

DE GRUYTER

GESTURES

APPROACHES, USES, AND DEVELOPMENTS

*Edited by Giovanni Maddalena, Fabio Ferrucci,
Michela Bella, and Matteo Santarelli*

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The publication is funded by the VASARI project (VALorizzazione Smart del patrimonio ARTistico delle città Italiane, Project Code ARS01_00456, CUP H16C18000170005), Scientific Responsible Prof. Fabio Ferrucci, managed by the Department of Humanities, Social Sciences and Education, University of Molise, Italy.



ISBN 978-3-11-078575-3
e-ISBN (PDF) 978-3-11-078584-5
e-ISBN (EPUB) 978-3-11-078590-6
DOI <https://doi.org/10.1515/9783110785845>



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Library of Congress Control Number: 2024939425

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the internet at <http://dnb.dnb.de>.

© 2024 the author(s), editing © 2024 Giovanni Maddalena, Fabio Ferrucci, Michela Bella, and Matteo Santarelli, published by Walter de Gruyter GmbH, Berlin/Boston
The book is published open access at www.degruyter.com.

Typesetting: Integra Software Services Pvt. Ltd.
Printing and binding: CPI books GmbH, Leck

www.degruyter.com

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Introduction

What do we mean precisely by “gesture?” The Merriam-Webster online dictionary presents at least three different meanings of this term: a movement usually of the body or limbs that expresses or emphasizes an idea, sentiment, or attitude; the use of motions of the limbs or body as a means of expression; something said or done by way of formality or courtesy, as a symbol or token, or for its effect on the attitudes of others.¹ Although in different meanings, these three main senses suggest a close connection between gesture and communication. Unlike purely random body movements, gestures communicate something in some sense. Not all bodily movements, therefore, are endowed with gestural dignity, as in Clifford Geertz’ expression: “That’s all there is to it: a speck of behavior, a fleck of culture, and—*voilà!*—a gesture” (1973, 6).

The type of communication involved in the gesture remains unclear in these commonsensical meanings. In some languages, the gesture seems to be accompanied by a basic, para-verbal form of communication. Let us consider the Italian verb “gesticolare.” A person “gesticulates” when he or she accompanies his or her verbal utterances with gestures-nonverbal gestures that have the function of emphasizing what is being said or when he or she replaces verbal expression with intense, broad, and sometimes “odd and frantic” body gestures. This suggests that gestures are to be placed in an intermediate position in the hierarchical ranking of communicative acts.

On the one hand, they have communicative value differently from purely random body movements. On the other hand, they are poor relatives of higher and more dignified ways and styles of communication. One cannot pantomime a poem without yielding a debasing and comic effect with respect to the original composition.

Nevertheless, the etymology and history of the term suggest caution against such a debasing and derogatory conception of the gesture. The word gesture

¹ <https://www.merriam-webster.com/dictionary/gesture>, last accessed March 6, 2024.

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comes from the Latin word *gero*, meaning to carry, and is also found at the origin of the term “*gesta*,” a term describing heroic deeds. In this context, one might think of the famous “Chansons de geste,” narrative poems based on legendary episodes or real events concerning the heroic gestures and deeds in France at the times of Charles Martel, Charlemagne, and Louis the Pious.² In a different sphere, the term “gesture” characterizes a type of action characterized by a high level of symbolic complexity—a sense that echoes the third meaning presented by Merriam-Webster’s dictionary. In some dialectal idioms of central Italy, the expression “fare il gesto” (“doing the gesture”) is found. When one “does the gesture,” she means to express the intention to make a gesture that she knows will likely never be performed. The classic example is when we are invited to lunch and know the person inviting us will pay for the meal. While we are sure of this, once the meal is over and we go towards the cashier, we will reach into our wallet and take the money. The person inviting us will interrupt us and make explicit that the meal is on her while appreciating that we “did the gesture” of paying. That is how sophisticated gestures can be.

The scientific literature on the subject reflects this ambiguity in the treatment of gestures. On the one hand, a long-standing and prestigious scholarly stream adopts a parallelist conception of gestures (Quintiliano 2001; Bonifacio 1616; Bulwer 1644; De L’Épée 1776; Condillac 1746; Rousseau 1755; De Jorio 1832; and Wundt 1912). According to the various versions of this conception, gestures are understood as an expression of thought parallel to verbal or written language. Gestures can translate the sophistications of verbal language in elementary and inadequate ways, they can struggle to replace words in contexts that make it necessary, they can anticipate discursive communication in the ontogenetic development of the individual, and they can reinforce the emotional and pragmatic components of what we say. In each case, the bias toward the restricted and secondary communicative capabilities of gestural communication is retained.

As an alternative to such a parallelist paradigm, however, a continuist paradigm has emerged since the 19th century, with some ingenious anticipations in the 18th century (Vico 1744). This paradigm emphasizes the continuity between the bodily and pragmatic dimensions of communication and its intellectual and cognitive dimensions. The dichotomy between nonverbal gesture and verbal communication is thus overcome, asserting that communication is always, to some extent, embodied and enacted.

2 On the working hypothesis of linking “gesture” to the Greek word γόρον-ου (meaning) and identifying in it the object of this bringing, see Molfetta (2023).

Such a continuist position finds a paradigmatic exponent in George Herbert Mead. In a series of articles and the collection of lectures published under the name *Mind, Self, and Society* (1934/2015), Mead adopts the concept of gesture as central to his theory of human action and communication. Instead of identifying gestures as a communicative current parallel to the verbal flow, Mead analyzes the genesis and development of reflective thinking and symbolic capacity from the social practice of the conversation of gestures. In this sense, human specificity is not identified in non-gestural, disembodied verbal language but rather in the ability to employ and understand symbolic and significant gestures. The focus on continuity promises an overcoming of hyper-intellectualist conceptions of the human being, and its ascendancy has reaffirmed the importance of the pragmatic, relational dimension in human experience and cognitive processes. Mead's insights—and pragmatism more generally—thus anticipate recent developments in so-called 4EA cognition (see Madzia-Jung 2016; Madzia-Santarelli 2017; and Baggio 2021 and 2023).

The contemporary new wave of gesture studies includes both parallelist and continuistic approaches. The contemporary focus on the concept has developed either by explicitly employing the vocabulary of gestures (Kendon 2004; McNeill 1992 and 2005; Sennett 2009; Maddalena 2015 and 2021; Agamben 2017; and Tversky 2019) or by means of alternative terminological choices that are theoretically consistent with the same conceptual framework (Deacon 1997; Archer 2000; Rizzolatti-Sinigaglia 2008; Tomasello 2008; Sennett 2009; Donati 2010; Ingold 2010; and Ferraris 2017).

The theoretical and practical implications of this new centrality of gestures have yet to be assessed, especially if we consider gesture as being involved in the cognitive, pedagogical, and sociological paths forged by the digital revolution. The absence of such an assessment is unfortunate in light of the fact that the concept of gesture might be crucial for understanding the forms of knowledge being created and the transitions of meaning occurring in this new cultural landscape. More in general, many questions arise from various points of view when we focus on the cognitive role of gesture. Does gesture entail highlighting the preeminence of bodily experiences at the expense of intellectual and rational processes? Does the focus on gesture lead to the thinning of the distinction between humans and nonhuman animals, or do gestures help us to rethink and reconceptualize the allegedly higher human capacities without reducing them to the epiphenomena of underlying biological and neural processes? Does the gesture involve reasoning? Does it have a meaning in itself, or is it merely a means of conveying meaning? Is it a purely external action, or are there also internal gestures? Does it serve to communicate, or is all communication a form of gesture? What kind of

pedagogy is connected to gesture? What kinds of relationships does gesture require? What kind of social relations are involved in the concept of gesture?

The book explores the potential and challenges of a philosophical approach to gestures from a multidisciplinary perspective.³ Many of the contributions argue for a pragmatist approach to gestures and engage in a conversation with Giovanni Maddalena's philosophy of gesture (2015). According to Maddalena's view, which is inspired by pragmatism and particularly by Charles S. Peirce's theories of continuum and existential graphs, gesture is a conceptual tool that helps us overcome traditional philosophical dualisms (e.g., analytic/synthetic, mind/body, theory/practice, knowledge/communication) and emphasizes the dynamic, processual, and embodied character of knowledge. Other contributions use different philosophical traditions to reformulate the above questions and provide answers. Furthermore, some contributions provide theoretical insights and reflections from the practice of gesture.

The structure of the book reflects its aim to provide a contemporary multidisciplinary overview of gestures, and consider their potential developments. The book is divided into four parts: I) Gestures in Philosophy, II) Gestures in the Social Sciences, III) Gestures in Psychology and the Cognitive Sciences, and IV) Gestures in Anthropology, Aesthetics, and Arts. Giovanni Maddalena's "Communication and Knowledge: A Proof of Completeness" opens the philosophical section of the book. Maddalena investigates the relationship between knowledge and communication. His inquiry involves two different moments. In the first part of the chapter, Maddalena analyzes the pragmatist thesis that cognitive processes are communicative in nature. In the second part, the author delves instead into a thesis not fully developed by classical pragmatist authors, namely, the idea that communication is always knowledge. To this end, Maddalena introduces his conception of synthesis as action, already developed in his 2015 volume *The Philosophy of Gestures*.

Mathias Girel's chapter "Are There Ambiguous Gestures?" aims to propose an account of ambiguous gestures. Girel analyzes several possible causes of this ambiguity—specifically, metaphysical causes and contextual causes. In the latter

³ Over the last ten years, a vast literature on gestures spread out. Most of these works consider artistic and anthropological gestures, political gestures, and gestures within the phenomenological tradition (see, among many others, Ferencz-Flatz, Popa (2022); Ciocan (2022); Franko (2022); Ruprecht (2019); Moran (2018); Crowther (2017); Manning (2016); Flusser (2014); Kendon (2013); Malafouris (2012); and Noland (2009)). On the connections between gestures and the philosophy of mathematics, see Maddalena, Zalamea (2012); Zalamea (2012); Longo (2021); and La Mantia, Alunni, Zalamea (2023). The classic literature on gestures in psycholinguistics is extremely vast; see, among many others, Alibali, Kita, Young (2000); de Ruiter (2000); Talmy (2000); Wagner, Nusbaum, Goldin-Meadow (2004); Hostetter, Alibali (2008); and Müller (2008).

case, ambiguity stems from the dependence of gesture meaning on the absence of other social actors. Through a dialogue between pragmatism and authors such as Austin and Anscombe, the author highlights the decisive importance of background conditions in determining the completeness and meaning of a gesture.

In “Between Saying and Doing: What Logic for Gestures?” Maria Regina Brioschi tackles the issue of the relation between gestures and logic. The author starts by constructing a minimal definition of gesture and then questions the role that gestures play in logic. The point of reference is Charles Sanders Peirce, with particular attention to his analysis of proposition. The discussion of Peirce’s logic leads Brioschi to two conclusions: not only the subject but also the predicate of a proposition can be understood in a gestural sense; recognizing gestures as synthetic reasoning helps to understand how the essence of reasoning should be thought of in terms of implication, not identity.

Marco Stango’s contribution “Transcendental Gestures” adopts a perspective at the intersection of philosophy and theology. Stango analyzes the concept of transcendental gesture, drawing inspiration on the one hand from the pragmatist conception of gesture and on the other from Balthasar’s “dramatic” idea that the very possibility of meaningfulness in individual life is made possible by fundamental gestures—e.g., the caregiver’s smile to the newborn. This involves an overcoming of the Kantian perspective and the affirmation of a virtuous circularity between transcendental and experience.

Anna Donise’s “Understanding Others: Theodor Lipps as Philosopher of Gestures” is a discussion of Theodor Lipps’ classic contribution to the phenomenological understanding of gesture. After reconstructing Lipps’ theory of gesture, Donise shows how it makes possible an original understanding of the relationship between self and other. From Lipps’ perspective, gestural interaction participates in the potential constitution of a vague and fusional dimension. This dimension, often relegated to a mere regressive if not pathological phenomenon, is decisive for developing the relationship between self and other.

The second part of the book enlightens current understanding of gestures in the social sciences. In his “Gestures, Habits, and Cultural Transmission: From “Organic Memory” to the Social Sciences,” Tullio Viola analyzes the role of gestures and habits in a phenomenon that affects broad areas of contemporary social sciences, i.e., cultural transmission. Through a historical overview, Viola shows how there has been during the 20th century a clear paradigm shift in the understanding of the role of habits and gestures in cultural transmission—i.e., the shift from a biological to a sociological understanding of the phenomenon. In the final section of the chapter, the author presents Connerton’s work and his attempt to ana-

lyze both the role of memory in cultural transmission and the centrality of the ritual dimension in memory as recollection.

Pierpaolo Donati's "A Relational Reading of Gesture" proposes to place gesture theory within a relational paradigm. On the one hand, this involves an appreciation of the idea of complete gesture presented by Giovanni Maddalena and, on the other hand, a critique of the pragmatist perspective. This perspective—especially in its Peircean version—would be incapable of articulating a version convincingly of realism. To this end, Donati deems that a movement toward relational sociology and critical realism—as championed by authors like Roy Bhaskar and Margaret Archer—is necessary.

In "The Problem of Museum Accessibility: A New Perspective from Relational Sociology and Communicative Gesture," Fabio Ferrucci offers an inclusive rethinking of the conception of museum accessibility as a property of the visiting experience. Drawing on disability and visitor studies, gesture philosophy, and relational sociology, the author proposes a new perspective on museum accessibility that wishes to "make sense" of the exhibition routes and cultural objects visitors encounter, making them effectively accessible.

Pier Paolo Bellini discusses "The Socio-Relational Roots of the Creative Gesture." From the author's perspective, creativity is not about the isolated act of a genius. On the contrary, it should be understood as a universal potentiality of human action. As a capacity specific to human beings, creativity thus concerns the ability to generate meaning in everyday interactions and everyday life. In order to develop his thesis, Bellini investigates the relationship between creativity, incompleteness, motivation and trust, thus highlighting the deeply humanistic character of creative gestures.

Giorgio Borrelli's "Gesture, Labor, and Semiosis: Some Research Hypotheses for a Theoretical Convergence between Semiotics and Dialectics" walks at the intersection of semiotics and dialectical theory. The core of his essay is the concept of labor. Beginning by analyzing the convergence between Hegelian-Marxian and Pragmatist understandings of gesture, Borrelli introduces an original comparison between Charles Sanders Peirce and Ernst Bloch. This comparison hinges on Bloch's theory of knowledge, which tightly holds together the cognitive, phenomenological, and pragmatic dimensions of gesture.

The third part of the book collects contributions to philosophy of psychology, psychoanalysis and the cognitive sciences. Michela Bella's "Toward a Psychology of Gestures" attempts to bridge Maddalena's Peircean-informed understanding of gesture with the psychological perspective leaning on William James. Bella highlights the limits of a semiotic perspective in which symbolicity plays a major role and introduces the role of significant others in the recognition of personal iden-

tity. In her reading, foregrounding perception's sensational and relational elements can benefit the development of a pragmatist psychology of gesture.

In "Psychoanalysis as a Science of Incomplete Gestures," Matteo Santarelli aims to affirm the centrality of the pragmatic dimension against overly intellectualistic interpretations of psychoanalysis. Specifically, Santarelli asserts the centrality of the gestural dimension in Sigmund Freud's psychoanalytic thought and practice. Thus, at the center of chapter the author develops a gestural analysis of the Freudian concept of transference. In the final part, Santarelli proposes an attempt to understand the role of vague gestures in psychoanalysis.

Guido Baggio contributes to the current debate on enactive languaging in the cognitive sciences with his enactive interpretation of meaning informed by George H. Mead's pragmatism. In his "Gesturing Language," the author refers to Mead to support the hypothesis of the phylogenesis of languaging from gestural conversations based on bio-social processes. Baggio argues that Mead's theory can mediate between recognizing an essential biological process that could generate languaging and the more recent enactivist conception of the linguistic sense-making process.

Francesco Fanti Rovetta's contribution, "Two Kinds of Perspectival Representations and the Role of Gestures in Perceptually Anchoring Inner Speech," focuses on the relationship between inner speech and gestures. While the role of gestures in interacting with others is well understood, the gestural dimension of speech with oneself may appear less intuitive. On the contrary, the author shows how in the context of inner speech, gestures not only allow for encoding different information relevant in that domain. They also allow for the representation and manipulation of linguistic-attitudinal and sensorimotor perspectives. Moreover, gestures might also play an important role in the perceptual anchoring of inner speech.

Laura Sparaci and Shaun Gallagher's "Continuity through Change: How Gestures Inform Current Debates on the Ontogeny of Embodied Narrative" addresses the controversial topic of embodied narrative in the development of social cognition. The work focuses on the relationship between actions and language to account for the critical shift from nonrepresentational to representational processes in the structural continuity claimed by the authors. Gestures play a significant role in Sparaci and Gallagher's analysis by suggesting continuity through changes in the transition from action to narration.

The fourth part of the book gathers contributions from anthropology, aesthetics, and the arts. Antonis Iliopoulos' chapter "Gesture and Things: A Working Definition and Material Engagement" offers a radically multidisciplinary perspective on the nature of the gesture. Such a perspective challenges overly intellectualist and cognitivist conceptions of gesture, summoning a wide range of authors from Dewey to Agamben. In continuity with the theory of material engagement intro-

duced and developed by Lambros Malafouris, Iliopoulos thus provides a pragmatic non-reductivist understanding of gestures anchored in the ongoing mind-matter interaction. This involves a fresh perspective on the creative and auto-poietic character of human gestures.

Roberta Dreon's "Reason, Language, and Life: Frank Lorimer's Critical Development of Dewey's Approach" offers a detailed analysis of the work of Frank Lorimer, an author whose role in the history of pragmatism tends to be neglected. Lorimer's perspective offers, according to Dreon, a valuable perspective on the discontinuous relations between humans and nonhuman animals. Central to that perspective is a multifaceted analysis of the genesis of human language in its multifaceted dimensions and his concept of organic intelligence. Lorimer's analysis might productively contribute to contemporary debates on naturalism.

Barbara Formis' "Handling Things Together: Artistic Practice of Research" works at the crossroads between philosophical reflection and artistic performance. This perspective tightly connects the philosophical work of pragmatists such as John Dewey and Richard Shusterman with its influence on artistic practices. Specifically, the author deals with Allan Kaprow's work and her direct experience as co-director of the *Laboratoire du Geste*. This integrated approach provides an original and rephrasing perspective on understanding gestures and their aesthetic value.

Daniele Goldoni shifts the discussion to a completely different area. In "Indeterminacy and Vagueness in Improvisation and in Experimental Music," Goldoni addresses topics of great importance in 20th century and contemporary aesthetics and musicology, namely, improvisation and experimental music. Despite their differences, these fields share a kind of dilemma consisting of the dialectical coexistence between reproducibility and a necessary element of unpredictability and surprise. Goldoni's contribution adopts these problematic issues as a starting point for reflecting on incomplete and complete gestures and vagueness.

Kelly Shoina's "The Self as Multiplicity in Virginia Woolf's *Orlando*: Tracing Identity by Way of Pragmatism" makes a case study on the emergence of personal identity through the writing gesture. Shoina relies upon Maddalena's *complete gesture* to understand the synthetic process of forming evolving identities without losing the unity of the self. The author reads Orlando's writing of the *Oak Tree* poem—and Woolf and her writing of *Orlando*—as a complete gesture that enables them to recognize their identity through the changes they had been subjected to over the centuries.

The volume provides a rich overview of current research on gesture, including its redefinitions, disciplinary hybridizations, possible uses, and developments. It aims to design a multidisciplinary *vademecum* for scholars interested in ap-

proaching gestures from various research areas, especially philosophy, social sciences, psychology and cognitive sciences, anthropology, aesthetics, and the arts.

References

- Agamben, Giorgio. 2017. *Karman. Breve trattato sull'azione, la colpa e il gesto*. Turin: Bollati e Boringhieri.
- Alibali, Martha W., Sotaro Kita, and Amanda J. Young. 2000. "Gesture and the process of speech production: We think, therefore we gesture." *Language and Cognitive Processes* 15, 593–613.
- Archer, Margaret. 2000. *Being Human: The Problem of Agency*. Cambridge: Cambridge University Press.
- Baggio, Guido. 2021. "Imagery in action. G. H. Mead's contribution to sensorimotor enactivism." *Phenomenology and the Cognitive Sciences* 20, 935–955.
- Baggio, Guido. 2023. "Gesture, meaning, and intentionality: From radical to pragmatist enactive theory of language." *Phenomenology and the Cognitive Sciences*.
- Bonifacio, Giovanni. 1616. *L'arte de' cenni*. Venezia: Francesco Grossi.
- Bulwer, John. 1644. *Chirologia: or the Natural Language of the Hand, and Chironomia: or the Art of Manual Rhetoric*. London: Tho. Harper.
- Ciocan, Cristian. 2022. "Phenomenology of Gesture Between Heidegger and Flusser." *Dialogue: Canadian Philosophical Review/Revue Canadienne De Philosophie* 61 (3): 575–599.
- Crowther, Paul. 2017. *What Drawing and Painting Really Mean. The Phenomenology of Image and Gesture*. New York: Routledge.
- De Condillac, Etienne Bonnot. 1746. *Essai sur l'origine des connaissances humaines*. Amsterdam: Mortier.
- De Jorio, Andrea. 1832. *La mimica degli antichi investigata nel gestire napoletano*. Naples: Stamperia e Cartiera del Fibreno. [English Translation: De Jorio, Andrea. 2000. *Gesture in Naples and gesture in classical antiquity*. Translated by Adam Kendon. Bloomington: Indiana University Press.]
- De L'Épée, Charles Michel. 1776. *Institution de sourds et muets, par la voie des signes méthodiques: ouvrage qui contient le project d'une langue universelle, par l'entremise des signes naturels, assujétis à une méthode*. Paris: Chez Nyon l'ainé.
- De Ruiter, Jan Peter. 2000. "The production of gesture and speech." In Mc-Neill, David (Ed.). *Language and gesture*, 284–311. Cambridge: Cambridge University Press.
- Deacon, Terrence W. 1997. *The Symbolic Species*. New York and London: W. W. Norton & Company.
- Donati, Pierpaolo. 2010. *Relational Sociology. A New Paradigm for the Social Sciences*. London: Routledge.
- Ferencz-Flatz, Christian and Delia Popa (Eds.). 2022. "Gestures." *Studia Phaenomenologica* 22.
- Ferraris, Maurizio. 2017. *Post-verità e altri enigmi*. Bologna: Il Mulino.
- Flusser, Vilém. 2014. *Gestures*. Minneapolis: University of Minnesota Press.
- Franko, Mark. 2022. *The Dancing Body in Renaissance Choreography: Kinetic Theatricality and Social Interaction*. London: Anthem Press.
- Geertz, Clifford. 1973. *The Interpretation of Cultures*. New York: Basic Books, Inc.
- Hosetter, Autumn B. and Martha W. Alibali. 2008. "Visible embodiment: Gestures as simulated action." *Psychonomic Bulletin & Review* 15: 495–514.

- Ingold, Tim. 2010. "Drawing Together. Materials, Gestures, Lines." In Otto, Ton and Nils Bubandt (Eds.). *Experiments in Holism: Theory and Practice in Contemporary Anthropology*, 299–313. Hoboken: Wiley-Blackwell.
- Kendon, Adam. 2004. *Gesture. Visible action as utterance*. Cambridge: Cambridge University Press.
- Kendon, Adam. 2013. "History of the study of gesture." In Allan, Keith (Ed.). *The Oxford handbook of the history of linguistics*, 71–89. Oxford: Oxford University Press.
- Krauss, Robert M., Yihsiu Chen, and Rebecca F. Gottesman. 2000. "Lexical gestures and lexical access: A process model." In McNeill, David (Ed.). *Language and gesture*, 261–283. Cambridge: Cambridge University Press.
- La Mantia, Francesco, Charles Alunni, and Fernando Zalamea (Eds.). 2023. *Diagrams and Gestures. Mathematics, Philosophy, and Linguistics*. Cham: Springer.
- Longo, Giuseppe. 2021. *Matematica e senso. Per non divenire macchine*. Milan: Mimesis.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists' Incomplete Revolution*. Montreal, Kingston, London, and Chicago: McGill-Queen's University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Rome: Carocci.
- Maddalena, Giovanni and Fernando Zalamea. 2012. "A New Analytic/Synthetic/Horotic Paradigm From Mathematical Gesture to Synthetic/Horotic Reasoning." *European Journal of Pragmatism and American Philosophy* 4 (2): 1–19.
- Madzia, Roman, and Michael Jung (Eds.). 2016. *Pragmatism and embodied cognitive science: From bodily interaction to symbolic articulation*. Berlin: De Gruyter.
- Madzia, Roman and Matteo Santarelli (Eds.). 2017. "Pragmatism, Cognitive Science, and the Sociality of Human Conduct." *Pragmatism Today*, Special Issue 8 (1).
- Malafouris, Lambros. 2012. "Prosthetic gestures: How the tool shapes the mind." *Behavioral and Brain Sciences* 35 (4): 28–29.
- Manning, Erin. 2016. *The Minor Gesture*. Durham: Duke University Press.
- McNeill, David. 1992. *Hand and Mind: What Gestures Reveal About Thought*. Chicago: University of Chicago Press.
- McNeill, David. 2005. *Gesture and Thought*. Chicago: University of Chicago Press.
- Mead, George H. 1934, 2015. *Mind, Self, and Society*. Chicago: University of Chicago Press.
- Molfetta, Giovanni. 2023. "Il mondo classico nel rapporto tra il principe e il cortegiano ne *Il Cortegiano* di Baldassarre Castiglione." Naples: Rinascimento letterario conference, Accademia Pontaniana, May 4–5, 2023.
- Moran, Brendan. 2018. "Gesture of Philosophy." In Moran, Brendan. *Politics of Benjamin's Kafka: Philosophy as Renegade*. Cham: Palgrave Macmillan.
- Müller, Cornelia. 2008. "Metaphors dead and alive, sleeping and waking: A dynamic view." Chicago and London: University of Chicago Press.
- Noland, Carrie. 2009. *Agency and Embodiment: Performing Gestures/Producing Culture*. Cambridge: Harvard University Press.
- Quintiliano. 2001. *Institutio Oratoria*, edited by Adriano Pennaccini. Turin: Einaudi. [English Translation: Quintiliano. 1958. *Institutio Oratoria*. Volume IV. Translated by Harold E. Butler. Cambridge: Harvard University Press.]
- Rizzolatti, Giacomo and Corrado Sinigaglia. 2008. *Mirrors in the Brain: How Our Minds Share Actions, Emotions, and Experience*. Oxford: Oxford University Press.
- Rousseau, Jean Jacques. 1755. *Discours sur l'origine et les fondaments de l'inégalité parmi les hommes*. Amsterdam: Marc Michel Rey.
- Ruprecht, Lucia. 2019. *Gestural Imaginaries: Dance and Cultural Theory in the Early Twentieth Century*. New York: Oxford University Press.

- Sennett, Richard. 2009. *The Craftsman*. London: Penguin Books.
- Talmy, Leonard. 2000. *Toward a cognitive semantics*. Cambridge: MIT Press.
- Tomasello, Michael. 2008. *Origins of Human Communication*. Cambridge: MIT Press.
- Tversky, Barbara. 2019. *Mind in Motion*. New York: Basic Books.
- Vico, Gianbattista. 1744. *La scienza nuova*. Naples: Gaetano e Staffano Elia.
- Wagner, Susan M., Howard Nusbaum, and Susan Goldin-Meadow. 2004. "Probing the mental representation of gesture: Is handwaving spatial?" *Journal of Memory & Language* 50: 395–407.
- Wundt, Wilhelm. 1912. *Elemente der Völkerpsychologie. Grundlinien einer psychologischen Entwicklungsgeschichte der Menschheit*. Leipzig: A. Kröner.
- Zalamea, Fernando. 2012. *Synthetic philosophy of contemporary mathematics*. Falmouth and New York: Collapse and Sequence.



Part I: **Gestures in Philosophy**

Giovanni Maddalena

Chapter 1

Communication and Knowledge: A Proof of Completeness

Abstract: Overcoming the dualism between knowledge and communication should be considered one of the major advancements that has followed from pragmatism. This chapter tries to explain the reasons for this and to advance some proposals that would make this pragmatist achievement better known. After a quick review of the relationship between knowledge and communication, I propose an attentive analysis of Peirce's semiotics to help understand that all kinds of knowledge always exhibit a dialoguing semiotic structure, namely, a semiotic structure that is intrinsically open to others' intervention. The second part of the chapter proposes to complete the overcoming of dualism by reading communication as a form of synthetic knowledge within a conception of synthesis as action, in which we recognize an identity through changes.

Keywords: communication, knowledge, synthesis, pragmatism, Peirce's semiotics

1 Introduction

Overcoming the dualism between knowledge and communication should be considered one of the major advancements that has followed from pragmatism, but it has not been highlighted with the proper emphasis up to now. This chapter tries to explain the reasons for this and to advance some proposals that would make this pragmatist achievement better known.

Let us begin with a quick review of the entanglement between knowledge and communication. Traditionally, scholars, no matter the discipline, looked at communication as an addendum to the hard kernel of knowledge in their fields; that is, communication begins when knowledge ends. First you have to know, and only then will you be able to communicate. However, the digital revolution has shown that this approach is no longer adequate and that it was always mistaken. Because of the rapid development of communication, it is clear that study, research, and the dissemination of knowledge cannot be severed from one another. Certainly, over the course of

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the history of philosophy, a number of authors have acknowledged that research implies dialogue among experts and that study is a dialogue with others who produced research at another time and in another place. The speed of the digital revolution has accelerated this process so much that it is clear that the nature of these processes related to knowledge is intrinsically communicative. To take a particularly striking example, think of the chain of epistemic functions present when one is working with ancient artwork: digging, finding, restoring, conserving, publishing, conferencing, exposing, and marketing are all phases of this chain. Traditionally, communication was confined to the last phase and was confused with marketing. Digital tools have now shown that all of the steps related to the gaining of knowledge have a communicative facet, as can be seen in social networks, applications, e-mail, and digital archives. Communication helps us make our way through all the steps of gaining knowledge. There is a profound continuity among the different phases of the epistemic enterprise, for which we need a different conception of communication. Pragmatism, especially following the semiotic clues left by Charles S. Peirce, possesses all the instruments that can enable us to understand the continuity between knowledge and communication and to foster a view, based on the concept of gesture, that will help to shape different habits of communication in the future.

The functional relationship between knowledge and communication must be discovered in two senses: communication must always be present in knowledge as much as knowledge must always be happening in communication. An attentive study of Peirce's semiotics helps us understand one side of the problem by forcing us to acknowledge that all kinds of knowledge always exhibit a dialoguing semiotic structure. This expression wants to underline Peirce's conception of semiosis as a kind of development of signs that comprehends subject and object, utter and receiver. Signs themselves create propositions, dialogues, and endless interpretations that can be analyzed and formalized but cannot be antecedent to semiosis. Scholarship agrees on this point, as has been argued by Pietarinen (2006), Short (2007), Maddalena (2009), Bergman (2011), Bellucci (2019), and Brioschi (2022). A more complete look at this side of the problem implies the construction of a model of communication based on Peirce's semiotic. It is possible to see an attempt to do this in Mats Bergman's book *Peirce's Philosophy of Communication* (2011), which proposes a model that can be further ameliorated and graphically represented. An amended version of the model would complete the series of models meant to explain analytically how communication is present in the formation and transmission of knowledge that have been created by numerous scholars over the last seventy years. This perusal of existing models and the construction of a Peircean model will be discussed in the first part of the chapter.

The second part of the chapter will be devoted to the other side of this functional relationship, which has always remained a little more obscure. For historical

reasons, since communication carried with it a different power and meaning during the first half of the last century, even classic pragmatists did not explore the conclusion that communication is always knowledge; that is, that knowledge is present in any act of communication, or, in other words, any act of communication is an act of knowledge. An interesting exception can be found in Dewey's *Art as Experience* (1934), even though he focuses mainly on aesthetic experience. The kernel of the problem is that studies of communication, including those considered in pragmatist scholarship, have privileged a study of roles, functions, and elements of communication in analytic terms. Synthetic activities are considered only as combinations of analytic sections, parts, and elements. However, this approach has demonstrably fallen short of a real explanation of communication, especially in the way it is now understood. Recent studies of Peirce's consideration of continuity have led to a different conception of synthesis as meaningful action, in which we recognize an identity through changes (Maddalena 2015a). As we are going to see, I will call "gesture" this kind of phenomenologically and semiotically structured, meaningful action. A sequence of gestures will provide a different kind of rhetoric, of which the linguistic one is only a specific case. Beyond the usual rhetoric built on language, we have a series of rhetoric of gestures like rituals, experiments, and arts. Communication as synthetic knowledge is more likely to be accepted within this different conception, which will be the topic of the second part of the chapter.

2 Well-Known Models of Communication

Many articles and books have been written on semiosis, a few of them concerning the possibility of transforming Peirce's semiotics into a model of communication. Perhaps the most important attempts are Thomas Sebeok (2001), Umberto Eco (1975), Jürgen Habermas (1981), Tom Short (2007), and Mats Bergman (2011). As mentioned above, in the first part of this chapter, I want to illustrate the place that a Peirce-based model of communication would have within the work done in these kinds of studies.

Let us sum up some of the different models of communication that have been proposed.¹ A first group includes the so-called linear models. Perhaps the two most influential of these are those devised by Shannon and Weaver (1948, Fig. 1) and Jakobson (1960, Fig. 2). I will present the graphic versions of various models because I find them significant, and I will try to do the same with Peirce's theory of communication.

¹ See also Gili-Colombo (2012).

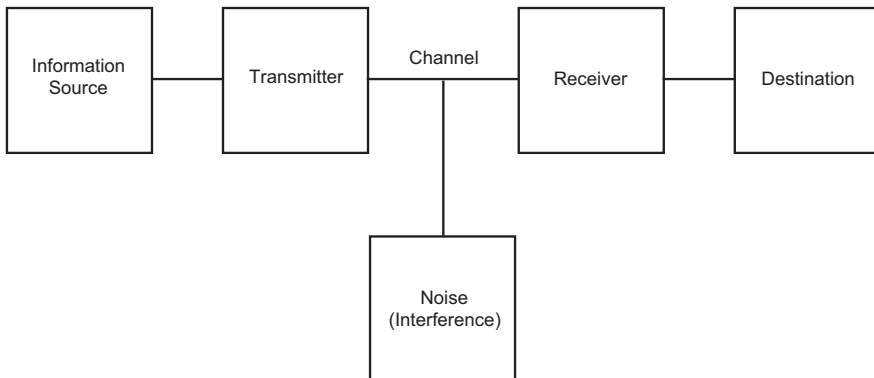


Fig. 1: Shannon and Weaver (1948).

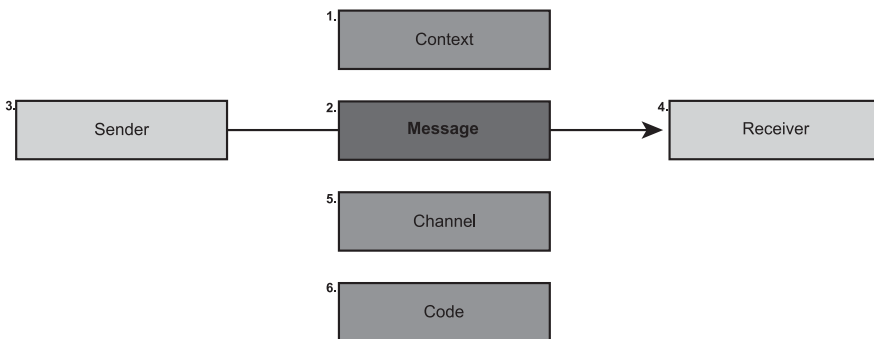


Fig. 2: Jakobson's Model of Communication (1960).

Linear models represent an initial attempt to analyze communication, highlighting each of its basic elements and functions and focusing on its elementary flux in the journey from sender to receiver.

Another group of models, which has an antecedent in Schramm's model (1954, Fig. 3), was developed mostly during the 1970s. Umberto Eco's and Stuart Hall's models may be the most influential models espousing this interactive conception of communication. Here, the focus is not on distinguishing the functions of communication but rather on their interactive organization, usually centered around code and coding, understood as the primary source of the infinite exchange of roles taking place during any communication. Hall's model (Fig. 4) highlights the way in which the code is produced, which is part of his political understanding of communication, while Eco stresses the semiotic side of coding and the ways in which communication fails (Fig. 5).

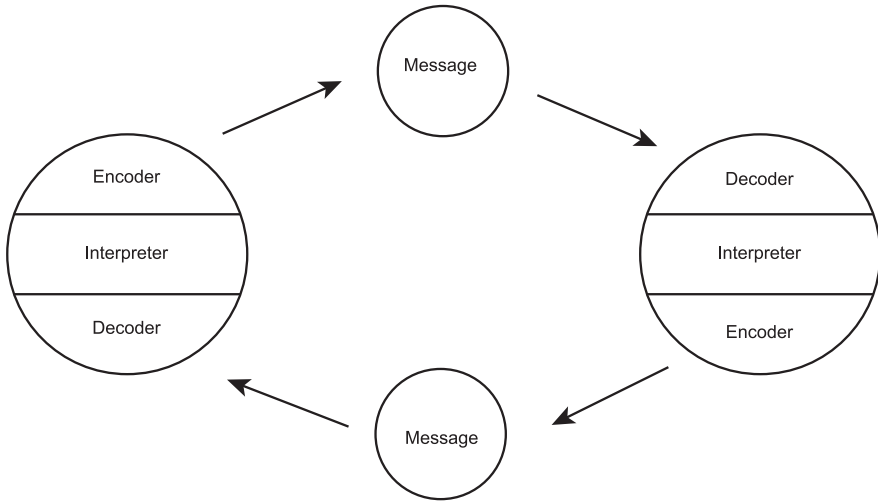


Fig. 3: Schramm's Model of Communication (1954).

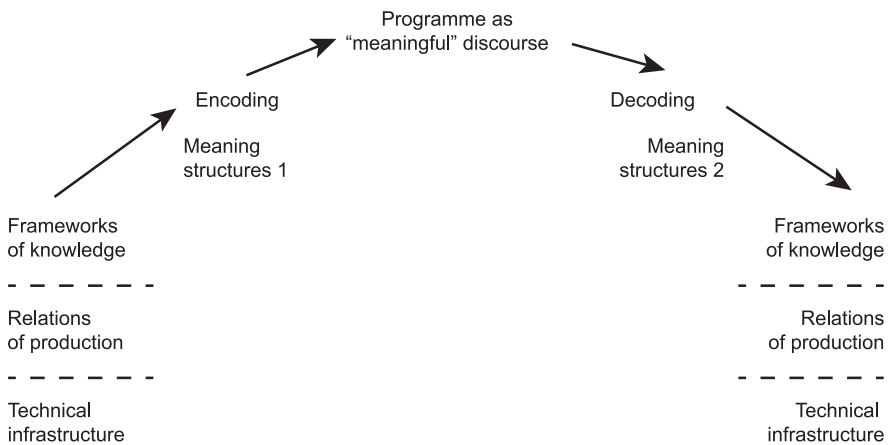


Fig. 4: Hall's Communication Model (1973).

We can single out a third group of models under the heading of “transactional.” As examples, we refer the reader to Dance’s helical model (1970, Fig. 6) and Barnlund’s sophisticated model (1970, Fig. 7). Here, the accent falls on the context and evolutionary development of communication. More recent attempts like Ellestrom’s (2018, Fig. 8) should also be included in this group. Focusing his model on

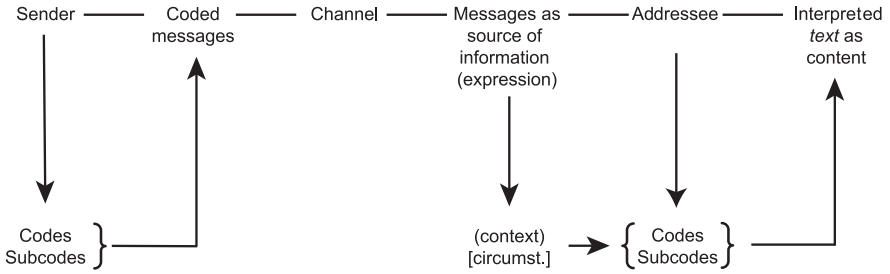
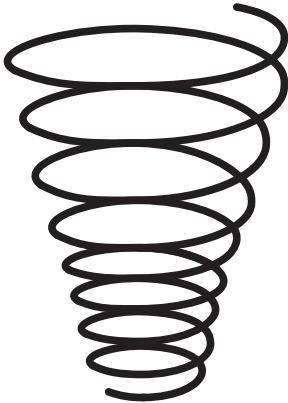


Fig. 5: Eco's Model of Communication (1975).

the media product, Ellestrom claims to use Peirce's conception of interpretant, even though he erroneously states that the interpretant refers only to the mental, which is contrary to Peirce's statements in his article titled "Pragmatism" (1907, EP2, 398–433), as commonly accepted in the scholarship. However, it is interesting that Peirce's semiotics can help in avoiding the subject-object distinction, the centrality of verbal or written language, and the lack of connection with the rest of the logic of the previous models.



DANCE'S HELICAL MODEL depicts communication as an endless spiral of increasing complexity.

Fig. 6: Dance's Helical Model (1970).

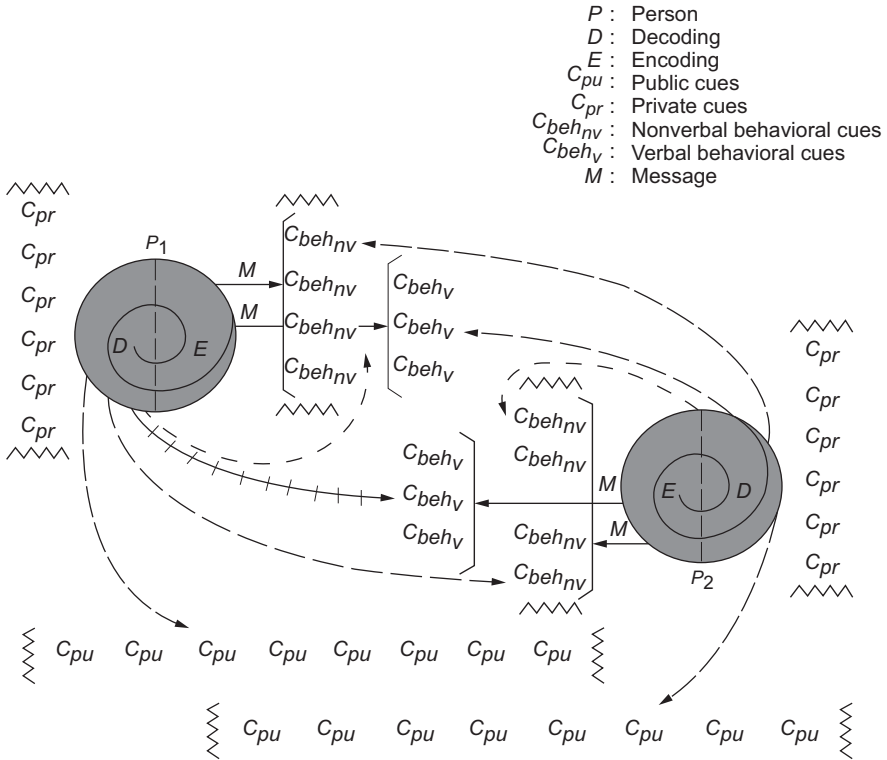


Fig. 7: Barnlund's Transactional Model (1970).

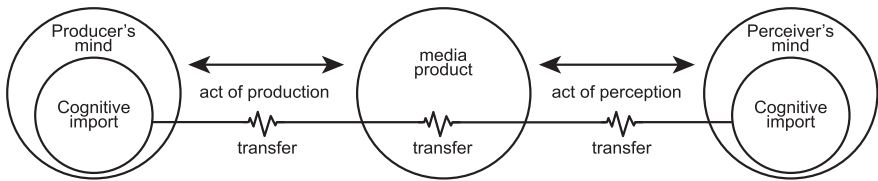


Fig. 8: Lars Ellestrom's Communication Model (2018).

3 Peirce's Theory of Communication

As mentioned above, possibly the most complete work examining Peirce's theory of communication has been done by Mats Bergman (2011). Bergman's account does not reach a graphic formalization, but it provides all of the necessary information to build one. I have performed a similar work of reconstruction (Madda-

lena 2015b) and I think that, even if there are important differences, i.e., the names of the interpretants,² the main points coincide. I sum them up in four keystones.

First, semiosis starts from a vague, common ground in which an immediate object is indicated. Second, the end of the communication is an ideal limit in which the real or the dynamic object will emerge as true. These two points express the distinctions outlined in Peirce's mature semiotics. The object that we communicate is not the object as it is, which is variable from moment to moment, as Hegel pointed out in infinite richness, but the immediate object, which is already a common representation. This immediate object is singled out from a vague general ground of experience through indices, both genuine (namely, containing an icon) and degenerate (namely, pure references like proper names). The dynamic or real object, which is present vaguely at the beginning of the communication with a phenomenological richness that cannot be completely determined at once, will appear in its fullness only at the end of the inquiry, when all meanings would be disseminated and explicit. Third, in the middle there is a growth of meaning that involves all kinds of signs (generally expressed as representamen). Fourth, there is a distinction of functions, but not of nature, as between immediate object, representamen, and interpretants.

These last characteristics account for the knowledge that any fact, insofar as it is also a communication, is a sign. Peirce pointed out 10 main classes of three elements, observing that the combination of them would amount to 5,049 types of signs. Beyond the numbers, it is important to notice that those classes represent an evolution of signs that can be well represented in our model: Peirce was thinking about signs as moving pictures, always in action. The ideal limit of the vague ground and the final manifestation of the dynamic object leaves room for a non-semiotic ur-beginning and an ideal end of inquiry, but everything else must be a sign.³ Here, it is important to underline also the role of logic-final interpretant, which, according to Peirce, is a habit of action. From this perspective, this logical-final interpretant saves its phenomenological ground but it also follows a semiotic, symbol-driven, course. With respect to the previous models, the triad of immediate object, representamen, and interpretants cover the sender-receiver roles as well as the process of encoding that is semiotically determined.

Given these characteristics, Peirce's model of communication could be described as a spiral that starts with immediate object and ends up with dynamic

² Scholarly debate about interpretants can be followed in the articles by Short and Lizska in the *Transactions of the Charles S. Peirce Society* (Short 1981, 1982, and 1996 as well as Lizska 1990).

³ Ransdell, Short, De Tienne.

object, passing through a continuous reformulation of representamen. As in Ellestrom's transactional model, we do not need a distinction between subject and object, or between sender and receiver, because all functions are included in the evolutionary process that makes the meaning develop. As in Eco's system, semiotics is central but has no need of external elements. In this model you can explain why communication becomes thinner or stops for a while or enters into latency.⁴ In this model, one has at the same time the powerful simplicity of the basic linear models, the semiotic precision of the interactive models, and the evolutionary sense of meaning of the transactional models. We can express these concepts graphically as follows (Fig. 9).

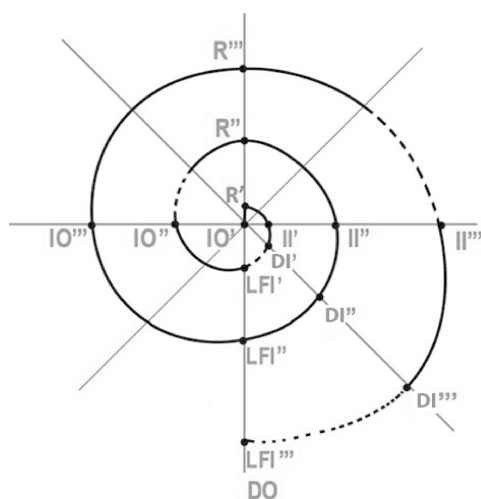


Fig. 9: Peirce's Model of Communication (see Bergman 2011 and Maddalena 2015b).
DO=Dynamic Object; IO=Immediate Object; R=Representamen; II=Immediate Interpretant;
LFI=Logic-Final Interpretant.

However, this model would be quite incomplete if we were not able to see another perspective on it that enlightens the passage that Peirce attributed to the discipline of stochiology:⁵ the passage from indefiniteness as vagueness to determinacy, and, finally, to indefiniteness as generality. As many authors have pointed out, Peirce considers two kinds of indeterminacy: the vague and the general. Usually, he de-

⁴ Graphically, you need to have different line thicknesses to depict growing or diminishing meaning. Temporal latency can be expressed by a dotted line. A temporary stop is always a latency. A real stop is the final one.

⁵ From the Greek: the doctrine of elements (EP2, 350).

fined these according to a sort of theory of games, pursuant to which vague is what must be determined by the utterer while general is what must be determined by the interpretant.⁶ Moreover, this stechiologic definition reverberates in the logic, where general is a universal quantifier that gives rise to a general proposition, vague gives rise to a particular proposition, and determinacy gives rise to a singular proposition. Eventually, this division ends up in a logical-metaphysical distinction among possibilities, actualities, and generalities where in the firsts the principle of contradiction does not hold and in the thirds the principle of the excluded middle does not hold (EP2, 351). In actualities, namely, in existent things, both principles hold. Now, our spiral must move from possibilities to determinacy and, eventually, to generality. Apart from the jargon, our vague perception of reality, whether physical or mental, becomes a determinate representation that achieves a general meaning (Fig. 10).

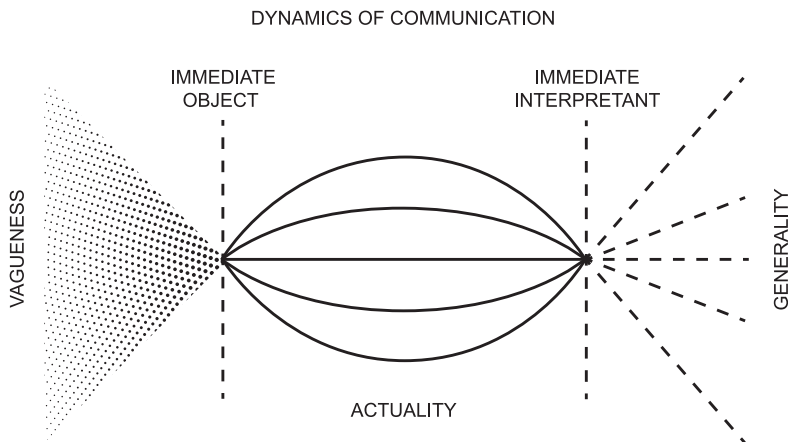


Fig. 10: Stechiological Dynamics of Communication.

The juxtaposition of the two diagrams should be possible with Riemann's surfaces, but such a project has not yet been completed. The two joined diagrams may represent a Peircean model that I consider to be the most apt for representing what is going on in any communication. With this model, we have another example of the fulfillment of the first part of the functional relationship: any knowledge is communication.

⁶ Cf. also Williamson (1994), Bergman (2011), and Bellucci (2019).

4 Synthetic Completeness

The second part of the functional relationship—any communication is knowledge—remains unaffected by this diagram. As much as I think it is better oriented to representing what happens during communication than others, Peirce's theory of communication (with its graphs) remains a mere analysis of what is going on. As much as it attempts to represent dynamics, it remains static. As much as it seeks concreteness, it remains disembodied. The problem that Peirce's theory shares with the others that we have seen is its intrinsic analyticity. The latter amounts to conceiving the epistemic flux as static and disembodied in order to identify its mechanisms. One of the big blunders of contemporary philosophy is not to have challenged Kant's distinction between analysis and synthesis at the root,⁷ meaning that synthesis is still conceived of as the reverse of analysis, a sort of patchwork of analytic elements. Peirce himself provided good phenomenological, semiotic, and logical tools offering a different view of synthesis, but he did not achieve this different view. Also, as far as communication is concerned, we have the same issue. Peirce's theory was a very good analytic theory, but it does not transform reality synthetically, as should be the goal of a pragmatist.

Correctly, in his book Mats Bergman notices the same weakness without thematizing it. Bergman states that at the conclusion of Peirce's semiotic theory we find a circle because we extrapolate the semiotic elements from communicative language and, afterwards, we build up communicative rhetoric from semiotic elements (Bergman 2011, 137). He points out that this can also be a virtuous circle, but the impression of something disproportionate remains, caused by a poor conception of the synthetic as a mere reverse of the analysis that assembles semiotic building blocks. In fact, there are a few examples of applications of Peirce's rhetoric; these attempts are not really innovative because they are mostly centered on describing scientific discourse.

The point is that Peirce himself, like many Peirce scholars, was, on the one hand, too focused on the linguistic characteristics of his semiotics and, on the other hand, was not aware of the challenge of coming up with a different conception of syntheticity. Moreover, his attempts to create a non-scientific rhetoric, as in his novel set in *Thessaly*, were linguistic and unsuccessful (W8, 296–340). Finally, a precise consideration of Peirce's mature writings leads to varying conclusions. Some of the topics he inquired into, like the relationship between the

⁷ Obviously, there were strong arguments against the existence of this distinction, like those of Quine, White, and Kripke (1980). However, these challenges remained internal to the same tradition and did not propose an alternative paradigm.

normative sciences and the need for logic in aesthetics and ethics, as well as his studies in phenomenology and openness to metaphysics, led him to a different conception of the synthetic results of communication and, therefore, to a different rhetoric. If you consider all of the aforementioned factors of his mature research, you will see that the rhetoric to which his semiotic studies pointed at could not be only linguistic. In addition, it is clear that this rhetoric could and should include the most relevant features of Peirce's pragmatic maxim, which warns against ending up in discursive argument and, rather, counsels in favor of habits of action. Certainly, linguistic rhetoric is a part of those habits, but it does not exhaust their entire scope. Finally, this rhetoric of habits will exhibit the virtuosity of the circle of semiotics-rhetoric if it demonstrates a different grasp of reality (it will be possible to decide whether this different grasp is more original or broader later on). My take, going beyond Peirce, is that this rhetoric of the habits of action reveals a synthetic approach to reality that supplements an analysis of semiotic characteristics. The actions within this particular grasp of reality are what I call gestures, using the term for his original meaning, which comes from the Latin *gero*; that is, to bring, to carry on. In this view, a gesture is an action with a beginning and an end that carries on a meaning (Maddalena 2015a).

We have to be careful in our understanding of this “carrying.” In Aristotle, there is a distinction between actions with an aim or meaning that is extrinsic to the actions themselves and actions that have an intrinsic meaning. Aristotle calls the first of these sets of actions *poiesis* and the second *praxis*. Here, we have a third category of action that causes the meaning to happen in its becoming, proceeding from the internal to the external.⁸

Peirce himself took into account the exceptional characteristics of this kind of action in his Existential Graphs (EGs). He considered them to be his *chef d'oeuvre* and also the “proof” of pragmatism (Zalamea-Nubiola 2011) because they showed the real unity between theory and practice, just as he had forecasted in the pragmatic maxim. In EGs, the meaning happens in the process of drawing the graphs because they are “a moving picture” of our thought. Peirce understood that EGs were a graphic representation of the epistemic value of the pragmatic maxim. However, he did not see that they also effected a unification of communication and knowledge. While we are drawing, we are at the same time coming to know something new—namely, we are synthesizing—and making it public and communicable, as you can see in the example below. We can see in the graphs that

⁸ The research by Giorgio Agamben (2017) is very interesting with respect to this distinction, even though it disregards the problem of the meaning by holding that the third kind of “action” has no meaning at all, as in a gag.

“every Catholic adores a woman” (beta graphs) but also that “there is a woman that every Catholic adores” (beta graphs) and “there is a woman that every Catholic must adore” (gamma graphs) (Fig. 11).

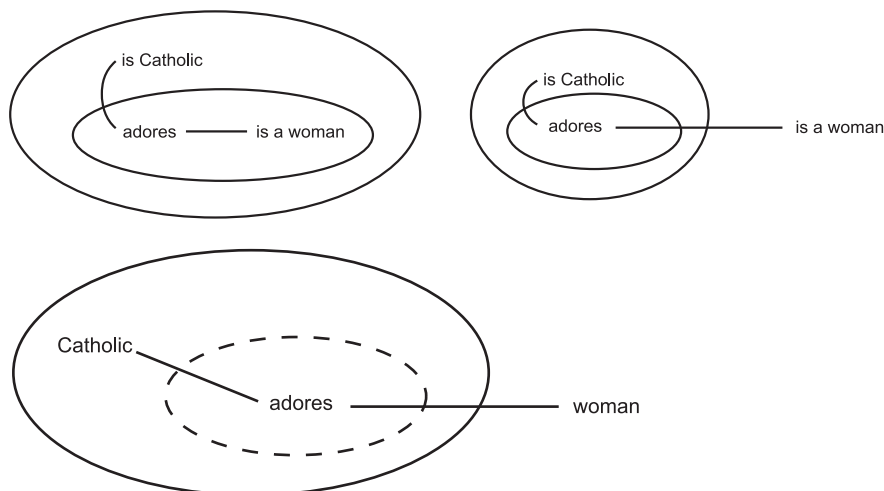


Fig. 11: Beta and Gamma Graphs.

Peirce provided many descriptions of the entanglement between semiotic and logic that can be seen in the graphs. The most sophisticated account occurs in the gamma graphs, those with modalities, in which he identified semiotic characteristics pertaining to all of the graphs. What follows is a short list of these.⁹

- a. The sheet of assertion in the alpha and beta graphs—propositional logic and first order logic, respectively—is a continuum in the Peircean sense.
- b. In his description of beta graphs, that is, first order logic, Peirce states that the line of identity, which acts as a quantifier (universal or existential according to the way in which it is enclosed in the cuts), is a continuum that moves upon the continuum of the sheet of assertion.
- c. What allows the line of identity to work as a quantifier is its being a “perfect sign”; namely, an “equal blending” of icons, indexes, and symbols.
- d. In gamma graphs—modal logic—the sheet of assertion must be imagined as a multidimensional (plastic) continuum.

⁹ For studies on Existential Graphs, see Roberts (1973), Shin (2002), Pietarinen (2011), and Zalamea (2012).

- e. The line of identity in gamma graphs represents an act of becoming, understood as transition among possibilities, actualities, and necessities. Entailed by this metaphysical dimension is the logical consequence that in gamma graphs, the line of identity can also remain open to different realizations of possibilities. Peirce represents this property with a loose ending of the line. In this case, he renames the line “the line of ter-identity.”

Working with Peirce’s existential graphs helps us greatly to understand that there is a tool that has the power to represent reality as transition among modalities and also to represent any reasoning that happens within this transition. The graphs are really a tool that unites theory and practice through a moving picture that enables us to understand that reasoning itself is in its turn a transition. Moreover, we understand that this representation, with its semiosis of open interpretative possibilities, is possible thanks to the very semiotic structure of our actual scribing. Finally, and most significantly, reasoning happens *while* we are scribing our graphs: there is no gap between reasoning and the representation of reasoning. In other words, in the graphs we understand something new by engaging in the action of scribing: we synthesize by drawing a line on a multidimensional plastic continuum. While we are scribing and synthesizing, we are also communicating something to someone else.

Striking though this outcome was, Peirce limited his subsequent focus to an examination of the deductive consequences of the graphs. He was in awe because this magnificent tool could accomplish all of the operations solvable in symbolic logic, but in an easier way. He failed to realize, however, that his *chef d’oeuvre* opened up a completely different view of synthesis. This is especially odd given that Peirce’s mathematical, semiotic, and phenomenological descriptions of the graphs allow us to generalize a kind of action that is specifically apt for synthesizing.

In fact, the graphs pave the way to a generalized view of gestures, actions that carry on a meaning; that is, through which meaning is articulated while it is in its development. This is the synthetic happening of the analysis we saw in the spiral of communication.

With EGs, we know that gestures, like scribing a graph, must have a semiotic structure that causes all signs to work together, like the line of identity. Moreover, we can add that the different kinds of phenomenological realities that are at the foundation of communication—firstness, secondness and thirdness, which have a modal version as possibilities, actualities and necessities—also must work together in this kind of action. This phenomenological foundation means that all actions embody a certain vague feeling or idea (firstness, or possibility), a determinate existential and physical extension (secondness, or actuality), and a general replicability as a habit of action (thirdness, or necessity). This phenomenological structure is impor-

tant for understanding that the communicative process also has a non-semiotic, residual component that is present in the dynamic object and that will be completely expressed only at the very final moment of inquiry, when the dynamic object will appear as a sum of all conceivable consequences or habits of action.

Gestures have a phenomenological and a semiotic structure (Fig. 12). When they are complete, they synthesize a new meaning. Even if not complete, they have some power of synthesis that is expressed in less powerful forms of communication; these forms cover the usual continuum of gestures that the scholarship in the field has identified.¹⁰ But above all, gestures show the same dynamic that we saw before: they actually embody vague meaning in order to open up various general interpretations (but not all of them).

Do we have examples of these gestures as meaningful developing actions? Our lives are full of examples. Some general categories comprehend public and private rites, scientific experiments, and artistic performances. As for the first category, think of the ceremony of the swearing in of a President using an oath. During this ceremony, the vague promises of the electoral campaign become real power and open up various meanings of the oath to the participant: joy, concern, responsibility, importance of tradition, etc. In another field, let us consider a scientific experiment, like Rutherford's gold foil. During the experiment, the vague hypothesis of a difference of density in the structure of the atom became evident in action, opening new perspectives on studies in the field. Certainly, there is a difference between the first time an experiment is performed and other times, and studies have to be done to assess whether completeness happens only in the first time. Finally, a play or a concert is an example of artistic performance that is presented to a different audience each night, making the gesture different each night.

We might list thousands of examples from different fields, and we might also see how any single phenomenological and semiotic item makes up those habits of action. I have tackled the demonstration of this point in other works (Maddalena 2021) and do not do so here. Here, I wish only to point out the interrelationship between knowledge and communication. If it is true that language is a flux of signs (with a phenomenological basis) and reveals a possible model of communication, it is also true that this model of communication can be maintained synthetically as a rhetoric of gestures, in the scientific and broad meaning of "gesture." Without this second aspect, pragmatism would fail to unite knowledge and communication in its own terms.

¹⁰ Cf. Kendon's continuum (Kendon 2004).

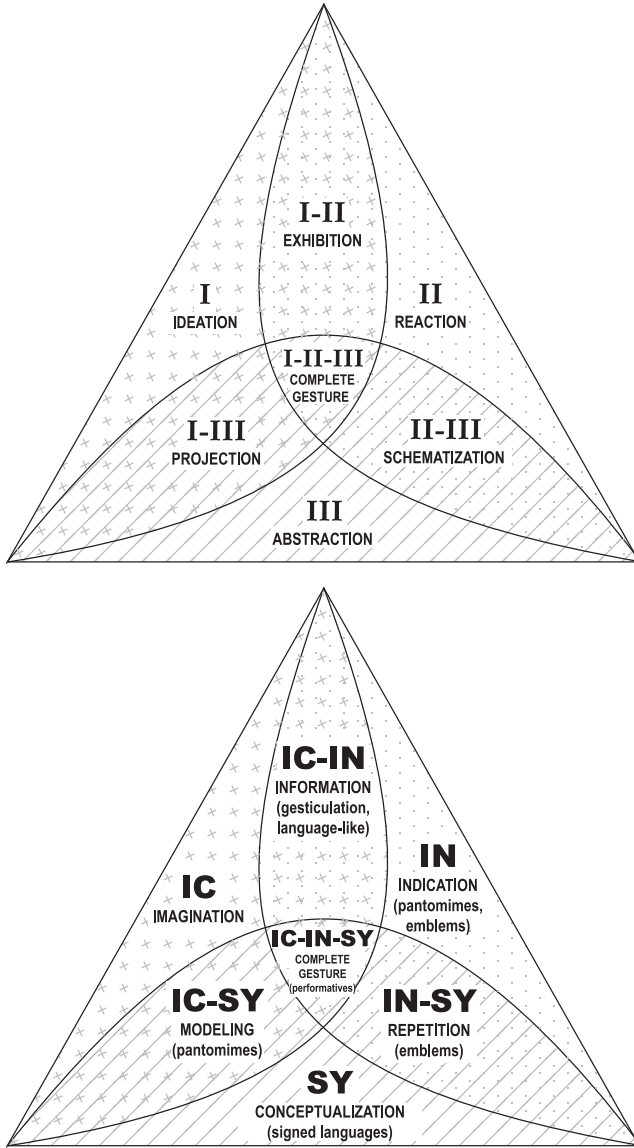


Fig. 12: Phenomenological and Semiotic Structure (Mapped Kendon's Continuum).

Perhaps this conclusion is not surprising, but it has not been sufficiently stressed. Part of the explanation for the omission of this second aspect is that classic pragmatism had a strong synthetic drive but often became stuck at the analysis of a synthesis because it did not challenge Kant's definition of the two classes of argument. Another part of the explanation is that classic pragmatism discovered many new epistemic tools (think of abduction, stream of consciousness, conversation by gesture, instrumental logic) but in the process was not able to get a bird's eye view of the entire philosophical path it was clearing. In any case, the practitioners of classic pragmatism accomplished terrific work in opening the road. Now, it is time to complete the journey towards a new form of philosophy. Gesture as a tool for creating a synthetic dimension of philosophy is the first step on this journey.

References

- Agamben, Giorgio. 2017. *Karman. Breve trattato sull'azione, la colpa e il gesto*. Turin: Bollati e Boringhieri.
- Barnlund, Dean C. 1970. "A Transactional Model of Communication." In Akin, Johnnye, Alvin Goldberg, Gail Myers, and Joseph Stewart (Eds.). *Language Behavior: A Book Of Readings In Communication*. The Hague: Mouton, 43–61.
- Bellucci, Francesco. 2019. *Peirce's Speculative Grammar*. London: Routledge.
- Bergman, Mats. 2011. *Peirce's Philosophy of Communication*. Bloomsbury: Continuum.
- Brioschi, Maria R. 2022 (Forthcoming). "L'intersoggettività secondo Peirce: comunità, dialogo e agape." *Annuario Filosofico* 38: 204–224.
- Dance, Frank. 1970. "A Helical Model of Communication." In Sereno, Kenneth K. and C. David Mortensen (Eds.). *Foundations of communication theory*, 103–107. New York: Harper and Row.
- Dewey, John. 1934, 1980. *Art as experience*. New York: The Berkeley Publishing Group.
- Eco, Umberto. 1975. *Trattato di semiotica generale*. Milan: Bompiani.
- Ellestrom, Lars. 2018. "A medium-centered model of communication." *Semiotica* 224: 269–293.
- Gili, Guido and Fausto Colombo. 2012. *Comunicazione, Cultura e Società*. Brescia: La Scuola.
- Habermas, Jürgen. 1981, 1984. *The Theory of Communicative Action*. Boston: Beacon Press.
- Hall, Stuart. 1973. "Encoding and Decoding in the Television Discourse." Birmingham: Centre for Contemporary Cultural Studies.
- Jakobson, Roman. 1960. "Linguistics and Poetics." In Sebeok, Thomas (Ed.). *Style in Language*, 350–377. Cambridge: Massachusetts Institute of Technology Press.
- Kendon, Adam. 2004. *Gesture. Visible action as utterance*. Cambridge: Cambridge University Press.
- Kripke, Saul. 1980. *Naming and Necessity*. Cambridge: Harvard University Press.
- Liszka, James J. 1990. "Peirce's Interpretants." *Transactions of the Charles S. Peirce Society* 26 (1): 17–62.
- Maddalena, Giovanni. 2009. *Metafisica per assurdo*. Soveria Mannelli: Rubbettino.
- Maddalena, Giovanni. 2015a. *The Philosophy of Gesture*. Montreal: McGill-Queen's University Press.
- Maddalena, Giovanni. 2015b. *Peirce*. Brescia: La Scuola.
- Maddalena, Giovanni. 2021. *Filosofia del gesto*. Rome: Carocci.

- Peirce, Charles S. 1981–2010. *Writings of Charles Sanders Peirce*. Volumes I–VI and VIII, edited by The Peirce Edition Project. Bloomington and Indianapolis: Indiana University Press. [Abbreviated as *w.*]
- Peirce, Charles S. 1998. *The Essential Peirce*, Volume II, edited by The Peirce Edition Project. Bloomington and Indianapolis: Indiana University Press. [Abbreviated as *EP2*.]
- Pietarinen, Ahti-Veikko. 2006. *Signs of Logic: Peircean Themes on the Philosophy of Language, Games, and Communication*. Berlin: Springer.
- Pietarinen, Ahti-Veikko. 2011. “Existential Graphs: What a Diagrammatic Logic of Cognition Might Look Like.” *History and Philosophy of Logic* 32 (3): 265–281.
- Quine, Willard V.O. 1951. “Two Dogmas of Empiricism.” *The Philosophical Review* 60: 20–43.
- Roberts, Don D. 1973. *The existential graphs of Charles S. Peirce*. The Hague and Paris: Mouton.
- Schramm, Wilbur. 1954. *How Communication Works*. In Schramm, Wilbur (Ed.). *The Process and Effects of Mass Communication*. Champaign-Urbana: University of Illinois Press.
- Sebeok, Thomas. 2001. *An Introduction to Semiotics*, London: Pinter Publishers.
- Shannon, Claude E. 1948. “A Mathematical Theory of Communication.” *Bell System Technical Journal* 27, lug-oct., 379–423 and 623–656.
- Shin, Sun-Joo. 2002. *The Iconic Logic of Peirce’s Graphs*. Cambridge: MIT Press.
- Short, Thomas L. 1981. “Semeiosis and Intentionality.” *Transactions of the Charles S. Peirce Society* 17 (3): 197–223.
- Short, Thomas L. 1982. “Life among the Legisigns.” *Transactions of the Charles S. Peirce Society* 18 (4): 285–310.
- Short, Thomas L. 1996. “Interpreting Peirce’s Interpretant: A Response To Lalor, Liszka, and Meyers.” *Transactions of the Charles S. Peirce Society* 32 (4): 488–541.
- Short, Thomas L. 2007. *Peirce’s theory of signs*. Cambridge: Cambridge University Press.
- White, Morton. 1950. “The Analytic and the Synthetic: An Untenable Dualism.” In Hook, Sidney (Ed.). *John Dewey: Philosopher of Science and Freedom*, 316–330. New York: Barnes and Noble.
- Williamson, Timothy. 1994. *Vagueness*. London: Routledge.
- Zalamea, Fernando. 2012. *Peirce’s Logic of Continuum*. Boston: Docent Press.
- Zalamea, Fernando and Jaime Nubiola. 2011. “Existential Graphs and Proofs of Pragmatism.” *Semiotica* 186: 412–439.

Mathias Girel

Chapter 2

Are There Ambiguous Gestures?

Abstract: If we accept the hypothesis that we can get confused about gestures, which seems to be a quite ordinary experience, the next task in order is to provide an account of ambiguous gestures or, at the very least, of the conditions under which they can *become* ambiguous. That is the subject of the present paper: investigating the conditions of possibility for the ambiguity of gestures. In what follows, I shall address several possible causes for this ambiguity. The first one would be categorial: the idea is that an incomplete metaphysics of gestures would leave us in a situation where we cannot make a difference between complete and incomplete gestures, so much so that all gestures would become ambiguous on *a priori* grounds. The second one is contextual: depending on the way we assent to gestures, they can (or so it seems) always be downgraded to a lower status, incomplete gestures or mere acts. Finally, I shall take advantage of Anscombe's philosophy of intention to show in which ways our environment can contribute to the ambiguity of gestures.

Keywords: Peirce, Charles S, Anscombe, Elizabeth, ambiguity, intention, felicity (of speech acts), degenerate (categories), categories

1 Introduction

I have two main reasons to be interested in gestures. The first one might seem trivial. The initial riddle I have been grappling with, in my first encounters with Pragmatism, was the following: pragmatism is supposed to have performed a “practical” turn, between the 1870s and 1900, and overturned a Cartesian approach, dominated by “ideas” and “intuitions.” Still, the pragmatist account of practice is by no means monolithic and has sometimes been developed a long time after the first methodological proposals (Girel 2021). Telling us that, in order to make our ideas and meanings clear, we needed to look at “practical bearings,” and sometimes even at the conduct of the inquirer, was not a ready-made solution, it was a *problem*; it was the beginning of an investigation. Some of the most interesting attempts, by Peirce, at providing a “proof” of his pragmatism, involve

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the kind of gestures we make when we draw a logical graph (Hookway 2012; Maddalena 2015). The Pragmatist revolution was in many ways a grammatical and metaphysical inquiry into gestures.

In addition to this, I had another reason: working on the epistemology of the Pragmatists, I have very early been interested in their concept of “inquiry.” Successful inquiries certainly qualify as “complete gestures,” in Giovanni Maddalena’s sense. Even if we use a less technical vocabulary, inquiries are things we *do*, and, as I have suggested elsewhere, it is interesting to see whether the usual categories of action, including failure, can apply to these particular actions named inquiries (Girel 2017). Actions can fail, they can fail persistently, and they can fail under the action of third-party strategies. Is it true too about inquiries, and in which ways? My intuition, here, was that a good part of what has been published under the rubric of “Agnotology” (Proctor and Schiebinger 2008), “ignorance studies” (Gross and McGoey 2022), the “Merchants of Doubt” strategies (Oreskes and Conway 2010), or again the “production of ignorance”, could be made clearer if we read the processes that are described by Proctor, Oreskes, and others against a background provided by a pragmatist epistemology (Girel 2022). If inquiries are done, how can they be undone? Here, the concern was that we might easily be confused about gestures: some agents seem to do something, pursuing an inquiry, while doing just the opposite, undermining this inquiry. The motto “we need more research,” for example, can play both roles. If we accept the hypothesis that we can get confused about gestures, in particular epistemic gestures, the next thing we need is an account of ambiguous gestures or, at the very least, of the conditions under which they can *become* ambiguous. That is the subject of the present paper: investigating the conditions of possibility for the ambiguity of gestures.

In what follows, I shall address several possible causes for this ambiguity. The first one would be metaphysical: the idea is that an incomplete metaphysics of gestures would leave us in a situation where we cannot make a difference between complete and incomplete gestures, so much so that all gestures would become ambiguous on *a priori* grounds. The second one is categorial: depending on the way we assent to gestures, they can, or so it seems, always be downgraded to a lower status. Finally, I shall take advantage of Anscombe’s philosophy of intention to show in which ways our environment can contribute to the ambiguity of gestures.

2 Complete, Incomplete, and Degenerate Gestures

The first concern is metaphysical. Is it possible to confuse genuine complete gestures with incomplete gestures, or even with events that do not even qualify as gestures at all and then make a kind of “category-mistake” (Ryle 1938) when we think of them? The claim in this section is that the kind of metaphysics we endorse plays an important role when we have to decide what counts as a gesture and to identify it as such. We shall see that there are two distinct situations: on the first hand, situations where we cannot even *identify* complete gestures, because our grammar, or if you prefer our ontology, is too narrow; on the other hand, there are situations where we deal with speciously complete gestures, gestures which *seem* complete but are not actually so.

To start answering, we need a characterization of gestures, and several candidates could come to mind. Georges Politzer, for example, in the French-speaking philosophy, made extensive use of “gestures” in his reconstruction of psychology and psychoanalysis. He thought of life as a “drama,” that is to say, as possessing a dramatic structure:

The act of the concrete individual, it is the life, but the life in the singular sense of the singular individual, in short, the life, in the dramatic sense of the word. (Politzer 1994, 34)

In a sense, our whole life *is* a gesture. But Politzer sometimes reduces gestures to mere acts, as when he argues that his psychology puts gestures at the center of the picture, only to add immediately:

A gesture that I make is a psychological fact, because it is a segment of the drama that my life represents. The way it inserts in this drama is given to the psychologist by the story that I can tell about this gesture [. . .] but it is the gesture illuminated by the narrative that is the psychological fact, and not the gesture apart, nor the realized content of the narrative. (Politzer 1994, 156, translation modified)

One could take up his analysis by saying that gestures are precisely this dynamic and dramatic totality: neither only “acts,” nor only “narratives.” While I think that adopting this redefinition would lead to rewrite a good part of the theory, which is the reason why I shall consider more promising candidates, it is worth noting that Politzer immediately presupposes a triadic structure: the act, the narrative, and the symbolic content of the narrative. Anything that would impair this triadic structure would also seriously alter gestures in this larger sense.

George Herbert Mead could be a candidate too, not only for what he says about the “conversation of gestures,” but for the relationship between gestures as

initiations of acts, and the more complete “social acts.” This would be promising in many ways but at the cost of exchanging the notion of gesture for the “social act.”

I shall rather build here on Giovanni Maddalena’s notion of gesture, defined as “any performed act with a beginning and an end that carries a meaning” (Maddalena 2015, 69), which is a clear and compact definition. This way, (1) we keep the idea of a dramatic sequence—there is a beginning and an end, (2) it is *performed*, and (3) it has a connection *with at least one meaning*. This first nominal definition is made more robust with the additional resources provided by Peirce’s philosophy, as read by Maddalena. This particularly holds for “complete gestures”: a complete gesture is, this time, any gesture that respects “all the characters [evidenced in] existential graphs: evidence, generalization, continuity in a Peircean sense, and an equal blending of kinds of signs” (Maddalena 2015, 70). Regarding this last clause, complete gestures will thus involve iconicity, indexicality, and symbolization, to respect this “equal blending.” If one of these dimensions is missing, the gesture is deemed “incomplete.”

Let us now face the two situations mentioned at the beginning of this section.

In the first one, we can be blinded by our categories, and some crucial elements for gestures to be complete will be missing *a priori*, for philosophical reasons, because of the ontology we have endorsed. We can understand why if we follow Peirce’s lead, as Maddalena does. Peirce, in his 1903 *Harvard Lectures* presenting his theory of the categories, gave a twofold approach, both semiotic and phenomenological, of his Firstness, Secondness, and Thirdness, which can also provide a nice framework to account for both complete and incomplete gestures. In the lecture “Seven Systems of Metaphysics,” Peirce shows that there are only seven systems of metaphysics, one complete system acknowledging the reality of the three categories—mainly Aristotle and Peirce—and six systems allowing only one or two categories. In the same way, here, complete gestures, as in rituals, ceremonies, works of art, or scientific experiments (at least in their most satisfactory forms), obviously display the three categories: they have their originality, their Firstness; their actuality, their Secondness; and of course, their more general content, their Thirdness. In contrast, and if we follow the analogy, incomplete gestures will miss one or two categories (or, in semiotic terms, the blending of kinds of signs will be imperfect). There can be a first ambiguity of gestures if we are not in a position to tell complete from incomplete gestures, and my claim is that this happens *a priori* if we have a philosophy that does not recognize the reality of each category in gestures.

Two remarks are in order here. First of all, in my reading of Peirce’s lectures, the six incomplete systems have different inner logics: I would argue that the “one category” systems are so many samples of metaphysical *extravagance*. Their

authors want to reconstruct the whole universe with only one resource, and Peirce certainly told us all that we needed about them. In the “Architecture of the theories,” he gave the following metaphor:

Just as if a man, being seized with the conviction that paper was a good material to make things of, were to go to work to build a *papier mâché* house, with roof of roofing-paper, foundations of pasteboard, windows of paraffined paper, chimneys, bath tubs, locks, etc., all of different forms of paper, his experiment would probably afford valuable lessons to builders, while it would certainly make a detestable house, so those one-idea'd philosophies are exceedingly interesting and instructive, and yet are quite unsound. (Peirce 1960, 6.7, 1891)

The grammar here is too poor to allow for ambiguity.

Secondly, the two-categories systems are in general different, and more interesting philosophically: most of them will try to derive the “missing” category from the two others. For example, Berkeley, missing the category of Secondness, the “outward clash” (since there is no real worldly “outward” here), will try deriving it from mere ideas (passive ideas, Firstnesses) and the general laws of God’s action (Thirdness). One of the categories, in these systems, is only *apparent* but is not given a real ontological status. The best reply to these systems is not to show how extravagant they are but to show that the three categories are irreducible to each other. If we use this architectonic structure as a heuristic device to investigate gestures, we can expect to meet accounts where the creativity of the gesture is only apparent (that would be the case for a determinist account); and others where their dynamic component is obliterated (or considered as merely as the conjunctions of inner episodes and events in the world), and also accounts where the true generality and continuity of mental life, as well as the growth of meanings, are missing. This would hold, if we follow Peirce, for all the nominalist metaphysics.

The second situation is more interesting philosophically, as the same categorical scheme can be useful to investigate gestures which seem complete but are not actually so. The language of “degenerate” categories provides here such resources.

It should be noted that degeneracy is not a normative term; it is borrowed from mathematics and from the study of curves. In all cases where duality or triplicity reside only in the way of considering the thing, a category becomes “veiled” and is *degenerate*.

The First category, which is absolutely simple, has no degenerate form.

The Second category has one degenerate form and only one, which corresponds to the case where the duality, its “twoness,” resides only in the way of considering the fact while in reality there is nothing of the kind; this is the case, according to Peirce, of the relations of resemblance, which are the very type of

the relations of reason, and of the relations of identity, which are the very type of reflexive relations. In the first case, one can remove the dyadic relation without altering its members (resemblance), in the second one, one does not have a genuine dyadic relation (identity).

The Third category admits two main types of degeneracy:

- A dyadic degeneracy, which consists in an irrational plurality that is only a simple complication of duality; this is the case for the dichotomous method in philosophy: a subdivision is only a way of creating multiplicity from iterated dualities. It delivers us only semblances of Thirdness. In the different forms of this Thirdness, the three terms are not in real relation: a trivial example is that of the staple B that holds two sheets of paper A and C together. If the relation between A and B is removed, the relation between B and C remains (whereas the absence of only one of the three terms cancels the gift, which is the paradigm of genuine Thirdness).
- A monadic degeneracy, of which Peirce develops in these lectures only a version. It is not at first obvious to understand its nature and, for this reason, it is more prudent to grasp it from an example: “The most degenerate Thirdness is where we conceive a mere Quality of Feeling, or Firstness, to represent itself to itself as Representation. Such, for example, would be Pure Self-Consciousness, which might be roughly described as a mere feeling that has a dark instinct of being a germ of thought” (Peirce, 1960 [1903], 5.71). A representation of the Self to a Self as oneself would be a case of such a specious triadic relation.

Why do I think that degenerate forms would be useful here? For example, confirmation biases, so much discussed by cognitive scientists, are forms of degenerate seconds; my “gestures,” there, are not really interacting with the larger world, I am only projecting what was already hard-wired—in my brain—well before I had to act. In the same way, everything that is performed under the first three methods for settling beliefs described by Peirce are also degenerate gestures. There is a semblance of Secondness, but no real Secondness. The outcome is already settled, whatever the world actually is.

What about the dyadic generation of Thirdness? Any regularity emerging in the behavior of a collective, of a public, is not necessarily a “meaning,” or a real third. If this behavior is formatted by an algorithm, as on Facebook, the community of habits will only be the result of dyadic formatting. Or, if you prefer: it will be a raw effect of the technological interface with which we are dealing. This can certainly happen, too, when a crowd acts under the motivation of blind pulsions, of hatred, of bigotry. We shall have apparent meanings, apparent thirds, but the

real flavor of Thirdness will be missing. There lies the possibility of speciously complete gestures.

As for monadic degeneracy, it would cover every act through in which I am supposed to affect myself, such as in a mythological act of introspection. Perhaps the void subjectivity which is described by Dewey in *Individualism, Old and New*, would fit that narrative too.

A proper philosophical analysis would have two main tasks here: explaining why such acts, as they are described by their proponents, are not gestures; showing how components of complete gestures are in fact tacitly presupposed: in the case of introspection, if we choose to keep that word, we have firstnesses, but also a dialogical and thus a dyadic structure as well as a continuous development of meaning over time.

3 Infelicities

But that is not the whole story. Gestures are not complete before we “assent” to them, and this assent contributes to determining them, or, if we think in semiotic terms, to determine their meaning. From there on, we could say that there is never ever a really complete gesture if this means that it could not be interpreted again, and we could argue that there is a radical indeterminacy in all gestures, perhaps linked with their vagueness. I shall not repeat that story, since the conversation has already taken place between Giovanni Maddalena and Vincent Colapietro a few years ago (Maddalena 2016). Rather, I shall confine myself here to a simple argument: however powerful the synthesis they achieve, if gestures are not received and interpreted, they start soon to look like meteors falling from the sky, they are reduced to mere secondnesses, that is to say to their sheer actuality. They will be pure events, and we shall remain blind to their meaning. Assenting to them (or not) implies that their tentative “end” is not terminal, that they cannot be closed on themselves.

But that is still a general feature of gestures. Sometimes, we assent only to one part or one dimension of the gesture, and I shall take here an example from Maddalena:

One can participate in a gesture or make a gesture without assenting to it. In this case, the gesture will turn out to be an abuse, as Austin would have said, or it will even have the opposite outcome. In the novel *Vite dei santi* (Lives of the Saints) by Nino Ricci [. . .], the main character, Cristina, stigmatized in a small town in Molise in the early 1960s for having become pregnant while her husband had emigrated to America, entered the church aisle during Christmas mass and everyone took that action as a gesture of penitence and reconcil-

iation. Instead, Cristina performs that action without being aware of its implications. So it is not a gesture, and in the end that very action will be at the origin of the definitive break with the country. (Maddalena 2021, 51)

Of course, we can read things this way: Cristina is part of a gesture (the ceremony), perhaps, but she is not assenting to it (as a manifestation of penitence), and it is not really “her” gesture; she performs one act that is embedded into a larger gesture, and the way she performs it is crucial when we have to tell whether the whole interaction counts as a gesture or not. From my standpoint, we would have an interesting case of ambiguity, because we do not really know what is taking place by mere immediate observation or inspection. It is irreducibly vague until we know more about Cristina, and about the ceremony and the town as well.

To make that claim more precise, we can take advantage of Austin’s notion of “infelicity” (Austin 1962), as Maddalena himself does. One may remember that Austin identifies six main types of infelicities for a speech act. The first four are “misfires”: the act is not totally or really performed, or the conventions are not respected or the person performing the speech act has no authority to perform it. If I select two random people in the streets of Campobasso and loudly declared them “married,” nothing serious will ensue, even if I have said the exact same words as the mayor and quoted the relevant laws. In the gesture-language, I would not even have *performed* a gesture. Or at least, *that* gesture. After all, I might be a street artist performing live while being streamed on a video channel. I would then have performed another gesture. We need to have access to background conditions to tell (1) what kind of gesture we are considering and (2) whether, under that description, it is complete or not.

The last two infelicities are called “abuses” by Austin: the conventions, the setting, are there, the act is done and is done completely, but its consequences (its interpretants) are not endorsed by the agent. As, for example, when someone makes a promise, with all the decorum that this implies, the witnesses, and so on, but has absolutely *no intention of keeping his promise*, or pretexts that he “has changed” is mind and is thus not committed to it anymore.

We might thus have instances of events that *look like* gestures, but where the speaker does not assent to all the consequences and implications of the act. For the one making that kind of promise, things are not ambiguous, but for everyone else, if this kind of thing happens too often, gestures will *become* ambiguous, because we shall then not be in a situation where we can tell a complete gesture from an abuse. Some repeated abuses impair the possibility of complete gestures by others.

Here, the ambiguity and the confusion lie with the difficult distinction between a gesture and the mere appearance of a gesture, and it can be argued that there is a massive “contribution of the environment.” The main problem with the idea that we would be living in a post-truth era, as most have seen, is not an epistemic problem only, it concerns acts, and speech acts for that matter: are the agents or the sources of information really endorsing all the consequences of their speech acts? Are they really doing what we think they do when they say what they say? The confusion that ensues is not only a proliferation of the false; it is a weakening of complete gestures, as the fabric on which our world is built.

But do we have cases where the same sequence of action can belong to different gestures, which would make the case for an objective ambiguity of some gestures at least? The confusion this time would not lie between apparent and genuine gestures but between two gestures.

4 Pumping

Let me try to make that clearer, since that might sound too cryptic. Anscombe, who was certainly not a pragmatist, can help us in clarifying this difficulty and making it more concrete.¹

Her magisterial work, *Intention*, contains incisive statements about our access to intentions as a “knowledge without observation.” It is also relevant to mention her here, since identifying intentions is instrumental when we assent to gestures. The book also contains some rather radical statements about intentional “nesting,” which are less commented upon but are nevertheless crucial in order to understand why gestures can be ambiguous. In §23, she introduces the famous “man at the pump.” This man is making a gesture, and even if we do not have manual pumps anymore, we can still recognize this gesture.

A man is pumping water into the cistern which supplies the drinking water of a house. Someone has found a way of systematically contaminating the source with a deadly cumulative poison whose effects are unnoticeable until they can no longer be cured. The house is regularly inhabited by a small group of party chiefs, with their immediate families, who are in control of a great state; they are engaged in exterminating the Jews and perhaps plan a world war. The man who contaminated the source has calculated that if these people are destroyed some good men will get into power who will govern well, or even institute the Kingdom of Heaven on earth and secure a good life for all the people; and he has revealed

¹ Since the present chapter was submitted, I have developed other consequences of Anscombe’s account, on the basis of the “pump” example, in Girel (2023).

the calculation, together with the fact about the poison, to the man who is pumping. (Anscombe 2000, §23)

First, there is a muscular action, which consists of raising and lowering the arm, in short, pumping. By pumping, he replenishes the cistern of a cottage; pumping is dictated by his task, which is to feed the cottage with water. But the water is poisoned. Knowing that the inhabitants are going to drink it, the man who pumps is preparing, even carrying out, an assassination; supplying water becomes a means to this end. However, the inhabitants of the house are officers of an occupying army; the man with the pump is enrolled in the Résistance.

Here, the man at the pump is aware of the project; there is no “abuse,” as in the former example.

Anscombe’s idea was that one and the same act, moving one’s arm up and down, well, pumping, could serve several intentions, and that the “highest” intention so to speak “swallowed” all the lower intentions, under ordinary conditions. The man is not making four gestures at the same time, if we follow Anscombe:

[. . .] when we speak of four intentions, we are speaking of the character of being intentional that belongs to the act in each of the four descriptions; but when we speak of one intention, we are speaking of intention *with which*; the last term we give in such a series gives the intention *with which* the act in each of its other descriptions was done, and this intention so to speak swallows up all the preceding intentions *with which* earlier members of the series were done (Anscombe 2000, §26).

Anscombe rightly points out that these actions are not related to each other as causes and effects; *it is one and the same act that can be described in these various ways*. Our ability to identify the action depends on the fact that under ordinary conditions, and even under the extraordinary conditions of war, we know roughly where to stop in an intentional chain. We “grasp” the gesture, to use a phrase that surfaced in the book symposium quoted above.

In Anscombe’s example, the “intention with which” we act is given by the last term, and this might be a sensible reply to our puzzle about the identification of gestures. We could devise the maxim: *when you are in doubt, look for the most encompassing gesture, and interpret the rest as “sub-gestures.”* Things are not so simple though: a conspiracist will generally want to go further up the chain of intentions. For any “ordinary” gesture, he will always look for a larger intention, a larger gesture, or a mischievous goal. So, we cannot say that “the” gesture always corresponds to the most comprehensive account, or to the most inclusive description. Some persons are definitely “too” inclusive. Conspiracy theories, in general, are a powerful solvent for gestures.

I draw two conclusions from this example. The first one is, again, that background conditions are necessary to allow us to identify the relevant level when

we face a gesture. These conditions are provided by our ordinary interactions with others, and by our practices as well as by our institutions. They might obtain, or not, depending on the kind of community we make, with other inquirers. To phrase it differently: thinking that officials are “hiding the truth” or “stealing the election” does not have the same status in a country where the balance of powers is respected, where institutions work in full transparency, where the press is free, and in a country where institutions are corrupted. In the second situation, this does not imply that there are actually more conspiracies, but that disambiguating them from normal processes becomes more difficult. The second conclusion is that, even when we do not live in a conspiratorial society, we often face a radical ambiguity, since we never fully know in advance what will be the good level of description and, thus, what is the right assent we have to give to the gesture.

One can also add that Anscombe, even if she does not develop this point, opens another question, that of intentional *bifurcation*: one and the same act, at first sight, can serve two different and competing intentions. After all, we do not know the man with the pump very well: perhaps he is despised by the people in his village and—even if we agree that by pumping he is murdering the inhabitants of the cottage—his intention might be to bring retaliation on his village. This time, it is not a matter of moving up, it is a matter of deciding. If we do not know more, we cannot decide: even if we had all the physical details of his pumping-gesture at hand, we would still have to cope with ambiguity. If this example seems too exotic, think of a researcher with a conflict of interest. He or she is working, say, on the effect of the sun on global warming—a serious question, but also a favorite topic for climate skeptics—while being funded by a fossil fuel producer. How will we identify his action? There is indeed a bifurcation: the pump man is resisting *or* harming his neighbors; the researcher is extending science *or* is, whether he is aware of it or not, a denier; the manipulated person does what he would have done anyway *or* serves the interests of another, acting then in a different way than he would have done without it. Here, we often cannot answer without the help of a full repertoire of other gestures: what has the man at the pump been doing or experiencing in the past? What kind of science is this researcher doing usually? What is the track-record of the institution which sponsors him?

My aim here is not to propose a new analysis of the grammar of intention, nor an exegesis of Anscombe. However, I suggest that Anscombe’s two problems, that of “swallowing up” and that of bifurcation, arise in relation to gestures, if we understand them as distributed over a series of discrete acts, whose synthetic identity they provide. Gestures can be (and can become) ambiguous, not only subjectively ambiguous, in the sense that I would have difficulty interpreting it or even in the sense that its agent would not have clear ideas about it, but objectively ambiguous when considered in isolation.

5 How Things Came Undone

I have first argued that the grammar for gestures might be enriched through the addition of degenerate categories, which seem necessary when we want to say that apparently complete gestures are not so complete after all. I have also claimed that some narrow metaphysics do not even allow us to make a distinction between complete and incomplete gestures, so much so that the ontological status of gestures becomes ambiguous.

I am aware that more should be said to give flesh to some of the arguments about ambiguity I have offered above, but I hope the general direction is clear. As we have seen, a gesture is not “complete” if it does not meet what Maddalena called an “assent.” This is linked to the communicative nature of the gesture: a gesture that would never be “taken up” by others would not be a complete gesture. But precisely, what takes up and interprets a gesture . . . is another gesture, that might be performed, or not. Rutherford’s experimentation, Michelson-Morley’s experimentation, in the register of experimental science, a novel like Proust’s *La Prisonnière*, a complete mathematical proof . . . are complete gestures only if they can be taken up again, and this taking up again by other gestures, new experiments, writing articles, reading and writing novels, mathematical works, is essential to their “fruitfulness.” There is a way of presenting this gesture, the result of which is never certain, but there are also ways of receiving it, which determine just as much the success, the “felicity,” of this gesture. In short, there are no isolated gestures; there are *circles of gestures*.

This explains why the background conditions, that I mentioned when I was discussing Anscombe, are so important. When our forms of life become chaotic, when the community of interpretation becomes unstable, or again when publics remain spectral and “eclipsed,” to use Dewey’s term, a background condition for gestures is receding in the twilight.

Hence a last and longer point about the dynamics between complete and incomplete gestures: in the ordinary sense, a gesture is someone’s gesture, and the meaning that this gesture will have depends on the one who makes it. It is a platitude, certainly. The gesture of giving a coin to a hungry person does not have the same meaning and therefore is not the same gesture if the one who makes it is a millionaire or a beggar. It is a manifestation of charity in the first case, a sacrifice in the second. The qualification of the gesture will remain the same if the millionaire is disguised as a beggar and if the beggar has just been given beautiful clothes. We cannot totally bracket the agent when we assess a gesture. There would be here a risk of relativism here, if one could no longer say anything about a gesture if one did not relate it to an individual perspective. This risk is “limited,” though, because we usually manage to agree on gestures. It is also limited because

in the perspective that is undoubtedly shared by most authors in this volume. A gesture is social from the outset: in the same way as there is no private language, a language where I alone could renegotiate all the meanings all the time, there is no private gesture.

6 Conclusion

Representing things this way makes it possible to cast light on a deeper problem: any gesture very quickly becomes independent of the person who made it; very quickly, it leads another life, which thus continues beyond the author. If that is true, is the gesture then the particular, which one can associate with a proper name, which one can arrange under a date and a place, or is it, rather, this common and larger life? Certainly, complete gestures can be instantiated in the two forms. In science, we have for example major experiments, which are complete gestures, on their own account, and can be taken up by others, but we also have the unending life of inquiry, and it is tempting to interpret it as a complete gesture performed by all the inquirers, dead or alive. This twofold life of gestures opens the possibility that what is a gesture at one level becomes an act in the service of a gesture at another level. Any gesture can become an act again, and this is still part of its meaning as a gesture, of its possible interpretations. In other words, its perfection is never taken for granted; the completeness of a gesture, paradoxically, is contingent upon the completeness of other and of future gestures.

References

- Anscombe, Gertrude Elizabeth Margaret. 1957, 2000. *Intention*. Cambridge: Harvard University Press.
- Austin, John Langshaw. 1962. *How to Do Things With Words: the William James Lectures Delivered At Harvard University in 1955*. Oxford: Clarendon Press.
- Girel, Mathias. 2017. *Science et Territoires de L'ignorance*. Versailles: Quae.
- Girel, Mathias. 2021. *L'esprit En Acte. Psychologie, Mythologies Et Pratique Chez Les Pragmatistes*. Paris: Vrin.
- Girel, Mathias. 2022. "The Pragmatics of Ignorance." In Gross, Matthias and Linsey McGoey (Eds.). *The Routledge International Handbook of Ignorance Studies*. 2nd ed., 61–74. London: Routledge.
- Girel, Mathias. "What Exactly Is Presupposed by Agnotology? The Challenge of Intentions." *International Studies in the Philosophy of Science* 36, no. 3 (2023): 229–46. doi:10.1080/02698595.2023.2257111.
- Gross, Matthias, and Linsey McGoey (Eds.). 2022. *Routledge International Handbook of Ignorance Studies*. 2nd ed. London: Routledge.

- Hookway, Christopher. 2012. *The Pragmatic Maxim: Essays on Peirce and Pragmatism*. Oxford: Oxford University Press.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists' Incomplete Revolution*. Montreal: University of McGill-Queen's Press.
- Maddalena, Giovanni. 2016. "Grasping the Gesture. Replies to Colapietro, Girel, Guglielminetti, Pihlström and Santaella." *European Journal of Pragmatism and American Philosophy* 8 (1). <https://doi.org/10.4000/ejppap.462>.
- Maddalena, Giovanni. 2021. *Filosofia Del Gesto. Un Nuovo Uso Per Pratiche Antiche*. Rome: Carol I.
- Mead, George Herbert. 1934, 1962. *Mind, Self, and Society from the Standpoint of a Social Behaviorist*. Chicago: University of Chicago Press.
- Oreskes, Naomi, and Erik M. Conway. 2010. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. 1st U.S. ed. New York: Bloomsbury.
- Peirce, Charles Sanders. 1960. *Collected Papers*. Cambridge: Harvard University Press, Belknap Press.
- Politzer, Georges. 1927, 1994. *Critique of the Foundations of Psychology: The Psychology of Psychoanalysis*. Pittsburg: Duquesne University Press.
- Proctor, Robert N., and Londa Schiebinger (Eds.). 2008. *Agnotology: The Making and Unmaking of Ignorance*. Stanford: Stanford University Press.
- Ryle, Gilbert. 1938. "Categories." *Proceedings of the Aristotelian Society* 38: 189–206.

Maria Regina Brioschi

Chapter 3

Between Saying and Doing: What Logic for Gestures?

Abstract: The present chapter aims to illustrate what kind of logic is implied and demanded by gestures in light of Peirce's thought and his understanding of logic as semiotics. By relying on recent studies, the first part—"Meaningful Gestures"—provides a minimal definition of the gesture from a pragmatist perspective. Given such a characterization, the second part—"Gestures in Logic"—focuses on the role and relevance of gestures in the proposition according to Peirce's logical analysis, which he developed after his research on the logic of relatives. Finally, the third part—"For a Logic of Gestures"—investigates what kind of logic gestures require and express. As Peirce emphasized, logic is semiotically characterized and should not be based on (Indo-European) linguistic bias. Similarly, gestures should not be conceived of as embodiments of abstract judgments but the other way around. Gestures come first and allow us to understand better the very structure of reasoning, which—in Peirce's perspective—is not founded on the classical equation relationship ($A = B$) but rather on the copula of inclusion or implication.

Keywords: Peirce, Charles S, semiotics, pragmatism, the logic of relatives, reasoning, synthetic judgments

1 Meaningful Gestures: Toward a Pragmatist, Minimal Definition of "Gesture"

The present article investigates from a pragmatist perspective (particularly from that of Charles Sanders Peirce) what kind of logic is required by gestures. But what are gestures? How can they be described and defined in their essential features? Before focusing on their logic, this introductory section addresses these

Note: This research was funded by the Department of Philosophy "Piero Martinetti" of the University of Milan under the Project "Department of Excellence 2018–2022" awarded by the Ministry of Education, University and Research (MIUR).

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preliminary questions on the nature of gestures, relying on both classical sources and recent studies in the pragmatist field.

As Wittgenstein recalls by quoting Augustine at the beginning of his *Philosophical Investigations*, gestures are “the natural language of all peoples, the language that by means of facial expression and the play of eyes, of the movements of the limbs and the tone of voice, indicates the affections of the soul when it desires, or clings to, or rejects, or recoils from, something” (Augustine, *Confessions* I, 8, quoted in Wittgenstein 2009, 5, emphasis added). This wide definition underlines that gestures can be comprehended as that “universal” language that makes equal all peoples. Gestures are thus characterized as bodily motions endowed with a certain meaning insofar as they always express “something”: an intention, a desire, a feeling, etc. To this extent, gestures are always meaningful. Every gesture carries a meaning, which can be either known or unknown to the listener; determinate, indeterminate, or even vague about the contents it aims to express. Accordingly, gestures can also be misunderstood or misinterpreted, but—even if the meaning of a gesture is unclear—one cannot avoid wondering: “What does it mean?”

For this reason, the preliminary, general definition of gesture adopted through the article is the one that Giovanni Maddalena provides in his *Philosophy of Gesture*: “Gestures are the ordinary way in which we carry on meaning, as the etymology of the word (from *gero* = I bear, I carry on) implies.” Better yet, “Gesture is any performed act with a beginning and an end that carries a meaning” (Maddalena 2015, 9, 69–70).

Two clarifications are in order to fully understand the significance of this definition, which at first glance may seem even trivial. First and foremost, stating that gestures are “the ordinary way in which we carry on meaning” does not imply that they must be construed as *vehicles*, or *incorporations* of meaning, as if meaning was pre-established, or preceded them. From a pragmatist perspective, meaning is never an ideal construction or a ready-made concept (such as a Platonic idea) that is *then* translated into the bodily shape of gestures. By following William James’ pragmatist suggestion to “looking away from first things, principles, ‘categories,’ supposed necessities” and to “looking towards last things, fruits, consequences, facts” (James 1907, 54–55), and Charles Sanders Peirce’s pragmatic maxim, which asserts that any meaning “lies in purposive action” (Peirce NEM 2, 520, c. 1904),¹ it is possible to conclude not only that gestures are *per se* meaning-

¹ The full quotation from the excerpt is: “Have you read Royce’s *World and Individual*? It contains the most persuasive presentation of the doctrine that the meaning, or ultimate translation, of a conceptual sign, that is, of a general sign, lies in purposive action. I put it into the form of a logical maxim in the *Popular Science Monthly* for January 1878; but I did not show there how I

ful, but also the other way around. *Meaning* is nothing apart from gestures and practices. Secondly, it is worthwhile noticing that such a conception of gesture diverges from other characterizations of gestures advanced in current, philosophical debates. This is, for instance, the case for Giorgio Agamben's notion of gesture (see Agamben 2000). According to his archeology, informed by Aristotle and Varro's *De Lingua latina*, gestures (from the Latin *gestum*, *gerere*) escape the classical distinction between *agere* (to act) and *facere* (to make), as well as that between *praxis* (whose end is the action itself) and *poiesis* (whose end is outside itself). Instead, gestures designate pure "mediality." In other words, from Agamben's perspective gestures are conceived of as pure *media*—means without any end—whereas, from a pragmatist perspective, gestures cannot be devoid of meaning, and are most of the time deliberate acts.

In addition to this definition, three relevant characteristics of gestures must be clarified in this introductory section. These features are not intended to provide a complete, exhaustive description of gestures, but must be comprehended as the "pins" that one sticks into the map of an unknown territory, as far as she proceeds.² The first essential and general feature of gestures is that it represents a very promising and fruitful conceptual tool, or conceptual device, because it permits to overcome some of the most notorious dualisms in the history of philosophy: that between body and mind, practice and theory, as well as dichotomies such as that between communication and knowledge, perception and intellectual understanding.

More specifically, as a second characteristic it is worthwhile noticing that every gesture *opens up a world of (new) meaning*. In the pragmatist definition already introduced, it has been emphasized how gestures are essentially *meaningful* gestures, since they carry on some meaning. This implies also that a gesture may break up with the previous chain of meanings, which constitutes the horizon within which it inscribes itself, and make possible paths before unexplored or even inconceivable. Noticeable examples of this kind of rupture with the past and this disclosure of new horizons of meaning is represented in the history of humankind

had myself derived it, namely from a logical and not a psychological study of the essential nature of signs" (Peirce NEM 2, 520–521, MS 137, c. 1904). The reference to the *Popular Science Monthly* is to the canonical formulation of the pragmatic maxim as expressed in "How to make our ideas clear," now in Peirce W3: "Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object" (Peirce W3, 266).

2 This image intentionally recalls Peirce's metaphor in his "Prolegomena to an Apology for Pragmatism," comparing the maps in his "diagrams of thought" with the maps during a military campaign (Peirce 1906, 492–493).

by the *gesture* of drawing³ and then of writing,⁴ which evolved the human animal in the shape that is familiar to us today. Or yet, if one focuses only on daily life, think about how a gesture of a colleague or of a person with whom you are barely familiar may spark a friendship. This feature of gesture has received interesting consideration in the thought of the Italian philosopher Carlo Sini, further evolved by Carmine Di Martino (2015) and Rossella Fabbrichesi (2019). According to his understanding of gestures, when a gesture happens, it always changes the “scene” of the world, opening up new possibilities and new horizons of meaning. As Fabbrichesi recently summarizes in her essay “From Gestures to Habits”:

Sini proposes that we define the *gesture* as “grapheme,” a writing of the body and world, a writing which traces the opening of experience by means of signs which are engraved in the body, the environment, the forms of pictorial and ideography writing. “In this sense, the gesture is the original writing of experience” (Sini 1996/2014, 20). I would also add that if each gesture is an original *gramma* (in Greek: writing, character, depiction), it is also a *pragma*, an action guided by a certain interest. (Fabbrichesi 2019, 351)

In the third place, gestures are not to be understood as ancillary to language—useful in some occasions to understand better the intentions of the speaker, or, even worse, considered as an optional frill, ultimately irrelevant to the reasoning carried out. On the contrary, according to a pragmatist approach, gestures properly constitute the origins of language. From a genetic-historical point of view, this perspective has been specially developed out of philosophy, by the so-called “Gestural Theory of Language evolution,” which is nowadays credited as one of the most important theories of language evolution.⁵ It largely claims that vocalizations and languages, which were spoken languages before becoming written languages, have stemmed from the communication through arms and hands that our ancestors performed at the beginning. In this regard, pragmatism (and, to some extent, phenomenology)⁶ offers a conceptual framework for this interdisciplinary research that connects ethno-anthropology, cognitive studies, animal

3 Consider for instance the idea of *homo pictor*, according to which the gesture of drawing has been what allowed human beings to become such. See Jonas (1962 and 1966).

4 See, among others, Sini (1996/2014 and 1996/2009).

5 For an overview on the gestural theory, see Gillespie-Lynch (2017), and for a discussion of the different hypotheses, see Kendon (2017). Among the most representative authors are Michael Corballis (2002) and David F. Armstrong and Sherman E. Wilcox (Armstrong and Wilcox 2007). The topic has been also explored from the 1960s by ethno-anthropologists such as André Leroi-Gourhan (Leroi-Gourhan 1964–1965).

6 Among classical phenomenologists, see especially Merleau-Ponty (cf. Gill 2010). For more contemporary efforts, inspired by a phenomenological approach see Vilém Flusser (2014).

studies, communication, and linguistic studies.⁷ On the whole, from a philosophical perspective, all those investigations are related to a continuistic perspective, which underlines the proximity, and continuity indeed, of human and non-human primates. For instance, Aristotle famously said that the human being is essentially characterized as “*zoon logon echon*,” later translated into Latin as “animal rationale” (rational animal), but originally meaning that humans are the only animals endowed with “*logos*,” the latter referring at once to *reason* and *language*, so that according to the Ancient Greek mentality “reasoning cannot be done without language” (Peirce W8, 24, 1890). Contrariwise, once language is acknowledged to stem from gestures, the peculiarity of human beings, if any, needs to be deeply reconsidered. If the gestural theory of language has been that emphasized, it is not for declaring the intention to jump into the vast and multifaceted debate about human and non-human beings. The point that is crucial for the issue at stake in the present article is that those kinds of research challenge the way we ordinarily think of reason (*logos*). In this regard, the first point to clarify is to what extent reason and reasoning can be construed without a linguistic framework. Accordingly, and to narrow the scope of the topic and state the point plainly, if language is *per se* a kind of gesture, and has its origins in gestures, how do we need to redefine reasoning, and the rules of reasoning (that is, logic)?

Last but not least, gestures from a pragmatist perspective are acknowledged as “social acts.” As for the gestural theory of language, this perspective is currently supported by a vast, interdisciplinary literature.⁸ Nonetheless, also in this case it is important to remember that the pragmatist philosophy of George H. Mead was pioneering in the field. As Fabbrichesi summarizes: “The gesture is the pragmatic unity par excellence: it produces a practical behavior and it triggers a social response” (Fabbrichesi 2019, 89). This appears clearly also from trivial examples of daily life, consider for instance the case of a mother smiling at her newborn baby, that stimulates the baby to smile back at her (see Stango 2024, *infra*). From a pragmatist perspective, a gesture—even when it is not conventional (as it may be conventional, for instance, the thumb up)—is always directed toward someone, always calls for, and provokes the other’s response. In the extreme case, the addressee can

⁷ This is also due to the importance and pioneering work of George H. Mead on gestures, at the crossroads of sociology, communication theory and philosophy (Mead 1934), usually highly considered for his view of gestures as *social acts* (see the following paragraph of the present section).

⁸ One of the most well-known voices in this field of research is the evolutionary psychologist Michael Tomasello. Among his vast number of works, see, for instance, Tomasello (2008).

be even the same gesture-maker.⁹ In this regard, it must be clarified that the response is to be understood in a very broad sense. By following Peirce's reflections,¹⁰ a response may be emotional, energetic (or volitional, as actions are), or logical, thereby implying that the meaning (of gestures) must not be interpreted in a narrow, rationalistic, or intellectualistic, sense.

All those features that come along with the minimal definition of the gesture from a pragmatist perspective are not merely remarkable, opening observations; they cannot be omitted for inquiring about the logic of gestures, because they all reveal how gestures call for a new re-thinking of reasoning, and therefore of logic, since the latter is conceived of by the author exactly as "the theory of reasoning" (e.g., Peirce EP2, 385). Therefore, to be able to move on to Peirce's contribution in thinking about the logic implied and demanded by gestures, it is first and foremost important to assess if and to what extent Peirce takes into account gestures in his logical inquiry. Accordingly, the question that addresses the second section is: do gestures play a role in Peirce's account of logic?

2 Gestures in Logic According to Peirce

Peirce did not elaborate on a specific theory of gestures, or discuss them in detail. Nonetheless, in Peirce's writings, special attention is paid to gestures in his logical essays, particularly in his logical analysis of the proposition, developed after his study of the logic of relatives (also called logic of relations). Before understanding the specific role of gestures in Peirce's logic of the proposition, two general assumptions, belonging to Peirce's overall perspective, need to be made explicit.¹¹

The first assumption is that, according to Peirce, logic is comprehended as semiotics: logic is semiotics, and vice-versa.¹² He states, for instance: "All thought being performed by means of signs, logic may be regarded as the science of the general laws of signs" (Peirce EP2, 260, 1903). Such a coincidence between logic and semiotics has two, complementary consequences. On the one hand, formal logic cannot be detached from its semiotic implications (see Tiercelin 1991, 191);

⁹ This is, for instance, well expressed by an Italian song from the seventies by Giorgio Gaber, entitled "Cerco un gesto naturale" ("I am looking for a natural gesture"), which states: "I am looking for a gesture to be sure this body is mine."

¹⁰ I am here referring to his notion of "interpretant"; for an introduction to the topic, see Liszka (1990).

¹¹ For those interested in Peirce's account of propositions, see Stjernfelt (2014) and Bellucci (2020).

¹² For a detailed study of his conception of logic as semiotics, see Bellucci (2014).

otherwise, Peirce's contribution to formal logic would be misunderstood or incomplete. On the other hand, without understanding the logical purport of Peirce's semiotics, the latter would lose its consistency and theoretical significance.

Second, it is essential to remember how, for the author, logic and language are interdependent. To express their relationship, he adopts the following, suggestive image: "What is logic? [. . .] it is quite indifferent whether it be regarded as having to do with thought or with language, the wrapping of thought, since thought, like an onion, is composed of nothing but wrappings" (Peirce EP2, 460, 1911). Nonetheless, his conception of language is broader than our common understanding of it.

There are undoubtedly numerous other ways of making assertions besides verbal expressions, such as algebra, arithmetical figures, emblems, gesture-language, manners, uniforms, monuments, to mention *only intentional modes* of declaration. Some of these are of the highest importance for reasoning. [. . .] So, cultivators of the art of reasoning found themselves long ago obliged to institute a speculative grammar¹³ which should study modes of signifying, in general. (Peirce EP2, 18–19)¹⁴

To see how these two considerations, which seem opposite at first sight, stand together, it must be clarified that for Peirce, logic cannot be devoid of language, but not in the sense of being reduced to or based on some specific "linguistic" patterns, such as some specific "usages of languages" (EP2, 221, 1903), or natural languages. Indeed, the author often addresses harsh criticism towards logicians and grammarians (whom he calls "children of Procrustes"), referring to both old logicians and his contemporaries, since they build logic upon pre-established modes of thought, or upon certain languages, especially on the Indo-European ones. Yet, as Peirce suggests, one cannot ignore that "our Indo-European languages bear as small a proportion to all the varieties of human speech as the phanerogams to the totality of forms of plants or the vertebrates to the totality of animals" (Peirce 2020, 23, 1894).

Given for granted these two general assumptions, gestures enter into Peirce's anatomy of the proposition¹⁵ under the function of "index, indices." By his own

¹³ For the sake of clarity, with "speculative grammar," Peirce means—by recalling Duns Scotus's philosophy—the first proper branch of logic that concerns "the general theory of the nature and meaning of signs" (Peirce EP2, 260, 1903).

¹⁴ Peirce adopts again, in this regard, the metaphor of the skins of the onion, though with a slightly different meaning: "One selfsame thought may be carried upon the vehicle of English, German, Greek, or Gaelic; in diagrams, or in equations, or in graphs: all these are but so many skins of the onion, its inessential accidents" (Peirce CP 4.6, MS 298, 1906).

¹⁵ Given the clarifications just made, it must be noticed that when Peirce speaks of the proposition he is not referring to its linguistic expression nor to the act of judging it. As he defines it: "is that sign of which the judgment is one replica and the lingual expression another" (EP2, 311, c. 1904).

definition, an index is a sign, or—to limit to the scope of the present article—a *gesture* which “awakens and directs attention,” “which denotes a thing by forcing it upon the attention” (Peirce 1896, 29). This is, indeed, more or less the unique way in which Peirce actually refers to “gestures,” in both published works and his big amount of unpublished manuscripts. As Peirce significantly says: “A tone or gesture is often the most definite part of what is said” (Peirce CP 5.568). So, this section explores only this “narrow” interpretation of gesture. To this extent, the function of indices, or (indexical) gestures, is that of determining what is the object of the proposition,¹⁶ causing the listener “to attend to realities” (Peirce 2020, 60), so that both the utterer and the interpreter can recognize what they are talking about. The most paradigmatic example of those kinds of indexical gestures is the pointing-finger. The author emphasizes,

“that chair is yellow” would be more accurately represented thus: “☞ is yellow,” a pointing index-finger taking the place of the subject. (CP 7.635, 1903)

As it is apparent, according to Peirce gestures enter into the analysis of the proposition as a substitute for the subject of the proposition. Actually, Peirce does not only say that they can stand for subjects, but also that they are more accurate than nouns, which usually account for “subjects” in propositions. In addition, he also comes to maintain that not only gestures, but even percepts, looks, or tones (cf. e.g., Peirce 2020, 60, 1896; EP2, 168, 1903; and R 787 CSP 22, c. 1896) can be considered as subjects of the proposition, inasmuch as they “are virtually almost directions how to proceed to gain acquaintance with what is referred to” (Peirce MS 596 CSP 36, c. 1902). But what does “subject” mean for Peirce, in light of this prominent role accorded to gestures in propositions? To offer a thorough-going response to this question, the latter can be reformulated as follows: what does the role of gestures (that is, indexical gestures) in propositions tell us about Peirce’s logic and syntax of propositions?

16 To be more accurate, Peirce states: “Indices may be distinguished from other signs, or representations, by three characteristic marks: first, that they have no significant resemblance to their objects; second, that they refer to individuals, single units, single collections of units, or single continua; third, that they direct the attention to their objects by blind compulsion” (Peirce CP 2.305, 1901).

3 For a Logic of Gestures

3.1 Peirce's New View of the Proposition

After his research on the logic of relatives,¹⁷ Peirce concludes that “the whole expression of the proposition consists of two parts, a pure Boolean expression referring to an individual and a Quantifying part saying what individual this is” (W3, 178, 1885). The same can also be explained in semiotic terms. From such a perspective, Peirce states that every proposition is composed by the conjunction of *an icon* (the Boolean part referring to an individual) and *an index* (the part that says what individual this is). As Peirce clarifies: “the former [the icon] is intended to create something like a picture in the mind of the interpreter, the latter to point to what [they/s/]he is to think of that picture as being a picture of” (R 284 CSP 43, 1905). Icon and index then correspond to Peirce's idea of “predicate” and “subject” (see, for instance, Peirce EP2, 277, 1903). To exemplify this point, by recalling the example mentioned in the previous section, consider the proposition:

“That chair is yellow”/“☞ is yellow.”

In these cases, the propositions can be logically analyzed as follows:

“That chair”/“☞”: *the quantifying part/index/subject*
 “_is yellow”: *Boolean part/icon/predicate*

This model is pretty divergent from the traditional, Aristotelian logical compound, according to which a proposition is analyzable as “S is P,” where *S* stands for the subject, *is* for the copula (understood as the verb “to be”), and *P* refers to the predicate. In more detail, in Peirce's case, the *subject*—as *index*—has the function of directing attention. It is not a substance of which one can predicate qualities. For Peirce, subjects must be conceived as neither substances, nor merely agents; they are the “indicative” constituents of propositions, which transform the predicate in a proposition by performing their function of “*stimulants to looking*, like the bicyclist's bell” (NEM 4, 173, R 441 CSP 12, 1898). As the author clarifies: “An index only says “There!” It takes hold of our eyes, as it were, and forcibly

¹⁷ From the 1870s to the late 1890s, Peirce wrote various articles on the logic of relatives, extending Boole's logic and comparing his results with De Morgan's logic of relations. Some of his works include philosophical considerations—especially the later ones—while the others are more technical, fully devoted to logical contents and of indisputable relevance for the history of logic (see Brady 2000). Also, it is remarkable that the only book published by Peirce (not entirely authored, but edited) is dedicated to these logical inquiries (Peirce 1883).

directs them to a particular object, and there it stops” (W5, 379, 1886). Similarly, when Peirce speaks of the predicate, he is not referring to a bare quality. First of all, for the author, the predicate includes the copula “is.”¹⁸ Better yet, as the author states, the predicate “contains a verb within itself” (Peirce EP2, 220, 1903), and the verb may vary. The predicate indeed designates “an icon, or image, without attachments to experience, without a ‘local habitation and name,’ but with indications of the need of such attachments” (Peirce 1897, 163).

According to Peirce, the proposition can be imagined as an atom, with the predicate/verb as “nucleus” and the places for the subjects as its unsaturated bonds (e.g., Peirce CP 3.421, 1892). For instance, in the previous example, the predicate is not only “yellow,” but “__is yellow,” where the blank space underlines the fact that in this proposition *one* subject is needed. If one then takes into account, as Peirce does (see CP 5.542, R 596, 1902), the proposition: “Anthony gives a ring to Cleopatra,” the predicate, in this case, is “__gives__to__,” and the three blanks indicate that three subjects are needed here: they are equally Anthony, the ring and Cleopatra. It is worth noting that here the icon is not only an “image,” but an image of *action*. This feature is indeed not accidental and coincides with the passage in Peirce’s philosophy between an idea of nominal relative (such as “__lover of__”) to a verbal one (such as “__loves__”), that is indeed precisely defined as “rhema” (from the Greek, meaning *predicate, verb*). As Peirce explains:

The word *donation* is indefinite as to who makes the gift, what he gives, and to whom he gives it. But it calls no attention, itself, to this indefiniteness. The word *gives* refers to the same sort of fact, but its meaning is such that that meaning is felt to be incomplete unless those items are, at least formally, specified; as they in: “Somebody gives something to some person (real or artificial).” (Peirce 1906, 511)

Accordingly, this new, original, logical understanding of the proposition paves the way not only to think of a logic of signs, but also a logic of gestures. Why?

18 As Peirce explains, the copula became the third essential component of the proposition only from the Middle Ages onwards, due to the language in use at the time (Latin). However, as also different natural languages testify to (see, for instance, old Egyptian), the copula is not necessarily the verb to be since that is a bias based on what Peirce calls the “Aryan syntax” (Peirce EP2, 20, 1895). See Brioschi (2020) for a more detailed account of Peirce’s new syntax of the proposition in light of Peirce’s logic of relatives, and see Brioschi (2022) for the implications at the categorical level. The logical function of the copula is connecting the icon and the index, indicating “that they are to be taken as signs of the same object” (Peirce EP2, 310). Accordingly, a copula may also be another word or the bare fact of co-localization or juxtaposition (see Stjernfelt 2019).

3.2 A Suitable Logic for Gestures

So far, it has been mainly investigated how Peirce's new analysis of the proposition takes into account gestures as its indexical components. From another perspective, it has been analyzed what is the place of gestures in Peirce's account of the proposition, and how such a view of propositions diverges from classic interpretations. But Peirce's contribution is not only confined to this. Indeed, once Peirce's notion of the proposition and its verbal kernel (both introduced in the previous section) are fully understood, it follows that (i) the predicate, too, can be construed as a gesture, and therefore (ii) that the logic of relatives, which lies at the basis of Peirce's new analysis of the proposition, can be assumed as an effective, logical model for the grammatic of gestures.

Accordingly, (i) the predicate can be seen as a gesture, though of a different kind of the pointing finger previously considered. The predicate is indeed an *iconic gesture*.¹⁹ Whereas Peirce's thought (and especially his idea of "icon") has been successfully adopted in visual and cognitive semiotics, it has scarcely underlined how Peirce's very idea of the icon (predicate, or *rhema*) also paves the way for conceiving a logic of gesture.²⁰ An iconic gesture does not define the subject of a proposition; rather, it stands for its central knot, which is *per se* indefinite and incomplete but encompasses the indications of what is needed to assume a determinate meaning, that is, to complete the proposition. For instance, let us consider when a professor, during a written exam in class, at a certain moment hears a whispering and reacts by placing the index finger vertically in front of the lips. This gesture, meaning "be quiet!," is indefinite and incomplete ("Who should be quiet?"), and for this reason, it often triggers another gesture. In the case considered, some students may point their thumbs at themselves, as if they said: "Are we the ones to whom you are saying to shut up?!" As it is in the case analyzed, the proposition can be understood as the conjunction of *two* kinds of gestures: an indefinite, descriptive, and "signifying" one and a defining (determining), "denotative" one.

Thus, by examining gestures, we can see how they assume a definite meaning, as propositions do, by stemming from the union of an *indexical* gesture with an *iconic* one. As it has already been explained, on the one hand, indexical gestures

¹⁹ For a detailed overview of iconic gestures, see Holler and Beattie (2003).

²⁰ Among the few that explore the broad meaning of Peirce's predicate, see Stjernfelt. For instance, he states: "Outside of linguistics, pictures, images, diagrams, gestures, etc. may form rhemes and thus appear as the predicative, propositional-function part of Dicisigns [that is, of propositions]. Common to all predicate rhemes is that they involve an iconic, descriptive sign" (Stjernfelt 2015, 1026).

help identify the object to which the predicate refers. This is the defining, determining gesture of the proposition, which denotes its subject. On the other hand, the iconic gesture stands for the predicate of the proposition. Differently from indices, the function of this kind of gesture is to describe, to resemble “something” (the latter to be understood not merely as a *thing*; it is especially a behavior or an action). Also, this kind of gesture is intrinsically incomplete: iconic gestures cannot be true or false, for instance. They are, *per se*, vague or indefinite because they are descriptive of “pure potentialities,” rather than of facts, which happen in some place at some moment. For instance, if one watches a performer, such as a mime actor, climbing (a ladder) or eating (an apple), there is no reference to who the climber is, to what the ladder (or the apple) is, etc. For this reason, Peirce states, “An icon can only be a fragment of a completer sign” (EP2, 306, c. 1904). Only once that gesture is conjoined with an indexical gesture, a proposition is obtained, though not in a linguistic fashion. It may happen that iconic gestures are verbally translated into the compound of the verb “to be” and a predicate/adjective. For instance, think about when one imitates with both hands the drops falling from the eyes; in this case, the meaning can be expressed as “_ is sad.” However, Peirce’s idea of the predicate is not limited to this specific form; it includes also complex predicates, as well as actions, together with the indications of the number of subjects/objects needed to make sense of that pure icon. This model is particularly evident when one examines gestures. For instance, the gesture of a “hug” requires a giver and a receiver, and their indications can be performed by gestures as well.

Furthermore, the logic of relatives should be assumed as a suitable logic for gestures because it challenges the common understanding of reasoning. It is well known how Peirce’s logical investigations allow to make room for creativity and synthetic reasoning in logic.²¹ Recently, starting from his philosophy, it has been also emphasized how synthetic reasoning and gestures are deeply connected.²² Nonetheless, it has not been underlined yet how this union is rooted in Peirce’s writings in mathematical logic. Since the profound connections between gestures and the logic of relatives have been explored in the last section, before moving to conclusions it is essential to touch upon the relationship between synthetic reason-

²¹ In this regard, the topics investigated the most are undoubtedly those related to “abduction”; see Magnani 2023.

²² Overall, in this chapter, “Synthetic reasoning” generally refers to ampliative reasoning. Recently, synthetic reasoning and gestures have been strongly related to one another. For a detailed analysis of why gestures and synthetic reasoning are deeply connected, see Maddalena (2015). The present research assumes this perspective as its starting point. Still, in comparison to that theory, the chapter diverges in the definition of synthetic reasoning as the “recognition of identity through changes.”

ing and the logic of relatives. In fact, it is thanks to the latter that Peirce aimed to reverse the classical connection between analytic and synthetic reasoning. More in detail, one of the crucial changes that Peirce's propositional logic introduced, if compared to Boole's algebra, is the adoption of the copula of inclusion (or implication, graphically represented as \rightarrow and later \subset) instead of that of equation ($=$), so that his new definition of identity is: " $(x = y) = (x \rightarrow y \ \& \ y \rightarrow x)$ " (Peirce W2, 360, 1870). At first glance, this might seem a slight difference. However, by adopting the copula of inclusion, which exhibits a transitive and antisymmetric relation, Peirce maintains that this copula is more primitive than the equation and, therefore, must be acknowledged as *the* basic structure of reasoning.²³ As a consequence, synthetic reasoning too can be viewed as the most original way of thinking. From this perspective, it lies at the very heart of every kind of reasoning, including the analytic one, which is, instead, typically based on the equational model, and usually considered as the primary, logical form upon which the other kinds of reasoning are built.

4 Concluding Remarks

As the first section has shown, gestures are crucial from a pragmatist perspective, because they allow us to understand meaning in its making, as arising from experience and interwoven with the threads of practices. Due to this relevance, the second section illustrates how Peirce's philosophy of logic, understood as semiotics, encompasses gestures. After describing the role and place that gestures assume in Peirce's analysis of the proposition, the third section revealed that gestures represent an eloquent example of how Peirce's account of the proposition is valid also for the non-verbal types of communicative language. Furthermore, by thinking *with* Peirce and on the basis of his own system, it has been argued that the logic of relatives constitutes an adequate model for deciphering the grammar of gestures, and can be assumed as the starting point of a thorough understanding of reasoning as synthetic.

²³ The author also emphasizes that this implicational model is the one which corresponds to inference (see Peirce, NEM 4, 174, 1898).

References

- Agamben, Giorgio. 2000. *Means without end*. Translated by Cesare Casarino and Vincenzo Binetti. Minneapolis and London: University of Minnesota Press.
- Armstrong, David F. and Sherman E. Wilcox. 2007. *The Gestural Origin of Language*. New York: Oxford University Press.
- Bellucci, Francesco. 2014. “‘Logic, considered as Semeiotic’: On Peirce’s Philosophy of Logic.” *Transactions of the Charles S. Peirce Society* 50 (4): 523–547.
- Bellucci, Francesco (Ed.). 2020. “Peirce’s Theory of the Proposition.” Special issue of *Blixyri: Studi di storia delle idee sui segni e le lingue* 9 (2): 143.
- Brady, Geraldine. 2000. *From Peirce to Skolem: A Neglected Chapter in the History of Logic*. Amsterdam: Elsevier.
- Brioschi, Maria Regina. 2020. “For a New Logic of the Proposition: Peirce and the Concept of ‘Rhema.’” *Blixyri* 9 (2): 23–45.
- Brioschi, Maria Regina. 2022. “The Dismissal of ‘Substance’ and ‘Being’ in Peirce’s Regenerated Logic.” *Logic and Logical Philosophy*.
- Corballis, Michael C. 2002. *From Hand to Mouth: the Origins of Language*. Princeton: Princeton University Press.
- Di Martino, Carmine. 2015. *Signe, geste, parole*. Paris: Hermann.
- Fabbrichesi, Rossella. 2019. “From Gestures to Habits: A Link between Semiotics and Pragmatism.” In Jappy, Tony (Ed.). *Bloomsbury Companion to Contemporary Peircean Semiotics*. London and New York: Bloomsbury Academic.
- Flusser, Vilém. 2014. *Gestures*. Minneapolis: Minnesota University Press.
- Gill, Jerry H. 2010. “Language as Gesture: Merleau-Ponty and American Sign Language.” *International Philosophical Quarterly* 50 (1): 25–37.
- Gillespie-Lynch, Kristen. 2017. “Gestural Theory.” In Shackelford, Todd and Viviana Weekes-Shackelford (Eds.). *Encyclopedia of Evolutionary Psychological Science* 1–5. Cham: Springer.
- Holler, Judith and Geoffrey Beattie. 2003. “How iconic gestures and speech interact in the representation of meaning: Are both aspects really integral to the process?” *Semiotica* 146 (1/4): 81–116.
- James, William. 1907. *Pragmatism: A new name for some old ways of thinking*. New York: Longmans, Green and Co.
- Jonas, Hans. 1962. “Homo Pictor and the Differentia of Man.” *Social Research* 29 (2): 210–220.
- Jonas, Hans. 1966. *The Phenomenon of Life: Toward a Philosophical Biology*. New York: Harper & Row.
- Kendon, Adam. 2017. “Reflections on the ‘gesture-first’ hypothesis of language origins.” *Psychonomic Bulletin & Review* 24: 163–170.
- Leroi-Gourhan, André. 1964–1965. *Le geste et la parole*. 2 Volumes. Paris: Editions Albin Michel.
- Liszka, James J. 1990. “Peirce’s Interpretant.” *Transactions of the Charles S. Peirce Society* 26 (1): 17–62.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture*. Montreal, London, and Chicago: McGill-Queen’s University Press.
- Magnani, Lorenzo (Ed.). 2023. *Handbook of Abductive Cognition*. Cham: Springer.
- Mead, George H. 1934. *Mind, Self and Society*. Chicago: Chicago University Press.
- Peirce, Charles S. (Ed.) 1883. *Studies in Logic by Members of the Johns Hopkins University*. Boston: Little, Brown, and Co.
- Peirce, Charles S. 1896. “The Regenerated Logic.” *The Monist* 7 (1): 19–40.
- Peirce, Charles S. 1897. “The Logic of Relatives.” *The Monist* 7 (2): 161–217.

- Peirce, Charles S. 1906. "Prolegomena to an Apology for Pragmatism." *The Monist* 16 (4): 492–546.
- Peirce, Charles S. 1931–1966. *The collected papers of Charles S. Peirce*. 8 Volumes, edited by Charles Hartshorne, Paul Weiss, and Arthur W. Burks. Cambridge: Harvard University Press. [Abbreviated as CP followed by volume number and paragraph number.]
- Peirce, Charles S. 1967. *Manuscripts in the Houghton Library of Harvard University*. Identified by number based on Richard Robin, *Annotated Catalogue of the papers of Charles S. Peirce*, Amherst: University of Massachusetts Press. [Abbreviated as MS followed by manuscript number and page number.]
- Peirce, Charles S. 1976. *The New Elements of Mathematics by Charles S. Peirce*. 4 Volumes, edited by Carolyn Eisele. The Hague: Mouton. [Abbreviated as NEM followed by volume number and page number.]
- Peirce, Charles S. 1986. *Writings of Charles S. Peirce*, edited by the Peirce Edition Project. Bloomington: Indiana University Press. [Abbreviated as W3.]
- Peirce, Charles S. 1998. *Essential Peirce: Selected philosophical writings*. Volume II, edited by the Peirce Edition Project. Bloomington: Indiana University Press. [Abbreviated as EP2.]
- Peirce, Charles S. 2009. *The Logic of Interdisciplinarity. The Monist-Series*, edited by Elize Bisanz. Berlin: Akademie.
- Peirce, Charles S. 2020. *Selected Writings on Semiotics, 1894–1912*, edited by Francesco Bellucci. Boston and Berlin: De Gruyter.
- Sini, Carlo. 1996, 2014. *Gli abiti, le pratiche, i saperi*. Milan: Jaca Book. [Reprinted in Sini, Carlo. 2014. *Opere. Il pensiero delle pratiche*, Volume IV, Tome II, §1, edited by Florinda Cambria. Milan: Jaca Book.]
- Sini, Carlo. 1996, 2009. *Etica della scrittura*. Milan: Il Saggiatore. [English Translation: Sini, Carlo. 2009. *Ethics of Writing*. Translated by Silvia Benso and Brian S. Schroeder. Albany: State University of New York Press.]
- Stango, Marco. 2024. "Transcendental Gestures." In Maddalena, Giovanni, Fabio Ferrucci, Michela Bella, and Matteo Santarelli (Eds.). *Gestures, Approaches, Uses, and Developments*. Berlin: De Gruyter.
- Stjernfelt, Frederik. 2014. *Natural propositions: The actuality of Peirce's Doctrine of Dicisigns*. Boston: Docent Press.
- Stjernfelt, Frederik. 2015. "Peirce's semiotic doctrine of propositions." *Synthese* 192 (4): 1019–1054.
- Stjernfelt, Frederik. 2019. "Co-localization as the syntax of multimodal propositions: An amazing Peircean idea and some implications for the semiotics of truth." In Jappy, Tony (Ed.). *The Bloomsbury Companion to Contemporary Peircean Semiotics*, 419–458. London and New York: Bloomsbury Academic.
- Tiercelin, Claudine. 1991. "Peirce's Semiotic Version of the Semantic Tradition in Formal Logic." In Cooper, Neil, and Pascal Engel (Eds.). *New Inquiries into Meaning and Truth*, 187–213. New York: St. Martin Press and Harvester Wheatsheaf.
- Tomasello, Michael. 2008. *Origins of Human Communication*. Cambridge: MIT Press.
- Wittgenstein, Ludwig. 2009. *Philosophical Investigations*. Revised 4th ed. Translated by Gertrude E. M. Anscombe, Peter M. S. Hacker, and Joachim Schulte. Chichester: Wiley-Blackwell.

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Chapter 4

Transcendental Gestures

Abstract: In this chapter, I introduce the notion of *transcendental gesture* by relying on the recent studies on the logic and epistemology of *gestures* proposed by Giovanni Maddalena read in the broader context of the “dramatic” ontology of *truth* developed by some Catholic philosophers and theologians in the *Communio* school. Maddalena has recently elaborated an original and persuasive doctrine of “gesture” understood as the paradigm of synthetic reasoning. All the formal aspects of gestures discussed in Maddalena’s work echo the concerns present in the “dramatic” doctrine of truth elaborated by the Swiss Catholic theologian Hans Urs von Balthasar.

Keywords: logic and epistemology of gestures, transcendental gestures, Balthasar, Hans Urs von, gift, mother’s smile

“To my mind, we ought to love life more than anything.”

“Love life rather than the meaning of life?”

“Yes. Love it before finding reasons why; without logic, as you said; that’s the only way to get at its meaning.”

Fyodor Dostoevsky, *The Brothers Karamazov*

Begin to greet thy mother with a smile,

O baby-boy! Ten months of weariness

For thee she bore: O baby-boy, begin!

For him, on whom his parents have not smiled,

Gods deem not worthy of their board or bed.

Virgil, *Eclogue IV*

It says: “In the Beginning was the Word.”

Already I am stopped. It seems absurd.

The Word does not deserve the highest prize, I must translate

It otherwise

If I am well inspired and not blind.

It says: “In the beginning was the Mind.”

Ponder that first line, wait and see,

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Lest you should write too hastily.
 Is mind the all-creating source? It ought to say: In the
 Beginning there was Force.
 Yet something warns me as I grasp the pen,
 That my translation must be changed again.
 The spirit helps me. Now it is exact.
 I write: "In the beginning was the Act."
 Johann Wolfgang von Goethe, *Faust*, I, 3

1 Introduction

In this chapter, I introduce the notion of *transcendental gesture* by relying on the recent studies on the logic and epistemology of *gestures* proposed by Giovanni Maddalena read in the broader context of the “dramatic” ontology of *truth* developed by some Catholic philosophers and theologians in the *Communio* school.

Maddalena has recently elaborated an original and persuasive doctrine of “gesture” understood as the paradigm of synthetic reasoning (Maddalena 2015 and 2021). According to him, gestures, in their multifaceted varieties, are the fundamental synthetic modality of our knowledge of reality. They represent a radical alternative to any view that sees human knowledge as depending on the priority of analyticity and the inevitability of *a priori* structures—from Kant to the most typical developments in analytic philosophy. All the formal aspects of gestures discussed in Maddalena’s work—especially the fact that they are deeds, their synthetic nature, their capacity to grasp identity through change, the crucial role of vagueness and *Gestalt* played in them, and in general the possibility that they open for a genuine encounter with the meaning of reality that is not predetermined in any way by *a priori* structures—echo the concerns present in the “dramatic” doctrine of truth elaborated by the Swiss Catholic theologian Hans Urs von Balthasar.

Balthasar and one of his most insightful and original contemporary followers, the American philosopher David C. Schindler, have presented a theory of the dramatic structuring of human knowledge according to which the spirit’s structural openness to reality in its dimension of truth can be enabled and activated only thanks to some fundamental gestures in which the possibility of the meaningful-

ness of reality as such is first conveyed, as it were, *as a gift*.¹ Balthasar's most famous exemplification of these gestures is the mother's smile to the child, in and through which the child is introduced to the intelligibility of reality.² What is conveyed in such gesture is not only *a* meaning but the possibility of *meaningfulness as such*. The dramatic encounter between the mother and the child in their mutual smiling—"dramatic" because free, unexpected, and surprising, and yet fully corresponding to the most profound aspirations of our reason—reveals the meaningfulness of reality as such in one single dramatic deed that has all the features individuated by Maddalena as formal aspects of gestures. One can hardly think of something more synthetic than a gesture that communicates, precisely in virtue of its utter vagueness, the meaningfulness of reality as such. Balthasar and Schindler suggest that the mother's smile is precisely such gesture.³

According to the Medieval Scholastic tradition that reaches its summation with St. Thomas Aquinas, the human spirit is always already open to receiving reality in its meaning.⁴ There is then, in a qualified sense, an *a priori* structuring of the encounter between spirit and world. Such structuring, however, should not

1 "The entire paradise of reality that unfolds around the "I" stands there as an incomprehensible miracle: it is not thanks to the gracious favor of the "I" that space and world exist, but thanks to the gracious favor of the "Thou." And if the "I" is permitted to walk upon this ground of reality and to cross the distances to reach the other, this is due to an original favor bestowed on him, something for which, a priori, the "I" will never find the sufficient reason in himself" (Balthasar 1993, 46). See also Schindler (2004).

2 Balthasar even mentions the centrality of the smile of the mother to the child for the overall architecture of his theological work in his "A Resumé of My Thought" (1988, 470–471). Balthasar and Schindler explicitly appeal to the notion of "gesture," for instance in the following passages: "the body, with its attitudes and gestures, offers the human spirit an inconceivably sensitive and versatile set of instruments to make itself thoroughly comprehensible even without the spoken word" (Balthasar 2004, 252); "When the mother smiles at her child, she is in fact presenting him with a Gestalt in which she makes her person accessible to him as a loving gift. The gesture is not simply an opaque picture, which can adequately be read as it were 'off the surface.' Instead, the whole has a meaning because of 'something' that is both not any particular part of what she shows him and at the same time transparently present everywhere within it, namely, herself, i.e., her freedom" (Schindler 2013, 48–49). In the pragmatist tradition, Rossella Fabbrichesi has discussed the smile of the mother, see Fabbrichesi (2019, 339–358).

3 See the difference between this view of motherhood and the view presented at times by Richard Dawkins: "I am treating a mother as a machine programmed to do everything in its power to propagate copies of the genes which ride inside it," for "[w]e are survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes" (1989, 123). For Balthasar and Schindler, the mother with her smile is the "sacrament" for the child of the love-being of God and His creation (see *Glory of the Lord*, 5); for Dawkins, the mother is the unwitting vehicle of genes.

4 See *De veritate*, Q. 1., A. 1.

be understood along the lines of innate ideas or *a priori* principles and categories, as it is for some modern thinkers, but according to what the tradition calls the *transcendentals*—especially being, truth, goodness, beauty. Balthasar and Schindler interpret the mother’s smiling to the child in continuity with the Thomistic understanding of truth as transcendental. For them, the mother’s smile is a gesture that *brings into itself the transcendental intelligibility* that has always already characterized the union of spirit and being. In fact, such transcendental intelligibility of being, although not simply potential in the child’s spirit, remains weak and inoperative without its being liberated to itself by the mother’s gesture. I call this and similar gestures *transcendental* insofar as such gestures are closer than any other to the transcendental conditions of human life and bring such conditions into themselves by enabling and activating them.

Thus, it is by recovering the traditional, Scholastic notion of the transcendental in light of the contemporary doctrine of gestures—in short, by discovering the heuristic force of transcendental gestures—that one can rediscover the virtuous circularity between the transcendental (not reduced to Kantian *a prioris*) and the experiential (rescued from its fragmentation into experiential atoms, no matter how “synthesized” each one of these atoms is). In this way, while the contemporary developments in the philosophy of gesture bring logical clarity to the connection between transcendental gestures and truth, the non-Kantian, Scholastic understanding of the transcendental can put that same philosophy of gesture on safer metaphysical ground.

In the remainder of this chapter, I will articulate some of these considerations in greater detail. I will make six points plus a brief conclusion.

2 Beyond the Kantian Transcendental

The “synthetic” logic and epistemology of gestures developed by Maddalena is an attempt to overthrow the primacy and exclusivity of a model of knowledge based on the concept of a priority and analyticity, made classical by Kant but present throughout the history of Western philosophy, arguably from Plato’s privileging of *theoria* to the recent developments in analytic philosophy. Maddalena’s proposal is also a way to overcome, if not overturn, the dichotomies between theory and practice, mind and body, contemplation and action, understanding and communication, explication of knowledge by analysis and extension of knowledge by synthesis, and what has often been the primacy of the former over the latter. The philosophy of gesture inscribes itself in the tradition of pragmatist philosophy and aspires to bring to completion the pragmatist incomplete revolution.

Maddalena's take on pragmatism is strongly shaped by a constant attempt to distance itself from any form of *a priori* and transcendental structures, which are seen by him as inevitable variations of the Kantian model. Contrary to the Kantian view, which restricts meaningfulness (at least, the meaningfulness of scientific, universal and necessary knowledge) to the application of categories and principles to a field delimited *a priori* by the forms of sensibilities, i.e., space and time, for the pragmatist, according to Maddalena's version of it, the horizon of meaning is essentially that of *a posteriori*, experience-based, growing habits of interpretation (Maddalena 2021, 45–46).

One might ask, however—is it the case that the *a priori* and the transcendental are inevitably Kantian? Is it possible to find a version of the *a priori* and the transcendental that, while preserving the idea of an original conformity or correspondence between reality and mind, is nevertheless not only open to but, more strongly, constituted by experience? And even more deeply, is it possible to find a model according to which this constituting experience is identified with a *gesture*? As I have anticipated, one finds precisely this model in the “dramatic” understanding of truth proposed by Balthasar and developed by Schindler. That is why I talk about transcendental gestures, that is, gestures that work precisely at the level of the transcendental conditions of our experience.

3 The Gesture as Co-Essential to the Transcendental

According to St. Thomas Aquinas, “truth” is a transcendental, not in the Kantian sense, but in the sense of being a trans-categorial feature of *esse*: all being is essentially “true,” namely, intelligible. There is no mind that is not originally and structurally “open” to the intelligibility of being, just like there is no being that is in principle closed to mind. These points are also recognized by Peirce, when he says that there is complete synonymy between “being” and “cognizability,” and when he talks about the “rational instinct” of the human being.

Despite the difference with the Kantian model, Thomas' view still carries the idea that such fundamental conformity or correspondence between being and mind is an *a priori* condition of judgment and reasoning: we would not be able to judge and reason if we were not always already somehow “in the truth.”⁵

5 For a historical reconstruction and critical assessment of the vicissitudes of the notion of transcendental, see Jan A. Aertsen (2012).

Balthasar and Schindler inherit this Thomistic view but develop it in a “dramatic” sense through a reflection on the *historical and experiential conditions* that such a *a priori* structure requires *for being what it is*. Being in its transcendental intelligibility first emerges to the consciousness of the child in the free, and in this sense dramatic, I-Thou relationship with the mother, and more precisely through a specific gesture, to which Balthasar devotes many pages of his work, namely, *the mother’s smile*.⁶ In this relationship, the event of the “dawning of being” takes place; “being as a whole lights up” in this gesture (Balthasar 2004, 255). While the *a priori* conditions for apprehending being as intelligible are in a sense already given, in another and deeper sense, they cannot be presupposed because they are *gifted to the child* in and through the gift of the mother’s smile.⁷

One can individuate here the virtuous circularity between two meanings of givenness: *a priori* conditions are “given” in the sense of being presupposed to any experience, but they are also “given” in the sense of being instituted by a certain fundamental experience, i.e., a gift that is a gesture. The virtuous circularity here means that while the conditions could not be instituted and made operative

6 “The little child awakens to self-consciousness through being addressed by the love of his mother. This descent of the intellect to conscious self-possession is an act of simple fullness that can only in abstracto be analyzed into various aspects and phases. It is not in the least possible to make it comprehensible on the basis of the formal “structure” of the intellect: sensuous “impressions” that bring into play a categorical ordering constitution that in its turn would be a function of a dynamic capacity to affirm “Being in absolute terms” and to objectify the determinate and finite existing object that is present here. The interpretation of the mother’s smiling and of her whole gift of self is the answer, awakened by her, of love to love, when the “I” is addressed by the “Thou”; and precisely because it is understood in the very origin that the “Thou” of the mother is not the “I” of the child, but both centers move in the same ellipse of love, and because it is understood likewise in the very origin that this love is the highest good and is absolutely sufficient and that, a priori, nothing higher can be awaited beyond this, so that the fullness of reality is in principle enclosed in this “I-“Thou” (as in paradise) and that everything that may be experienced later as disappointment, deficiency and yearning longing is only descended from this: for this reason, everything—“I” and “Thou” and the world—is lit up from this lightning flash of the origin with a ray so brilliant and whole that it also includes a disclosure of God. In the beginning was the word with which a loving “Thou” summons forth the “I”: in the act of hearing lies directly, antecedent to all reflection, the fact that one has been given the gift of the reply” (Balthasar 1993, 15).

7 See the profound claim that “a priori, *the cogito/sum* includes shared humanity” (Balthasar 1990, 271). In a sense, then, ontology must stress the primacy of relation (see Piero Coda, Pierpaolo Donati, Antonio López, Giulio Maspero, and David L. Schindler). One is also reminded of Aristotle’s statement (*Nicomachean Ethics*, III, 1112 b 25), discussed by St. Thomas (*Summa Theologiae*, I-II, Q. 5, A. 5, ad. 1) and Robert Spaemann (2010, 1–24), that “what we do by means of our friends is done, in a sense, by ourselves.” One could unpack this point by saying that what belongs to the core of what we are (our “reason”) requires our “friends” to “become what it is.”

by the gesture if they were not somehow already presupposed, at the same time, what is presupposed, without the instituting gesture, would not be much more than a mere unfulfilled promise of the actual possibility of encountering reality as intelligible and meaningful.⁸

4 The Mother's Smile According to Balthasar

Balthasar discusses the mother's smile in connection to many crucial points of his philosophy and theology. In *Glory of the Lord*, in particular, the treatment of the smile of the mother comes after a philosophical and theological reflection on the fundamentality of gestures for understanding, inspired by a reading of Ortega y Gasset but ultimately based on Jesus' way to communicate his reality as described in the gospels. The event of the smile of the mother to the child is connected with some of the most crucial aspects of Christian metaphysics (as Balthasar develops it) and falls under the treatment of what he calls the "natural language of the flesh."⁹

Let me sum up some of these results in a somewhat schematic way. First, while the child's mind is already structured to receive reality as intelligible, it is precisely the smile of the mother that announces to the child *in concreto* the intelligibility of reality and therefore institutes such capacity for the child, in an event that is "simultaneously personal and ontological, historical/phenomenologi-

8 "The view of consciousness implied in this exchange differs fundamentally from Kant's insofar as it affirms that the soul's condition of possibility are not fixed prior to and thus independent of the (receptive) encounter with what is other than consciousness, but instead *occurs* in the encounter. The conditions of possibility arise, as it were, not wholly from below, but as a gift from above, which precisely because of its generosity, creates the space for the 'from below' capacity to receive it" (Schindler 2013, 45); "the child possesses certain capacities that prepare him, not specifically for the smile, but for the surprise that he cannot simply anticipate. The child receives the a priori condition of the possibility of reception" (Schindler 2013, 51).

9 "Jesus, too, speaks the language of the flesh. It is the language of corporeal-spiritual man [. . .]. In no sense is his language a purely spiritual, angelic affair, even though man, by means of artificial abstractions, also produces such a bodily and soundless discourse, which he is pleased to term 'scientific' and which he reflects in countless treatises of 'linguistic analysis.' [. . .]. No one will ever discover how to make the full wealth of the 'language of the flesh' resound in a self-proclaimed 'scientific' theology. Jesus enclosed what he had to announce to men about God not in the confines of such a theology, but in the fullness of the fleshly language that is within every man's grasp" (Balthasar 2004, 248); see also Balthasar (2004, 251): "in the language of the flesh [. . .] the spiritual word expresses itself with perfect precision in bodily form [Gestalt]."

cal and metaphysical” (Schindler 2013, 46).¹⁰ Second, the child’s consciousness, his I, which is instituted as a capacity for truth in this being addressed by a Thou, receives everything as a gift: being itself, its intelligibility, and its own consciousness are experientially received as a gift, and such experience is the foundation for the very structuring of the child’s personality, for which being itself is perceived as a gift, namely, as self-giving, as love. Third, in receiving the entirety of being and its intelligibility in and through the smile of the mother, the child is initiated to the most radical sense of being, that of the ontological difference. Accordingly, his apprehension of being will grow soon into the realization that nothing (not the mother, no one and nothing else) can in fact exhaust its infinite horizon, even though every thing must participate in being in order to be.

5 The Smile of the Mother as Complete Gesture

The smile of the mother to the child can be studied as a chief example of what Maddalena calls “complete gestures.” In fact, the smile of the mother “bears” a fundamental understanding and communication of meaning for both the mother and the child. More precisely, it bears *not a particular meaning*, but the meaning that coincides with the *fundamental meaningfulness, or intelligibility, of reality as such*. The smile of the mother presents all the Peircean phenomenological (firstness, secondness, and thirdness) and semeiotic features (icon, index, and symbol) that, according to Maddalena, must accompany a gesture in order for such gesture to be complete. It also exemplifies the heart or generative experience of the normative dimension of life, which, once articulated and systematized, becomes the subject-matter of the so-called normative sciences (aesthetics, ethics, and logic).

Let us try to unpack the meaning of the gesture with respect to the phenomenological and semeiotic features of the complete gesture. The smile is a gesture which is unitary insofar as it is a *Gestalt* perceived as such by the child (cf. Schindler 2013, 47–49). The smile of the mother appears to the child (firstness) and is received in the form of a feeling, or rather as a concrete image of the luminous intelligibility of being in its totality and of the love that shines through it

¹⁰ See also Schindler (2013, 47): “from the beginning [. . .] being has a personal face, and the personal always has ontological depth.”

(icon).¹¹ The mother's smile is apprehended in its indwelling and overarching beauty, and the child both rests in it and at the same time is attracted to it as towards an inexhaustible source of beauty (aesthetics).¹² The *Gestalt* of the smile, in its dynamic unfolding through time, sets itself apart from the rest of the perceivable environment and is interjected by the child's attention with delighted surprise (secondness), while at the same time such smile already points beyond itself, to the mother herself, of which the smile is a physical modification, but also to the rest of reality, which, as we have said, is significantly introduced to the child in and through the smile of the mother (index). In the smile's "pointing" beyond itself, the child finds a direction for his movement, for his attention, for the summoning of his energies (ethics). The smile, which is born out of a free gesture of the mother, who in and through the smile gives herself to the child and makes him the gift of the intelligibility of reality, represents at the same time a call for the child, a call for a recognition and a response. The response to this call is the child's smile to the mother, which is itself the dawn of his own understanding-communication of the intelligibility of reality, as well as the beginning of the acquisition of a habit of interpretation (symbol)—a general habit of wonder and "play" for the received intelligibility of the real (thirdness), the onto-logical womb within which all further knowledge, both analytic and synthetic, will necessarily take place (logic).¹³ It is thanks to the I-Thou relationship, chiefly realized in the reciprocal smile, that the appearances to which the child is exposed are first manifested and interpreted as what they truly are, meaningful signs of an appearing

11 "The mother's smile is not a spoken word, as it is understood as one because it is an expression of spirit. It is 'word' as image, which, received within the child's heart, is engraved on the imagination" (Balthasar 2004, 256).

12 See Schindler (2013, 45): "Balthasar [. . .] roots the soul's contact with the world [intentionality, transcendentality of truth] in a more fundamental 'contact,' one that gives everything else a particular coloring: namely, the mother's smile. As deceptively simple as it seems, this principle is arguably the foundation of Balthasar's epistemology, and fits essentially the primacy of beauty." Note that also for Peirce, "aesthetics" is the primary normative science insofar as it is beauty that grounds teleologically "goodness" (ethics) and "truth" (logic).

13 "It gives itself to play because the experience of being admitted is the very first thing which it knows in the realm of Being. It is, in so far as it is allowed to take part as an object of love. Existence is both glorious and a matter of course. Everything, without exception, which is to follow later and will inevitably be added to this experience must remain an unfolding of it. There is no 'gravity of life' which would fundamentally surpass this beginning. There is no 'taking over control' of existence which might go further than this first experience of miracle and play" (Balthasar 1991, 616–617).

ground, of an object that gives itself to be known (institution of the semiotic triadic relationship, for which the smile of the mother is an “index”).¹⁴

As in the examples of Ulysses and Jesus discussed by Maddalena (2015, Chapter 6), also in the case of the I-Thou relation between the mother and the child, it is in a gesture—in this case, in the smile—that all the features of the characters are synthesized and communicated. In this case, what is synthesized and communicated is not simply the loving personality of the mother, but through her, and originally without distinction from her, the intelligibility of reality and even the loving presence of God in and through His creation.

6 Vagueness and Synthetivity of the Meaning of the Smile

The smile of the mother and the smile of the child thus understood and described represent an understanding-communication that presents *a maximum of vagueness and a maximum of synthetivity* precisely because what the mother and child understand and communicate is not the truth of a determinate thing, but the sense of the meaningfulness and intelligibility of reality as such. What could be vaguer than the transcendental idea of truth, given that when we say “truth” we are simply talking about the trans-categorical intelligibility of being and not of the determined truth of a judgment? And at the same time, what could be more synthetic than this same idea of truth, at least if we understand it as the Thomistic tradition does, not as an empty form, but as the onto-logical reactive agent, so to speak, that allows for the articulation of all and any possible content, or as the horizon itself within which all inquiry, judgment, reasoning, are conducted?

It is certainly the case that for Balthasar and Schindler it is a *gesture*, the mother’s smile, that brings the gift of the intelligibility of reality to the child. But one might ask why this is the case and, even more strongly, if it *must* be the case that

14 “The mother’s smile is understood by her child, and in this event the world of being as a whole lights up behind the world of images; this happens simultaneously in the I and in the Thou, inside and outside. When this illumination occurs, the sensible image is understood as pointing to an appearing ground. This capacity of projection constitutes the first foundation of the freedom of the I from the mere world of images, its power to read them as a sign or a meaning. Years can pass in the life of the child between the moment when this freedom lights up—when being as a whole becomes luminous—and the acquisition of the art of transposing these appearances understood as signs, into a sign-speech reflecting its freedom. [. . .] Looked at superficially, of course, the origin lies in the recognition that the appearance and what appears are simultaneously identical and different: the mother’s smile is the index of her presence” (Balthasar 2004, 254–255).

only a gesture can bring to the child such gift. Maddalena's framework helps us articulate the beginning of an answer (Maddalena 2021, Chapters 4 and 14): if what is gifted and received is the intelligibility of reality and therefore a *maximum of vagueness and syntheticity*, it is precisely a gesture that can accomplish such task insofar as a gesture is the best-suited tool for understanding-communicating vagueness and syntheticity.

What is the anthropological value of vagueness and syntheticity? Why is it so important for a human being to acknowledge that meaning is vague and synthetic and that it is carried by gestures such the mother's smile? Because, I suggest, this means that *meaning is not identical to intention*—and this, I submit, is the fundamental basis on which we can distinguish gestures from actions. In other words, while according to Aristotle's definition, the "bearer" of meaning in action is the clear intention of what one is doing, when it comes to gestures, due to the lack of the analytic awareness characteristic of actions, either we say that gestures have no meaning (e.g., Agamben 2017), or we claim that the bearer of the meaning must be different from the intention.

Following the framework I have discussed, we must say that the latter is the case. It is *gesture itself* that carries the meaning. In this sense, the meaning carried within a gesture always *precedes, exceeds, and underlies* the "clear and distinct" intention of an action. One could put this by saying that our analytic awareness does not "live up" to the meaning guarded in our gestures and that it must always again "catch up" with the richness present in it. This is certainly true in the case of the smile of the mother, the gesture that carries that maximally vague and synthetic meaning that neither mother nor child fully grasp in their analytic awareness and with which they will both try to catch up for the rest of their lives.¹⁵ Surprisingly, one can find a similar dynamic present in the biblical account of creation, where the analytic acknowledgment of the "goodness" of each created thing on the part of God comes after the *gesture of creation* itself. (Would it be better, then, to talk about the *gesture* of creation rather than the *act* of creation? What would a *Christian theology of gestures* look like?)

15 "The primal knowledge that man receives here is, however, only like a flash of lightning: even if the entire subsequent experience of the world looks from the outside like an addition (or "synthesis"), it remains in its most hidden reality a subtraction; it contains a fundamental disappointment, viz., that everything does not correspond to my first intuition (Gustav Siewerth), neither things nor human beings (and, ultimately, even my mother is one of these): all this is "only" world, not God, only things that exist, not Being" (Balthasar 1993, 32). Work remains to be done to show in what way such metaphysical "disappointment" is related yet irreducible to the origin of "neurosis" according to Freudian psychoanalysis. On this, see Norman O. Brown (1985, 15–19 and 113).

7 Unpacking the Dramatic Structure of Truth through the Logic of Gesture

Maddalena's framework is also helpful in order to try to provide a more explicit articulation of the way in which an *a priori* condition is also at the same time given, gifted, and instituted. In fact, one should explore the possibility that the almost paradoxical relation of the twofold "givenness" of presupposition-institution of the dramatic conception of truth developed by Balthasar and Schindler can be explained in light of the logic of the gesture. This logic allows to respond to the vagueness of a content by initiating the development of a corresponding general habit of interpretation through the mediation of a gesture which, as such, must be concrete and particular. The gesture, says Maddalena, brings a content that is predominantly potential and vague to a communicable-knowable universal-general content, ultimately realized in a habit of action and interpretation, within which also the work of analysis must take place (Maddalena 2021, 41).

If we adopt this rich logic of the gesture, we can propose the idea that what is presupposed in the Balthasarian dramatic idea of truth is the openness of the human mind to reality in all its dimensions, which is utterly vague and, in this sense, still incapable of a response until it is brought into itself by something else—as we know at this point, a *supremely meaningful gesture*, the smile of the mother. The particular, concrete, contextual, historical, smile of the mother summons the energies of the child, which blossom in the child's smiling response to the mother, and this response starts giving shape to that general habit of wonder which is the only habit befitting the utterly rich vagueness and syntheticity of truth understood as a transcendental.

8 From Transcendental Gesture to Gesture as Transcendental?

The fact that there are "transcendental gestures" leads us to wonder whether "gesture" could or even should be considered, in a certain sense, a transcendental property of being as such.¹⁶ We enter here a territory in which Balthasar and

¹⁶ Emmanuel Levinas (1998a, 55) speaks of the "gesture of being" (*geste d'être*) in a different context and with a different meaning (it is a different way to express what he sometimes calls "essence"). However, it is interesting to note here that, while Levinas speaks of the "gesture of being" as another way to characterize the self-sameness of the being of Western ontology, my

Schindler have not explicitly ventured. According to this idea, “being” would be not only “true,” “good,” and “beautiful” (and “one,” etc.), but it would also be “gesture.” While seemingly shocking, this point might well be a necessary corollary of an onto-logical view of truth that *takes into account the genetic, evenemential conditions of the dawning of intelligibility of being* in the consciousness of a child and that sees these genetic and evenemential conditions as *essential to the unfolding of truth*. Being “appears” to us as meaningful, that is, phenomena appear to us as the “signs” of an “appearing ground,” only because this “appearing” is originally a gesture, for instance, the transcendental gesture of the mother’s smile.

In and through her *free* gesture of self-giving to the child in the smile, the mother fulfills and enacts what nature aspires to do but cannot do if left to its own resources, namely, *being* a gesture of *personal love*. Thus, the fact that *nature* can offer *its own intelligibility* as an *instance of personal love* only *in and through the gesture of the mother’s smile* does not detract from the possibility of considering “gesture” as a transcendental *of being*. On the contrary, it points in the direction of the need for a deeper meditation on and systematic development of the essential connection between metaphysics and anthropology.¹⁷

St. Thomas famously says that the transcendental “truth” adds to the notion of “being” the idea of the relation of “correspondence” (*convenientia, concordia, adaequatio*) of being with “other,” in this case, the intellect.¹⁸ One could thus extend the same reasoning to “gesture.” In this sense, “gesture” would add to “being” the relation of correspondence of being with the genetic and evenemential conditions (for instance, the mother’s smile) that make being “become what it is,” namely, “true” for the child’s consciousness. In a synthetic formula: “gesture,” seen as a transcendental property of being, is the *performativity* of the “beautiful,” whose teleology is being itself affirmed as “good” and thus made available to the child’s consciousness in its intelligibility, in its “truth.”¹⁹ Balthasar notoriously places the transcendentals in an unconventional order—beauty first, goodness second, and truth last—and laments the all too common forgetfulness of beauty in metaphysical discussions. I

proposal shows how being and its transcendental properties should be understood as always already belonging to a dia-logical context. In a different essay it could be shown that even the transcendental “one” results from a sort of ontological settling of a dia-logical situation.

¹⁷ In turn, anthropology is “fulfilled” in Christology. Ferdinand Ulrich, who greatly influenced Balthasar’s thought, states that in his work the “subject matter itself [the study of being as being] has transcended ontology into anthropology and anthropology into Christology” (2018, 1). In this sense, one could say that the smile of the mother *analogically recapitulates* the meaning of God’s creation, i.e., love, of which Christ *is* the ultimate and definitive recapitulation. Balthasar says that he understands “metaphysics” as “meta-anthropology”; see Balthasar (1988, 470).

¹⁸ *De veritate*, Q. 1, A. 1.

¹⁹ See Schindler (2013, 58 and 69–80).

wholeheartedly agree with Balthasar's presentation. One could wonder, however, whether one should not lament the forgetfulness of another transcendental, gesture, whose role would even "precede" beauty in the order of the transcendentals insofar as it is the *performativity of the beautiful* (in Peircean categories, the Secondness of Thirdness in its fullest form). As Goethe says, "In the beginning is the act."

The Thomistic picture of the transcendentals presented in *De veritate* would thus receive a certain completion that is not explicit in Thomas. Just to mention one possible improvement, according to my proposal, "being" would still be "good" because the human *appetitus rationalis* is always already teleologically oriented to affirming being's lovability, but this metaphysical point would have an originally *dialogical nature*²⁰ whose irreducible *performative dimension* must be acknowledged in its specificity.²¹ In other words, transcendental goodness

20 See Balthasar (1988, 470–471): "Now man exists only in dialogue with his neighbor. The infant is brought to consciousness of himself only by love, by the smile of his mother."

21 Speaking of gesture as the "performativity of the beautiful" and seeing this in relation to the dialogical nature of the coming into themselves of the transcendentals force us to pause for a second and consider once again the question of the "order" of the transcendentals. In fact, the idea itself of the "performativity of the beautiful" seems almost confused. Are gesture and performance not relative especially to the good? And is the beautiful not relative primarily to perception? This apparent confusion is overcome once one sees the notion of performativity of the beautiful as a threshold notion between mother and child, that is, if one sees it from the point of view of the dialogue between them. One might say, then, that being is primarily "good" (and then beautiful and true) from the point of view of the mother, who *performs* the beautiful; while it is primarily "beautiful" (and then good and true) from the point of view of the child, whose performative response is the unfolding of the *perception* of the beauty of the mother's smile. The fear that putting goodness before beauty and truth might imply a form of irrationalism (see Schindler 2011, 312) could be put aside once one understands this idea from the point of view of the ontology of motherhood and the abiding meaning of pregnancy for it. The mother, in fact, in her expectant pregnancy, already loves and affirms as good one who already exists while being in a deep sense non-appearing—she loves and affirms as good one whose "glory" is yet to come. (See Psalm 139: "You formed my inmost being; you knit me in my mother's womb. [. . .] My bones are not hidden from you, when I was being made in secret, fashioned in the depths of the earth. Your eyes saw me unformed; in your book all are written down; my days were shaped, before one came to be.") It is not a mistake to say, as Emmanuel Levinas does, that the mother is "sensitivity" as "pure passivity," namely, the passive dwelling place of responsibility and being-for-another, see Levinas (1998b, 67); cf. Jennifer Rosato (2012, 348–365). Nevertheless, such characterization could and should be enriched with reference to the transcendentals. The mother already *actively loves and affirms* as good in her body the other, the one who exists but who does not appear yet. There should not be any opposition or mutual exclusion between the mother's "vulnerability" posited by Levinas and a certain *self-assertiveness for the other* on her part. In fact, the mother already expresses an intentionality which is eminently performative, which implies the primacy of the good. Of course, the one who is loved, the child, is already given to the mother's consciousness in some way even before his birth, but he appears paradoxically as yet-to-

would require the gesture of the mother—affirming “being” in and through her smile to the child and thus disclosing its lovability and “goodness”—opening up to the possibility of the child’s loving response. But the first meaningful “word” spoken by the mother to the child is precisely a “word made flesh,” a word-as-flesh, the gesture that *performs* as an act of love the beauty of being and thus proposes it to the child’s flourishing consciousness.

If being is “good,” it is not only because the child’s will is structurally attuned to it (Thomas’ view); it is also because being is originally presented *as embraced* by and in the mother’s smile,²² in the mother’s gesture, being is originally “smiled at” and thus affirmed in its goodness, and that is why the child can in turn delight in seeing the mother’s smile, that is, he can rejoice in the beauty of reality. This is also why he can simultaneously embrace being by smiling in return (affirming its goodness *in actu exercito*) and by so doing he is introduced to the meaningfulness of reality as such (truth).²³

9 Conclusion

The concept of transcendental gesture, which is the result of a possible mutual enrichment between Maddalena’s philosophy of gesture and Balthasar’s understanding of truth as dramatic, could open the doors to a study of those gestures

appear, namely, he appears in the mode of expectation. This is why the original intentionality of the mother is primarily performative, namely, it unfolds from its focus on the good as primary. While “expecting” the “glory” of the child (beautiful), the mother already affirms him as good. The mother’s love is “without measure” because she loves the child before he appears and “no matter what he looks like.” This performative intentionality which remains full of expectation for the yet-to-appear still abides in the mother’s smile to the child. Understood this way, there seems to be nothing irrational about positing a primacy of the good in the case of the mother. This hypothesis regarding the order of the transcendentals should be explored further, especially in theological perspective (could one say that the order of the transcendentals from the point of view of the mother’s gesture analogically mirrors the order of the transcendentals from the point of view of God the Creator and the Redeemer?). Note that in both cases, truth remains the “ultimate” transcendental.

22 Can one go as far as saying that there is a sort of original mimetism at work in the dawning of the transcendentals? That the child desires being (i.e., affirms being as good) because being is originally presented to him as desired by the mother? Could the work of René Girard shed some light on this point?

23 In this sense, the mother’s smile could be considered the first and most fundamental “educational” gesture insofar as “education” is defined as “an introduction to reality in its totality,” *Eine Einführung in die Gesamtwirklichkeit*, according to Josef A. Jungmann’s definition (1939, 20), then adopted and developed by Luigi Giussani (2005, 65–66).

that, analogously to the mother's child, are closer (for reasons that would need to be made clear) to the transcendental conditions of the human person. For instance, one could think about those gestures that institute meaningfully in us the sense of our sexuality—given, and yet in need of being received again as a gift; or those gestures that institute meaningfully in us the sense of our generational relations—being a son, a daughter, a father, a mother, a brother, a sister, etc.—which, despite being given, must be received anew as gifts and thus instituted in their meaningfulness.²⁴ Assuming that the notion of transcendental gesture is coherent and heuristically useful, the determination of the concrete form or *Gestalt* of these other gestures must be postponed to future studies.

References

- Aertsen, Jan A. 2012. *Medieval Philosophy as Transcendental Thought: From Philip the Chancellor (ca. 1225) to Francisco Suárez*. Leiden and Boston: Brill.
- Agamben, Giorgio. 2017. *Karman. Breve trattato sull'azione, la colpa e il gesto*. Turin: Bollati Boringhieri.
- Aristotle (2002). *Nicomachean Ethics*. Indianapolis: Focus.
- Balthasar, Hans Urs von. 1988. "A Resumé of My Thought," *Communio* 15: 470–471.
- Balthasar, Hans Urs von. 1990. *Theo-Drama, Volume II: Dramatis Personae: Man in God*. San Francisco: Ignatius Press.
- Balthasar, Hans Urs von. 1991. *The Glory of the Lord: A Theological Aesthetics*. Volume V: *The Realm of Metaphysics in the Modern Age*. San Francisco: Ignatius Press.
- Balthasar, Hans Urs von. 1993. "Movement toward God." In Balthasar, Hans Urs von. *Explorations in Theology*. Volume III: *Creator Spirit*. San Francisco: Ignatius Press.
- Balthasar, Hans Urs von. 2004. *Theo-Logic*. Volume II: *Truth of God*. San Francisco: Ignatius Press.
- Botturi, Francesco. 2009. *La generazione del bene. Gratuità ed esperienza morale*. Milan: Vita e Pensiero.
- Brown, Norman O. 1985. *Life Against Death: The Psychoanalytic Meaning of History*. Hanover: Wesleyan University Press.
- Dawkins, Richard. 1989. *The Selfish Gene*. Oxford: Oxford University Press.
- Fabbrichesi, Rossella. 2019. "From Gestures to Habits: A Link between Semiotics and Pragmatism." In Jappy, Tony (Ed.). *The Bloomsbury Companion to Contemporary Peircean Semiotics*, 339–358. London: Bloomsbury Academic.
- Giussani, Luigi. 2005. *Il rischio educativo*. Milan: Rizzoli.
- Jungmann, Josef A. 1939. *Christus als Mittelpunkt religiöser Erziehung*. Freiburg: iB.
- Levinas, Emmanuel. 1998a. *Of God Who Comes to Mind*. Stanford: Stanford University Press.
- Levinas, Emmanuel. 1998b. *Otherwise than Being or Beyond Essence*. Pittsburgh: Duquesne University Press.

²⁴ Cf. Francesco Botturi (2009, 163–194 and 204–209) on "recognition" as essential to "identity." "Transcendental gestures" could then be considered the chief expression of this dynamic of identity-generating recognition.

- Maddalena, Giovanni. 2015. *The Philosophy of Gesture: Completing Pragmatists' Incomplete Revolution*. Montreal, Kingston, London, and Chicago: McGill-Queen's University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Rome: Carocci.
- Rosato, Jennifer. 2012. "Woman as Vulnerable Self: The Trope of Maternity in Levinas's *Otherwise than Being*," *Hypathia* 27 (2): 348–365.
- Schindler, David C. 2004. *Hans Urs von Balthasar and the Dramatic Structure of Truth: A Philosophical Investigation*. New York: Fordham University Press.
- Schindler, David C. 2011. "Beauty and the Analogy of Truth: On the Order of the Transcendentals in Hans Urs von Balthasar's Trilogies." *American Catholic Philosophical Quarterly* 85 (2): 297–321.
- Schindler, David C. 2013. *The Catholicity of Reason*. Grand Rapids and Cambridge: Eerdmans Publishing.
- Spaemann, Robert. 2010. "Human Nature." In Spaemann, Robert. *Essays in Anthropology: Variations on a Theme*, 1–24. Eugene: Cascade Books.
- Thomas Aquinas (2018). *Summa Theologiae* I-II. Volume VX, 1–70. Green Bay: Aquinas Institute.
- Ulrich, Ferdinand. 2018. *Homo Abyssus: The Drama of the Quest of Being*. Washington, D.C.: Humanum Academic Press.

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Chapter 5

Understanding Others: Theodor Lipps as Philosopher of Gestures

Abstract: The chapter, after outlining the role Lipps attributes to gestures, bodily movement, and expressions, aims to show in what sense Lippsian theory is able to enhance the immediate and instinctive dimension of our relationship with the other. His reflection on gesture makes it possible to restore theoretical relevance to a type of relationship that precedes and grounds the cognitive and conscious one, in which the self and the you are fully distinct and separate. The instinctive and immediate dimension is, in fact, essential not only for understanding the characteristics of intersubjectivity, but also for rethinking—in comparison with Husserlian phenomenology—the role of others in the constitution of individual identity. Lippsian philosophy is proposed in the following pages as a true philosophy of gesture capable of delineating a reversal in the usual point of view: in order to talk about the self and the relation to the other, it is necessary to look closely at the potentially fusional and vague dimension set in motion by the mimesis and gesture of the other.

Keywords: Lipps, Theodor, phenomenology, gestures, others, individual identity

1 Introduction

The topic of gestures, which has recently been the focus of much debate, has historically been somewhat neglected by philosophical reflection (Maddalena 2015). It is not surprising that philosophers who seek universal knowledge that is both necessary and the result of rational thought have not seen the study of bodily movements accompanying communication as particularly interesting. From this perspective, bodily gestures may seem like a vague and perhaps superfluous way of communicating. However, even within this tradition, the question of gestures has gained some attention in relation to a specific theoretical issue: understanding others. Bodily movement and gestures have become relevant to those who address the problem of mutual understanding and possible access to the inner thoughts and experiences of others.

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A large portion of these reflections, which fall within a broadly “Kantian” paradigm, posit that we do not have access to the experiences of others and therefore gestures, understood as external manifestations accompanying one’s experience, serve as clues that help us understand their intentions or feelings. This tradition, which spans from the late 19th century to the mid-20th century and includes authors such as Dilthey, Rickert, and Husserl, is very broad. However, it is the psychologist and philosopher Theodor Lipps (1851–1914), active in Munich and only recently rediscovered,¹ who stands out for the central role he assigns to the dimension of gestures and bodily movement.

Lipps and his theory of *Einfühlung* were at the center of philosophical, aesthetic, and psychological debate in the first decades of the 20th century, before falling into oblivion for almost a century. This is not the place to give an account of the discussion that arose around the Lippsian notion of “empathy” (*Einfühlung*).² It is sufficient to note here that, from his perspective, empathic experience is closely tied to gestures, movement, and bodily expression. The aim of the following pages is therefore to construct a philosophical reflection on gestures, attempting to show in what sense Lipps can be considered the author of a true “philosophy of gestures.” After outlining the role Lipps attributes to bodily movement and expression, I will demonstrate why Lippsian theory is able to enhance the immediate and instinctive dimension of our relationship with others. His reflection on gestures allows us to restore theoretical relevance to a dimension that precedes the cognitive and conscious one, in which I and you are fully distinct and separate. However, as I intend to argue, the instinctive and immediate dimension is essential not only to understand the characteristics of the intersubjective relationship but also to comprehend the role of others in the constitution of individual identity.

2 Acrobatic Gestures

In 1903, Lipps used a famous example to explain how our understanding of others works: think of an acrobat walking on a wire and the effect his movements pro-

1 The attention paid to Lipps in recent years is largely due to the discovery of mirror neurons and Vittorio Gallese’s use of the Lippsian theory of *Einfühlung* to provide a theoretical framework to neuroscientific research. On this topic, see Gallese (2001, 42, and 2003, 175).

2 I will merely point out that the term *Einfühlung* originated in the aesthetic sphere, but Lipps made it a form of knowledge of the world linked to the emotional dimension, which also included knowledge of other selves. On this topic, see at least Stueber (2019) and Donise (2019).

duce on a crowd of spectators. Here, the central theme is precisely that of gestures: an insecure gait, a momentary loss of balance caused by a body movement or, or conversely, a confident stride and gait all have a definite impact on those observing the scene from the audience (Lipps 1903, 115–125). After all, this example was not new: Adam Smith had already used it in the *Theory of Moral Sentiments* to explain one of the forms of sympathy. As Smith put it, “The mob, when they are gazing at a dancer on a slack rope, naturally writhe and twist and balance their own bodies, as they see him do, and as they feel they themselves must do in his situation” (Smith [1759] 1767, 3)

First of all, we must consider the relationship between inner experience and gestures. Humans have a tendency (or an impulse) to manifest their vital drives through a kind of spontaneous “communication of internal processes through bodily processes” (Lipps, 1909, 225). Internal states such as sadness or joy are expressed through external gestures: from smiling to crying, from blushing to shivering. Lipps clarifies that we do not experience a sad gesture as “something that comes with sadness, but as something present in it” (1909, 225). The connection between feeling and gesture is unique. Using wrath as an example, Lipps states: “this being-bound is of a very special kind. [. . .] It can be determined by saying that the gesture ‘expresses’ wrath, that wrath ‘resides’ in it, that it ‘announces’ itself in it” (Lipps 1907, 704).³ When I am angry, I experience a connection between my inner thoughts and my body. I experience the “vital manifestation” that characterizes my feeling of anger: I may turn red or pale, shake, yell, cry, etc.

However, in order to properly understand how gestures function, Lipps invites us to distinguish two different aspects within a single gesture: the “optic gesture” and the “kinaesthetic gesture.” Essentially, we must differentiate between:

- visual (hence optical) and third-person experience, which I have by observing the other’s gestures, for example watching them grit their teeth or scream in anger;
- the experience I have of my own anger, felt in the first person. That is, I feel a change in my muscular or blood tension, in my heartbeat, my posture, and the movement of my facial muscles: for me, as I am feeling wrath, the angry gesture consists of this kinaesthetic experience which is the expressive movement of my body. I do not observe myself from the outside, so when I am angry I cannot observe my “optical gesture,” but I feel in my body what we can call “the kinaesthetic component of the gesture.” (Lipps 1907, 711)

3 Cf. also Lipps (1903a, 115).

Obviously, the optical and the kinaesthetic gesture are two sides of the same phenomenon.

3 Understanding the Gestures of Others

Thus far I have outlined the relationship between inner experience and gestures. But let us return to our acrobat to investigate the second central element for delineating a theory of gestures: the relationship between gestures and understanding the experience of others. This means focusing on the way in which observing other people's movements allows us to understand their inner experience, to which we do not have direct access. Lipps' idea is that our relationship with the world is mediated by a mechanism of instinctive and unconscious mimesis:⁴ a spectator watching an acrobat perform a dangerous trick experiences the acrobat's suspension "in the first person"; that is, they reproduce within themselves the movements performed by the acrobat, internally imitating the actions observed and completely identifying with the performer. The observer becomes "one" with the observed and, at the same time, self-objectifies in the acrobat (cf. Lipps 1903a, 122).

In this mimetic mechanism, which Lipps calls "*Einfühlung*" (empathy), there is no distinction between my own self and the other's, or rather—to continue with the example—there is neither myself nor the acrobat's self, but rather an "ideal self." Likewise, the space in which the empathic relationship takes place is also "ideal": when we feel like we are up there with the acrobat we are not in a real place, but in an ideal place that is neither the tightrope on which the acrobat is walking, nor the armchair in which our real self continues to be comfortably seated. Without my being aware of it, the acrobat's body with its movements and gestures triggers an imitative process in me. If the impulse to *vital manifestation* helps explain the relationship between one's own experience and gestures, the impulse to *external imitation* describes the immediate activation that the other's body movements produce in the observer.

Between another person's gestures and the sentimental element, there is a relationship that Lipps defines as symbolic (Lipps 1904, 465, and 1907, 722). Con-

⁴ It is important to emphasize here that in the Lippsian perspective, the mimetic mechanism does not only concern other human beings, but in general the world around us. We are mimetically activated by inanimate objects, plants, and works of art, and in imitating their form, we find ourselves grasping a qualitative and emotional aspect of them. On these themes, see Pinotti (2011) and Donise (2019).

trary to what he had previously claimed himself, this is not a relationship of association,⁵ according to which I reproduce my own past joy or anger in the perception of other people's gestures. The idea that this is a habit-based association fails to grasp the central point of the relationship between gestures and understanding the experience of others. According to the associative paradigm, the gestures of another should awaken in me the representation of anger, for instance, just as—to take an example from Lipps' pupil Moritz Geiger—when I see soldiers, I think of Napoleon by association: “The perception of soldiers and the thought of Napoleon would simply stand next to each other” (Geiger 1911a, 38). But it is not such a juxtaposition that we find in the relationship between a gesture and the anger or joy that appears in it. Rather, a gesture expresses a state of affairs that is not comprehensible by external connection alone—such as that of “association”—however close it may seem. Rather, we are faced with a relationship whereby gesture and anger are “one inside the other” (*Ineinander*).

According to Lipps, what happens is that when faced with the angry gestures of others, I am activated in the first person and therefore re-experience the internal state that I was in when I made those gestures myself. However, the qualifying element of this theoretical proposal is the fact that this is not a matter of reasoning: this entire mimetic process occurs on an “unconscious” level that excludes consciousness and allows me to experience the sensation and feel the emotion expressed by the movements and gestures of the other. Nevertheless, I unconsciously attribute the sadness or joy that are activated in me *to the other*, because they originate from their body. Insofar as the other's gesture awakens an experience I have had (fear, in the case of the acrobat, or the anger I was talking about earlier), I am able to empathize with them, that is, to feel *their* fear or joy. What occurs is an unconscious projection of the state of mind that has been aroused in me onto the other. The mimetic impulse thus drives me to carry out an inner, psychic imitation. External imitation is rather rare and is indeed insignificant for the empathic dynamic, whereas, on the contrary, “a form or degree of the internal one [. . .] is ever present”⁶ (Lipps 1904, 483–484).

To summarize, we can say that since, in the course of my life, I have had a certain emotional experience and expressed it through a certain gesture, even the inward reproduction of that gesture entails that I am in that state of mind. The gesture “resides” in the feeling, is an integral part and “index” of it: “affection has

5 In a polemical response to Witasek, in a 1904 essay, Lipps admits that in earlier works he had mistakenly labelled the relationship between feeling and gesture as an associative one. cf. Lipps (1904, 466). The association theory was supported by, among others, Stern (1898) and Prandtl (1910).

6 A case of involuntary external imitation is yawning. When imitation is voluntary, this takes place outside of the empathic dimension. On the subject, see Fabbianelli (2016, 33).

become ‘glued’ to it [the gesture] as what is manifested in it.” (Lipps 1907, 718). Of course, to claim that I am activated on the basis of my experiences is not to claim that I am only able to “feel” what I have actually experienced before. The example of the acrobat removes any possible doubt in this regard: in order to empathize with the acrobat, I certainly do not need to have had the experience of walking on a tightrope; otherwise, this would be a rather rare empathic reaction and circus performances would be very selective encounters. What I have experienced is loss of balance and vertigo while stumbling, riding a bicycle, or even just walking on an imaginary straight line or along the vanishing line between tiles as a child. Loss of balance is an experience that characterizes all of us bipedal human beings, which we would probably have no access to if we were crawling reptiles.

Lipps therefore maintains that the other’s body, with its gestures and movements, inevitably produces an unconscious activation in me that makes me feel personally involved. It is important to emphasize that at the center of Lippsian reflection, however, is not the body as such, but the body as the locus of expression of the psychic dimension: “What I see with the eyes of the senses is for me a *representative* or *symbol* of what is understood or ‘seen’ with the eyes of the mind” (Lipps 1904, 470). The body expresses the psychic and mental dimensions and the mind is activated by bodily movement. This activation cannot be eliminated: this is how we work. Lipps here takes up a theme that had already been tackled by Hume. The Scottish philosopher, in fact, had argued that “the minds of all men are similar in their feelings and operations, nor can any one be actuated by any affection” (Hume 1896, 575–576) and in order to understand others and their experiences one must inevitably use one’s own experiences and emotional dimension. I will return to this important point in the conclusion.

Obviously, to claim that the other’s body and gestures produce an imitative effect which activates us is not to claim that gestures are always well understood. First of all, habit is decisive, because while gestures are an innate human characteristic and there are certain forms of expression that have a universal value, different cultures and traditions define and influence the specificity of gestures. Therefore, if only because of this, the gestures of others—while inevitably activating us—can lead us to misunderstand their intentions.

4 Misunderstandings

As we have seen so far, Lipps clarifies the close connection between the feeling experienced and the gesture expressed through the instinct for vital manifestation. This element, associated with the mimetic instinct, allows us to grasp a

broader phenomenon that Lipps calls the “empathic relationship.” This relationship is instinctive and immediate. In the case of the acrobat, I clearly do not consciously try to put myself in their place: I do not pause to reflect on how he is feeling, imagining how I would feel if I were in his shoes. On the contrary, by observing the acrobat’s “optical” gesture, I unconsciously imitate his movements, producing the “kinesthetic” gesture within me. But imitation and, with it, the kinesthetic gesture, takes place at a psychic level and not a physical one: when watching the acrobat, I do not stand up and pretend to walk on a tightrope myself. Any physiological changes—such as an increase in heart rate or goosebumps—also have their origin in psychic activation and are secondary effects that Lipps refers to as “induced tensions” (Lipps 1903b, 197–198). Furthermore, the experience that is produced in me by the movements of others is attributed to *them*; I feel the fear, the dizziness, and the vertigo, but—even though I experience them in the first person—I attribute them to the acrobat. Of course, this applies to all feelings: the other person’s fear, like their sadness or anger, are experienced by me in the sense of reactivating my own fear, sadness, or anger.

Precisely for this reason, Lipps is credited with creating a model “of actuality”:⁷ the emotions triggered by the observation of other people’s gestures produce a feeling that becomes “actually” present in my own experience right now. It is easy to understand why Lipps was accused by some interpreters of not being able to ensure an adequate separation between myself and the other. In fact, by activating an emotional experience in the observer, the Lippsian model opens up a series of problems. If, by mimetically reproducing the other’s gesture, I personally feel their fear or anger—that is, if I am also emotionally activated—two related risks emerge. First, there is the risk of being infected by the other’s feelings: with a strong feeling like fear or panic, feeling invaded by such an intense experience can trigger reactions in the observer. Just think of what a crowd does at times of collective panic: the individual, even without having perceived any danger, behaves as if he had and tries to save himself, as other people’s fear becomes his fear. In such cases, the other is in danger of disappearing: one’s own fear takes over and one does not care about the fear of others.

But let us come to the second risk related to Lippsian reflection: if I project onto the other the experiences that have been activated in me, am I not “overshadowing” the other with my own experiences? And am I not in danger of missing

7 The alternative theory to that of “actuality” is that of “representation,” according to which one does not relive the emotions of others, but merely have a representation of them. In essence, the representation would be a faded image of the other’s fear or sadness and not the fear or sadness itself. On the subject see Geiger (1911, 33–34).

their state of mind? Let us further clarify this objection by returning once again to the example of the acrobat. Indeed, those uncertain movements on the wire, which cause my feeling of vertigo just by watching them, may be part of the performance and the experience of the man on the wire may be much less distressing than the one triggered in me. We can also hypothesize that the acrobat, used to performing, only pretends to lose his balance or to be afraid. I, on the other hand, have an instinctive mimetic reaction to his movements, projecting onto him the experience that is activated in me by watching him. In other words, I project onto the acrobat my own experiences related to the fear of losing my balance. But my experiences are activated—as in a mirror⁸—by *his* gestures. The case of the acrobat is a particular one, because it involves an artistic performance whose aim is precisely to provoke in the spectator a first-person activation that generates fear and vertigo. However, this general discourse also applies to common interpersonal relationships: we are constantly at risk of being unable to understand others, “overshadowing” them with our own experiences and feelings. In this way, the mimetic theory of gestures could be said to outline a theory of *misunderstanding* rather than understanding. Do we not often find ourselves in a potentially dangerous ethical position of confusing ourselves with others and failing to understand their differences?

Husserl’s criticism of Lipps’ theory is emblematic in this regard. According to Husserl, the concept of mimetic empathy proposed by Lipps fails to capture others in their diversity. On the contrary, a theory that claims to ground the relationship with others on an instinctive mechanism such as mimesis highlights a fundamental theoretical problem that anyone wishing to reflect on the intersubjective relationship must first answer: what differentiates selves from one another? If we have to rely on mimesis in order to understand the other, then we

⁸ At this point in the analysis, it is easy to understand why Gallese referred to Lipps’ theory in his work. Neuroscientists from Parma have shown that when we observe someone perform an action, certain areas of the brain are set in motion and in particular the same neurons are activated (or fired) that are activated in us when *we* perform the actions we are observing. The experiments were carried out first on macaque monkeys, then on humans, with essentially similar results. Cf. Gallese, Fadiga, Fogassi, and Rizzolatti (1996), Rizzolatti, Gallese, Fadiga, and Fogassi (1996), and Gallese, Keysers, and Rizzolatti (2004). According to Gallese, the simulative process does not take place by means of a voluntary act on the part of the observer, who imagines being in the other person’s shoes, but is instead automatic, unconscious and pre-reflective. Lipps’ theory of empathy, which refers to an instinctive and unconscious mechanism of internal simulation, provides a useful theoretical framework and a significant precedent for the concept of mirror neurons. Cf. Gallese (2001, 42, and 2003, 175). The neuroscientific idea is that empathy can be explained and founded from a scientific and organic point of view through a kind of mimesis—and in this sense we are not very far from Lipps’ acrobat.

constantly risk confusing our own experiences with those of others and considering the latter's fear, sadness or anger as *our own*, or, on the contrary, projecting onto others experiences that do not belong to them, thus ending up continually misunderstanding their intentions and states of mind. (Cf. Husserl 1973, 70–76 and 500)

5 The Alternative to Mimesis: Analogy

The Lippsian concept of mimesis was already a polemical response to the theory of the understanding of others which can be traced back, for instance, to Dilthey. According to this view, others, with their gestures and actions, must be understood through analogical reasoning or deduction. This approach is based on the idea that there are two separate selves and can be briefly summarized as follows: to stick to the example of anger, when I observe the other person shouting and gnashing their teeth, I wonder how I felt in the past when I myself shouted and gesticulated in that way (or in a similar fashion). From the memory of that feeling experienced in the past, I can then deduce that the person in front of me is experiencing a similar feeling (cf. Dilthey 1927; Id. 1924). The mimetic theory, on the contrary, precisely because of the centrality it attributes to gestures, places us on an emotional and immediate level: it speaks of a degree of involvement in our experiences that cannot be placed on a purely cognitive level.

With the analogical theory we could perhaps avoid the first of the problems raised by the mimetic theory, but not the second. Clearly, the advantage of an analogical deduction is that it presupposes a marked separation between experiences and the immediate recognition of an “I” and a “you,” which excludes the possibility of a contagious fusion from the outset, but we must recognize that the problem of misunderstanding remains. Through analogy, I am prompted to ask myself how I would feel if I were in the other's condition, I am driven to represent their condition to myself and to imagine myself “in their shoes.” This conscious separation may help me to make a distinction between the two people involved, but I still use my own experience to understand that of others. The analogical model essentially places itself on a cognitive and conscious level, while the mimetic model works on an instinctive, unconscious and mechanical level. Both approaches, however, employ one's own experiences as a tool for understanding others.

6 The Role of Others in the Construction of the Self

The idea of mimesis does not deploy cognitively dense strategies. On the contrary, it presents itself as a moment in which the self and the other are not yet well defined and helps us to understand in what sense the “I” takes shape in its relationship with the “you” (cf. Tomasello 2008). The entire process is therefore configured as inverse to analogical theories presupposing two individuals well aware of their identity and of their mutual differentiation.

Lipps’ “philosophy of gestures” helps us to focus on the relevance of the other in the constitution of individual identity. To stick to the example of anger, it is not clear how I could recognize anger in the expression and gesture of another based solely on my own first-person experience. The expression on my face in relation to what I am feeling is not the direct object of my own “optical” vision, but only of my kinaesthetic one. Yet I have a fairly clear representation of the expression on my face when I am angry or sad, even though I do not have “a mirror at hand as anger consumes me” (Lipps 1907, 698). Analogical theories do not explain how I can attain full “optical” awareness of my gestures, such that I am able to recognize them in others. In the analogical perspective, I only experience the “kinaesthetic” part of a gesture directly and first-hand: I do not see myself turn pale or grind my teeth. Lipps’ answer is clear: I do not need a mirror because I acquire awareness of expression “from observing the faces of others” (Lipps 1907, 699).

This is a “reversal” of the classical analogy approach because it highlights how important the role of the other is in the constitution of one’s own identity. It is through the other’s smile or tears that I know myself and my expressions: “in short, I know that my anger and a precise change in my face correspond because I know that they correspond in the other, and not vice versa” (Lipps 1907, 699). The mimetic relationship and the recognition of the experiences of others is therefore an essential process for the recognition of one’s own experiences. In recognizing the experiences of others, the self becomes the instrument through which we make ourselves resonate with others.⁹ It is from the concrete manifestation of bodily expressions of other people that I become aware of myself, not

⁹ This image originates from Hume, whose *Treatise*—it is worth remembering—was translated into German by Lipps: “The minds of all men are similar in their feelings and operations, nor can any one be actuated by any affection, of which all others are not, in some degree, susceptible. As in strings equally wound up, the motion of one communicates itself to the rest”; cf. Hume (1896, 575–576).

the other way around as postulated by analogical reasoning, which starts from me in order to consider the other (cf. Dapraz 2017).

While sharing Lipps' criticism of the analogical deduction, in a 1913 note, Husserl argues that it is wrong to "link the whole problem of empathy to mere expressive movements, bodily expressions, and expressions of the psychic moment [. . .] as Lipps does [. . .] in his arguments" (Husserl 1973, 70). Instead, he considers the bodily and exclusively kinaesthetic dimension central to the empathic relationship (cf. Fabbianelli 2016). In the Husserlian perspective, the bodily dimension becomes the ground and bulwark of individuality, that is, what allows us to defend ourselves from the risk of indistinction, contagion and fusion. It is thus possible to delineate an intersubjective relationship starting from the corporeal self located in a determined "here" in space as opposed to the "there" occupied by the other's corporeal self (cf. Husserl 1960, 89 ff.).

Expressions and gestures are psychic experiences that can become contagious and cannot always be fully recognized as one's own: our emotional dimension is constructed in the exchange with others. Recognizing that emotional contagion is part of the relationship, though linked to particular situations and contexts (crowds, loud noises, specific subjective conditions such as altered states of consciousness, etc.), allows us to construct a conscious theory of the structure of subjectivity. The Lippsian view allows us to grasp this type of relation as well, without, however, being reduced exclusively to it. A theory of gestures is thus the first level of a comprehensive reflection on the intersubjective relationship, which, in its subsequent levels, must be able to investigate the role of the conscious effort to understand the peculiarities and differences of others on a more explicitly cognitive level. In this sense, Lippsian reflection is also a useful contribution to the contemporary discussion that sees empathy itself as "enactive empathy": an embodied, pre-reflective understanding of self and others (cf. Hutto and Jurgens 2018 as well as Zahavi and Michael, 2018)

The wealth of Lippsian thought lies precisely in having recognized the link, within the gestural dimension, between the optical aspect (in the third person) and the kinaesthetic one (in the first person), without assuming the prevalence of either. Lipps thus managed to establish the strong connection between inner experience and the external world that went largely unrecognized by a tradition attached to the privilege of immanence. On the contrary, precisely because of the centrality it grants to the kinaesthetic dimension (in the first person), Husserl's cannot be understood as a philosophy of gestures.

Much of contemporary literature tends to regard the separation of experiences as preliminary to any possible reflection on humanity.¹⁰ There is a tendency to argue that the relationship with the other only arises when one's self is sufficiently formed to see itself as different and separate. An authentic philosophy of gestures, on the contrary, can outline a reversal of this mainstream point of view: in order to talk about the self and the relation with the other, it is necessary to look closely at the potentially fusional and vague dimension set in motion by the gestures of others.

References

- Bloom, Paul. 2016. *Against Empathy. The Case for Rational Compassion*. London: The Bodley Head.
- Boella, Laura. 2018. *Empatie. L'esperienza empatica nella società del conflitto*. Milan: Cortina.
- Costa, Vincenzo. 2010. *Fenomenologia dell'intersoggettività*. Rome: Carocci.
- Depraz, Natalie. 2017. "Lipps et Husserl: l'Einführung." *Revue de métaphysique et de morale* 96: 441–460.
- Dilthey, Wilhelm. 1910. *Die Entstehung der Hermeneutik*. In Dilthey, Wilhelm. *Gesammelte Schriften*, edited by Georg Misch, 317–331. Stuttgart: Teubner.
- Dilthey, Wilhelm. 1927. *Plan der Fortsetzung zum Aufbau der geschichtlichen Welt in den Geisteswissenschaften*. In Dilthey, Wilhelm. *Gesammelte Schriften*. Volume VII, 189–291. Stuttgart: Teubner.
- Donise, Anna. 2019. *Critica della ragione empatica. Fenomenologia dell'altruismo e della crudeltà*. Bologna: Il Mulino.
- Fabbianelli, Faustino. 2016. "Ripensare l'empatia a partire da Theodor Lipps." In Centi, Beatrice (Ed.). *Tra corpo e mente. Questioni di confine*, 29–61. Firenze: Le Lettere.
- Gallese, Vittorio. 2001. "The 'Shared Manifold' Hypothesis: From Mirror Neurons to Empathy." *Journal of Consciousness Studies* 8 (5–7): 33–50.
- Gallese, Vittorio. 2003. "The roots of empathy: the shared manifold hypothesis and the neural basis of intersubjectivity." *Psychopathology* 36 (4): 171–180.
- Gallese, Vittorio, Christian Keysers, and Giacomo Rizzolatti. 2004. A unifying view of the basis of social cognition. *Trends Cogn Sci.* 8 (9): 396–403.
- Gallese, Vittorio, Luciano Fadiga, Leonardo Fogassi, and Giacomo Rizzolatti. 1996. "Action Recognition in the Premotor Cortex." *Brain* 119 (2): 593–609.
- Geiger, Moritz. 1911a. "Über das Wesen und Bedeutung der Einführung." In Geiger, Moritz. *Bericht über den vierten Kongress für experimentelle Psychologie in Innsbruck vom 19. Bis 22. April 1910*, 29–73. Leipzig: Barth.
- Geiger, Moritz. 1911b. "Zum Problem der Stimmungseinführung." In *Zeitschrift für Ästhetik und allgemeine Kunstwissenschaft* 6: 1–42
- Hume, David. 1739–1740, 1896. *A Treatise of Human Nature*. Oxford: Clarendon Press.

¹⁰ The need to recognize separation is a dominant theme in both psychological and philosophical literature. See, for example, very different works that converge on this point: Costa (2010), Bloom (2016), and Boella (2018).

- Husserl, Edmund. 1960. *Cartesian Meditations. An Introduction to Phenomenology*. Translated by Dorion Cairns. The Hague: Martinus Nijhoff.
- Husserl, Edmund. 1973. *Zur Phänomenologie der Intersubjektivität. Texte aus dem Nachlass erster Teil: 1905–1920. Husserliana XIII*. The Hague: Martinus Nijhoff.
- Hutto, Daniel, and Alan Jurgens. 2018. “Exploring Enactive Empathy. Actively Responding to and Understanding Others.” In Matravers, Derek and Anik Waldow (Eds.). *Philosophical Perspectives on Empathy. Theoretical Approaches and Emerging Challenges*, 111–128. New York: Routledge.
- Lipps, Theodor. 1903a. *Ästhetik. Psychologie des Schönen und der Kunst*. Volume I: *Grundlegung der Ästhetik* Hamburg und Leipzig: Voss.
- Lipps, Theodor. 1903b. “Einführung, innere Nachahmung, und Organempfindungen.” *Archiv für die gesamte Psychologie* 3 (2–3): 185–204.
- Lipps, Theodor. 1904. “Weiteres zur ‘Einführung.’” *Archiv für die gesamte Psychologie* 4: 465–519.
- Lipps, Theodor. 1906. *Ästhetik. Psychologie des Schönen und der Kunst*. Volume II: *Die ästhetische Betrachtung und die bildende Kunst*, Hamburg: Voss.
- Lipps, Theodor. 1907. “Das Wissen vom Fremden Ichen.” In Lipps, Theodor. *Psychologische Untersuchungen I*, 694–722. Leipzig: Engelmann.
- Lipps, Theodor. 1909. “Erkenntnisquellen. Einführung.” In Lipps, Theodor. *Leitfaden der Psychologie*, Chapter 13, 222–241. Leipzig: Engelmann.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists’ Incomplete Revolution*. Montreal and Kingston: McGill-Queen’s University Press.
- Pinotti, Andrea. 2002. “Empatia: ‘un termine equivoco e molto equivocado.’” In Besoli, Stefano, Marina Manotta, and Riccardo Martinelli (Eds.). *Una “scienza pura della coscienza”: l’ideale della psicologia in Theodor Lipps. Discipline Filosofiche* 12 (2): 63–83.
- Pinotti, Andrea. 2011. *Empatia. Storia di un’idea da Platone al Postumano*. Rome and Bari: Laterza.
- Prandtl, Antonin. 1910. *Die Einführung*. Leipzig: Barth.
- Rizzolatti, Giacomo, Vittorio Gallese, Luciano Fadiga, and Leonardo Fogassi. 1996. “Premotor cortex and the recognition of motor actions.” *Cognitive Brain Research* 3 (2): 131–141.
- Rizzolatti, Giacomo and Corrado Sinigaglia. 2006. *So quello che fai. Il cervello che agisce e i neuroni specchio*. Milan: Raffaello Cortina.
- Scheler, Max. 1923. *Wesen und Formen der Sympathie*. Bonn: Cohen.
- Smith, Adam. 1759, 1767. *The Theory of Moral Sentiments*. London and Edinburgh: Millar & Kincaid.
- Stein, Edith. 1917. *Zum Problem der Einführung*. Halle: Buchdruckerei des Waisenhausen. [Reprinted in Stein, Edith. *Edith Stein Gesamte Ausgabe*. Freiburg: Herder.]
- Stern, Paul. 1898. *Einführung und Assoziation in der modernen Ästhetik*. Hamburg and Leipzig: Voss.
- Stueber, Karsten. 2019. “Empathy”, *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/fall2019/entries/empathy/>
- Tomasello, Michael. 2008. *Origins of Human Communication*. Cambridge: MIT Press.
- Tomasello, Michael. 2016. *A Natural History of Human Morality*. Cambridge: Harvard University Press.
- Tomasello, Michael, Malinda Carpenter, Josep Call, Tanya Behne, and Henrike Moll. 2005. “Understanding and sharing intentions: The origins of cultural cognition.” *Behavioral and Brain Sciences* 28 (5): 675–691.
- Witasek, Stephan. 1904. *Grundzüge der Allgemeinen Ästhetik*. Leipzig: J. A. Barth.
- Zahavi, Dan and John Michael. 2018. “Beyond Mirroring: 4E Perspectives on Empathy.” In Newen, Albert, Leon De Bruin, and Shaun Gallagher (Eds.). *The Oxford Handbook of 4E Cognition*, 589–606. Oxford: Oxford University Press.



Part II: **Gestures in the Social Sciences**

Tullio Viola

Chapter 6

Gestures, Habits, and Cultural Transmission: From “Organic Memory” to the Social Sciences

Abstract: The chapter asks to what extent the study of gestures and habits can help us investigate the dynamics of cultural transmission. I first describe the theories of habit that emerged in the 19th century as a bridge between biological and cultural transmission. Second, I show how, once the Lamarckian premises of this 19th-century paradigm were lifted, the question of cultural transmission through habit became a sociological rather than a biological problem. Third, I analyze the work of Paul Connerton, who argued that habit and bodily performances are central to the functioning of social memory.

Keywords: theories of habit, gestures, cultural transmission, Connerton, Paul, social memory

1 Introduction

This chapter focuses on the relationship between gestures and habits from a historical perspective. More specifically, it offers a brief historical overview of ideas about the relevance of gestures and habits to the study of cultural transmission. By cultural transmission, I mean the process by which cultural elements are handed down to individuals or groups. I will focus on the contribution of 19th- and 20th-century theories of habit to our understanding of this phenomenon.

Why should we pay attention to the role of habits and gestures in the transmission of culture? To answer this question, let us begin by considering three prominent features of the concept of habit. First, habits establish a connection between the past and the present. When we speak of a habitual action, we usually mean an action that is conditioned by a series of similar actions that have taken place in the past. In this sense, we can say that the past leaves its mark on the present through habit. In the following sections, I illustrate how this link between

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past and present has led the concept of habit, at least since the 19th century, to be associated with the concept of memory. Second, habits establish a connection between individuals and society, since habitual actions often depend upon the social context in which they occur. As Dewey ([1927] 2008, 334) elucidates, “habits are formed for the most part under the influence of the customs of a group.” Thus, the concept of habit is not solely linked to *individual* memory but also to what has been called *social* or *collective* memory.¹ Third, habits can be *transmitted* from one individual to another or from a group to an individual, making them one of the most significant means through which individuals absorb the cultural elements that are distinctive to a group.

Now let us consider the link between habits and gestures, a link that runs in both directions. On the one hand, gestures shape our habits. That is, the formation of a habit often occurs through the repetitive performance of the same gesture over time. I learn how to perform a skilled action, for instance, by repeating the same gestures over and over again. This further implies that, as gestures become ingrained in our behavior, they tend to solidify into habits. On the other hand, habits shape our gestures. That is, once formed, habits determine how we execute specific gestures and engage in various kinds of bodily actions. Pierre Bourdieu’s reflections on habitus as a generative matrix of behavior exemplify this particular perspective (more on this below).

These two directions—gestures shaping habits and habits shaping gestures—are not mutually exclusive and may coexist in a circular process where particular actions interact with general rules. Habits are general rules of behavior that *govern* particular actions, but they are also *governed by* particular actions because they arise only from the repetition of those actions. For example, I may have a habit of playing the piano that allows me to quickly learn a tune or even improvise a melody. However, I acquired that habitual capacity in the first place by practicing the specific movements of my fingers on the keys over and over again. So, gestures give rise to habits that are, in turn, the matrix of new gestures, and so on. This circularity helps us explain the two senses in which gestures are relevant to the study of cultural transmission. As I aim to show in what follows, we can study gestures as the outcome of a given chain of transmission, but also as the engine of cultural change, in the sense that it is only through particular gestures that habits are consolidated, transformed, and transmitted across time and space.

¹ For a concise introduction to the extensive body of literature on collective memory and to the terminological distinctions among “social,” “collective” and “cultural” memory, see Olick, Vinitzky-Seroussi, and Levy (2011).

To make this case, the chapter provides a historical overview of the paradigm shift that took place in relation to how habit, cultural transmission, and gesture were studied in the transition between the nineteenth and the twentieth centuries. In the first section, I briefly outline the 19th-century paradigm that was committed to the biological transmissibility view of habits. Although now discredited, this paradigm provided a crucial model for thinking about habits as a form of social memory. Following this, in the second section, I show how, when faced with the demise of the *biological* paradigm, scholars turned to a new *sociological* paradigm to answer the question of how habits are transmitted over time. Finally, I analyze the work of British anthropologist Paul Connerton, who understood the concept of habit through the study of the collective memory of a social group.

2 Organic Memory and Cultural Transmission

The 19th century was, in many ways, a pivotal period in the development of the concept of habit. As sociologist Charles Camic summarized almost four decades ago in an influential historical overview of the concept, scholars at this time became increasingly concerned with studying the fundamental psychological and physiological processes that contribute to the formation and maintenance of habit (Camic 1986, 1048). This shift in focus reflected the emergence of new academic disciplines, such as physiology and psychology, and their growing influence on philosophical debates of the time. A common concern in the 19th century was to trace the existence of habits back to fundamental properties shared by all living beings, such as the ability to create behavioral regularities from ongoing interactions with the environment.²

The psychological-physiological approach to the study of habit did not, however, make the concept irrelevant to the analysis of social and cultural facts. On the contrary, linking the existence of habits to the basic laws of organic matter facilitated the development of one of the earliest frameworks for the study of cultural transmission. The key concept here is “organic memory” (Otis 1994; Olick,

² In some cases, scholars suggested that the laws of habit could be at work even in inorganic matter. William James’ concept of “plasticity” in the *Principles of Psychology* exemplifies this (James [1890] 1981, Chapter 4). According to James, plasticity “means the possession of a structure weak enough to yield to an influence, but strong enough not to yield all at once” (James [1890] 1981, 110). Organic matter is endowed with plasticity, but the same can be said, at least in some cases, of inorganic objects: garments can be adjusted to who is wearing them, a metal lock works more or less efficiently depending on how it has been used in the past, and a piece of paper shows the traces of previous uses.

Vinitzky-Seroussi, and Levy 2011, 11–12). This concept suggests that memories acquired by past generations are transmitted to future generations through biological means. In other words, studies of organic memory posited a link between biological inheritance and individual memory. From past generations we inherit not only our biological makeup but also the memories of past events, acquired abilities, and the like.

This thesis is based on a Lamarckian assumption, namely, the heritability of acquired traits. According to the Lamarckian theory, organisms acquire several habits in the course of their life, and these habits are then passed on to their offspring in a purely biological way. Such a theory is hardly compatible with the current Darwinian synthesis in biology, but it was widely accepted until the end of the 19th century. One only has to read *The Expression of the Emotions in Man and Animals* (Darwin 1872) to note that even Darwin by no means ruled out the biological transmissibility of acquired traits, and especially the transmissibility of habits, but considered it an additional evolutionary factor parallel to natural selection. According to Darwin, gestures initially performed to fulfil specific functions become ingrained as habits. Those habits are then transmitted to future generations, allowing gestures to persist even when their original practical purpose is no longer relevant. Consequently, these gestures can develop an expressive function that is distinct from their initial practical utility.

The Lamarckian idea of the transferability of acquired traits survived until the early decades of the 20th century, when it became increasingly untenable due to the synthesis of Darwinian evolutionism and the Mendelian theory of heredity. According to this synthesis, genetic inheritance is the only element that can be biologically transmitted from one generation to the next. As I elaborate in the next section, this theoretical shift had substantial implications for the problem we are discussing here: the *biological paradigm* of organic memory will be replaced by a *sociological paradigm*. Social rather than biological dynamics will explain the transmission of habits and, thus, their role in cultural transmission.

One of the first, and most prominent, systematizers of the theory of organic memory was the German physiologist Ewald Hering. In his treatise “Memory as a General Function of Organized Matter” (Hering 1913, Chapter 1 [1870]), Hering aimed to include both physiological and psychological perspectives on the study of mind. For this reason, he insisted that we should construe the concept of memory broadly as the general ability on the part of the organism to preserve traces of past events. Thus, unconscious memory, the stable traces of past events accumulated in the body, became even more integral to understanding organic memory than the phenomena of conscious recollection studied by psychologists. Indeed, memory became an essential feature of all living beings because all organic (or “organized”) matter was claimed to be endowed with the ability to retain traces of past stimuli

and be influenced by these traces. Habit, in turn, became a manifestation of organic memory, as habit conditions the behavior of organisms in the present through the traces left by past stimuli or action. Moreover, according to the Lamarckian orientation of the whole theory, the habits of an organism do not disappear with the organism's death but are passed on to its descendants. They thereby become carriers of biological and cultural information.

Other prominent representatives of the theory of organic memory were the Frenchman Théodule Ribot (see Otis 1994, 14–17) and the English writer Samuel Butler, author of the book *Life and Habit* (Butler 1878). Years later, the German Richard Semon—a student of Ernst Haeckel—formulated a version of the theory of organic memory that initially received little attention in the psychology and physiology of his time, but that eventually proved influential on the broader public (Semon 1904; see Schacter 2001). Some of the most significant innovations Semon introduced were, in fact, terminological. He coined the concept of “mneme” to refer to an expanded idea of memory that encompassed both cultural and biological phenomena (memory proper and heredity). He also coined the terms “engram,” the trace of a past event that is stored and reproduced at the organic level; and “ecphory,” the process through which that trace is reactivated.

These neologisms have, in a sense, outlasted their creator. They remain in use today, thanks in particular to their reception in the writings of early 20th-century theorists of culture such as psychoanalyst Carl Gustav Jung (Pinotti 2004, 69), as well as the art and cultural historian Aby Warburg (Pinotti 2004 and Wedepohl 2014). Warburg, in particular, understood the engram as a trace accumulated in the pictorial and bodily memory of a social group. A key component of this pictorial memory is what Warburg called “*pathos formulae*,” i.e., schematic representations of the human body that, owing to their ability to become fixed in habitual gestures, are able to transmit symbolic content across time and space (Settis 1997 and Targia 2022). In line with the duality of function described in the Introduction, gestures here are both the content and the conduit of cultural memory. They represent both what is passed from one generation to the next and the means through which the body is molded to encapsulate specific formulae of pathos that can traverse time and space. Warburg, however, did not clarify further whether we should explain the existence of pathos formulas by invoking a form of organic memory, as in Semon, or whether we should stick to purely social mechanisms of transmission. In this sense, his work was a compromise between the biological and the sociological paradigms.

Semon's concept of the “mneme” is further echoed in today's use of the term *meme* as the cultural equivalent of the gene (Pinotti 2016, 423–427), meaning the minimal cultural unit that can travel from one individual to the next (Dawkins 1976 and Fischer and Grünewald-Schukalla 2021). However, the similarity in

terms here should not be mistaken for indicating substantial overlap in ideas. The modern-day use of the term “meme” is based on a neo-Darwinian selection mechanism and has therefore very little to do with the Lamarckian inheritance of habits.

A much more robust link to 19th-century theories of organic memory is offered by new research into non-genetic inheritance, including epigenetic mechanisms by which the environment can influence gene behavior (Portera and Mandrioli 2021). This research revives the Lamarckian idea of the inheritance of acquired traits. Scholars propose that profoundly traumatic events like wars, famines, or genocides can leave traces on affected individuals that are subsequently transmitted to later generations (Yehuda, Daskalakis, Bierer, Bader, Klengel, Holsboer, and Binder 2015 and Curry 2019). However, the validity and generalizability of these findings remain highly contested (Carey 2018 and Mitchell 2018). Moreover, it is worth noting that these studies—unlike 19th-century Lamarckism—conceptualize the “trace” of past events not so much through the idea of habit but through the idea of “trauma,” an idea influenced by psychoanalysis.³

3 The Sociological Paradigm

Charles Camic has noted that the theoretical discourse about habit in the mid-20th century declined significantly compared with the previous century, in part owing to the emergence of a behaviorist approach that seemed to offer little conceptual value to the sociologists, philosophers and psychologists of the time (Camic 1986, 1071). However, there were many notable exceptions to this trend, exceptions that positioned themselves at the intersection of philosophy and the social sciences. These studies highlighted the sociological dynamics that make habit a powerful engine of cultural transmission after the biological and Lamarckian explanations had lost their persuasive power. Rather than insisting on the biological transmissibility of acquired traits, they emphasized the role of social processes such as learning, communication, and imitation.

The role of *education* and schooling in the social transmission of habits is one of the issues that gained relevance in this new theoretical framework.⁴ In *Democracy and Education* ([1916] 1985), for instance, philosopher John Dewey laid out

³ The concept of trauma (or “cultural trauma”) has been extensively used in sociologically-oriented theories of memory and identity (see Alexander 2004).

⁴ The idea that habit plays a crucial role in education, however, is not novel in the history of philosophy (see Carlisle 2014, 47 and 103–107).

the implications of his pragmatist conception of habit for pedagogy, emphasizing the role of schools in shaping the habits of future members of a democratic society. According to Dewey, “[s]ociety exists through a process of transmission quite as much as biological life.” This process of transmission, however, is not biological but rather takes place through learning, i.e., the “communication of habits of doing, thinking and feeling from the older to the younger” (Dewey [1916] 1985, 6). There is, moreover, a specific kind of learning, namely, education, which takes place when the person who learns does not merely change his or her own habits in a mechanic way but accompanies the acquisition of habit with the acquisition of ideas and emotions (Dewey [1916] 1985, 17). This understanding of education is underpinned by a distinction between *active* and *passive* habits. Passive habits are routine-like adjustments to the environment, of which we may be partly unaware, and they are not necessarily accompanied by an intellectual or emotional component. Active habits, however, incorporate an “end in view,” that is, a purpose or aim that makes us conscious of those habits as supporting skilled and intelligent engagement with the environment (Dewey [1916] 1985, 34–35).

The idea of *incorporation* was also critical to 20th-century sociological theories of habit, and it is here that the relation between habits and gestures comes most prominently to the fore. As shown in the previous section, 19th-century theorists of organic memory had conceptualized habit as equivalent to bodily memory; they highlighted that habit turns the human body into an unconscious carrier of cultural traits that emanate from the past (see Heinlein, Dimbath, Schindler, and Wehling 2016). In contrast to theories of organic memory, however, sociological theories of incorporation emphasized the role of society in inscribing habits onto the bodies of individuals.

A major contribution to incorporation theories comes from French sociologist Marcel Mauss. In his essay on the “techniques of the body” (Mauss [1934] 1973), Mauss focused on everyday gestures and bits of ordinary physical behavior that are socially learned (although they might at first blush appear universal and ingrained in human nature) and are therefore found to vary across societies and cultures. Some key examples of techniques of the body in Mauss’ sense are ways of walking, eating, sitting, and sleeping. Mauss pointed out that it is precisely the habitual nature of these bodily techniques that allows for their learning and transmission. He drew on the Aristotelian concept of habit as a stable disposition (*hexis*) that can be acquired and strengthened through practice. However, he gave this Aristotelian notion a distinctly empirical-sociological twist in order to distinguish it clearly from the metaphysical and individualistic conceptions of habit prevalent in the French philosophical context of his time:

These “habits” do not just vary with individuals and their imitations, they vary especially between societies, educations, proprieties and fashions, prestiges. In them, we should see the techniques and work of collective and individual practical reason rather than, in the ordinary way, merely the soul and its repetitive faculties (Mauss [1934] 1973, 73).

Here again we see the bidirectional relationship between habits and gestures that I introduced at the beginning of this chapter. Certain gestures, when repeated, create habits. At the same time, habits, once formed, govern the continued repetition and social transmission of gestures.

Mauss’ notion of bodily techniques influenced Pierre Bourdieu’s sociological theory of habitus, which emerged in the late 1960s. According to Bourdieu, the habitus is a pre-reflexive and persistent behavioral disposition that determines the relative position of an individual within a social group by influencing their abilities, schemes of action, perceptions, expectations, and values. Bourdieu placed a strong emphasis on the fact that the habitus is not the result of biological mechanisms but rather of exclusively social processes; it is, in other words, the “social made body” (Bourdieu and Wacquant 1992, 127; see also Kastl 2016, 81). At the same time, he claimed that the habitus is a link between the past and the present. As he put it, “[h]abitus is that presence of the past in the present which makes possible the presence in the present of the forth-coming” (Bourdieu [1997] 2000, 210). Bourdieu examined the role of occupation, gender, and class differences in shaping the habitus, which led him to conceptualize habit as a tool for social differentiation and social domination. The gestures of a waiter at a Parisian café, for instance, are the means by which an individual “espouses” and “identifies with” his social function without having to be intellectually aware of this identification process (Bourdieu 1981, 309).

Among the authors who have taken up and further developed Bourdieu’s incorporation-based approach, the political theorist Iris Marion Young is particularly worth mentioning because of her influential contribution to understanding the incorporation of gender inequalities. (Young 1980) Young highlighted that the supposed innate differences in behavior between men and women are often the result of social forces that shape the gestures and bodily techniques of an individual from childhood. For instance, “The young girl acquires many subtle habits of feminine body comportment—walking like a girl, tilting her head like a girl, standing and sitting like a girl, gesturing like a girl, and so on” (Young 1980, 153). It is through habit, Young suggests, that social forces come to have an influence on individual behavior. It is worth noting how Young focuses on seemingly innocuous everyday gestures to reveal not only their social conditioning (in line with the work of Mauss and Bourdieu), but also their role in shaping more significant social inequalities and patterns of oppression.

The two strands of 20th-century research on the social transmission of habits mentioned thus far—education and incorporation—focus on society’s influence

on individuals. Through the formation and transmission of habits, subjects become carriers of information, symbols, or techniques that are already present in their social group. However, by highlighting the bidirectional relationship between habits and gestures, we should be able to appreciate that the opposite is also true. Through their individual actions, subjects can modify existing habits. This may involve local habits as well as more generally shared social norms. As Max Weber has noted, for instance, a habit that initially appears to pertain to an individual's behavior alone can readily turn into a binding social norm, because "the mere fact of the regular recurrence of certain events somehow confers on them the dignity of oughtness" (Weber [1922] 1978, 326, translated in Camic 1986, 1059). For example, if I wave to the shopkeeper near my home before going to work two days in a row, I will have created a minimal expectation that I will also make the same gesture the next day. If I do not, I will give the impression that I have violated a norm established by my own behavior.⁵

5 The account just given is, admittedly, overly individualistic, as it appears to postulate a linear progression from individual actions to social norms. In the pragmatist-Deweyan framework I have already alluded to above, it would instead be more correct to argue that interaction, the joint perception of a social situation, and conjoint action are prior to individual behavior (Testa 2016, 42). While Dewey was inclined to regard social norms as "precipitates of the habituations of our activity" (Testa 2016, 47), he did not conceptualize the process as a linear progression from individual habits to social norms, but rather as a process of crystallization by which a habit that is already embedded in social interactions and structures gradually acquires normative force. As a further development of the pragmatist perspective, Roberto Frega (2018) suggests speaking of patterns of social interaction rather than collective habits in order to better demarcate the individual and the social level. He gives examples that show to what extent these patterns of social interaction might be relevant to a study of gestures. "Patterns of interaction involve a plurality of individuals (at least two), for example the way in which a customer and a shopkeeper interact during their commercial transaction, or the way two strangers look at each other and maybe solve interactional troubles such as rights of precedence when jumping on a bus. But there are also, as explained above, the normative orders that are immanent to interactions themselves, for example the way strangers stand in line waiting their turn to be served, usually respecting an order of precedence while being sensitive to exceptions and circumstances, without needing every time to re-establish queuing rules" (2018, 177–179).

4 How Societies Remember

In *How Societies Remember* (1989), anthropologist Paul Connerton made a very explicit attempt to place the concept of habit at the center of studies on social and collective memory.⁶ As the title of his book reveals, Connerton's aim was to explain whether and to what extent we can talk of a collective or social dimension of memory (i.e., to discuss the dynamics through which a social group preserves its past over and above the mnemonic capacities of individual subjects). Unlike other scholars in the field of collective memory studies, Connerton did not exclusively focus on the public acts by means of which a social group recollects or recreates its own past. Rather, he sought to encompass the idea of memory as *active recollection* within the broader framework of memory as *transmission*. This broader perspective considers the ways in which culture is preserved and transmitted over time within the boundaries of a social group.⁷ Thus, Connerton addressed the very same question I have investigated throughout this chapter, namely, the role of habit and gestures in preserving and transmitting culture.

The starting point of Connerton's argument is the idea that, in order to give a detailed account of social memory and cultural transmission, we need to foreground the role of bodily and ritual practice. He claims that “[t]here is [. . .] an inertia in social structures” (Connerton 1989, 5) that we can fully account for only by paying attention to the embodied, performative, and practical dimensions of social life.

This focus on embodied practices is not aimed at downplaying the importance of language and narrative frameworks as factors of cultural transmission.⁸ Rather, Connerton took issue with hermeneutical approaches that take language and the interpretation of linguistic elements as the more important or essential facts of culture. He rejected the idea that texts and other forms of “inscriptions” are the key factor in explaining social memory (Connerton 1989, 3–4). Granted, hermeneutical approaches may, in principle, account for bodily practices. How-

⁶ Considering the history of the concept of habit outlined in this essay, but also considering the fact that Connerton's work follows Bourdieu's, one may get the impression that his claim to be exploring new territory is exaggerated. (On the affinities between Bourdieu and Connerton, see Dimbath and Heinlein 2015, 200–207.) Be that as it may, his book was effectively perceived to break new ground in sociological studies on collective memory.

⁷ See his critical remark about Maurice Halbwachs: “If we follow the thread of Halbwachs's argument we are inevitably led to the question: given that different groups have different memories which are particular to them, how are these collective memories passed on within the same social group from one generation to the next?” (Connerton 1989, 38).

⁸ See, for instance, his very insightful observations on the role of informal narratives for the transmission of culture (Connerton 1989, 17–21 and 39).

ever, Connerton believed that this rarely happens without an implicit devaluation of the specificities of these practices. He highlighted that bodily practices are essentially unlike texts in that they “do not exist objectively, independently of their being performed” (Connerton 1989, 102). The hermeneutical perspective, however, always attempts to identify a layer of meaning that transcends the performance itself. Thus, hermeneutics detrimentally neglects the formal and performative aspects of rituals and embodied practices to focus instead on the referential aspects (Connerton 1989, 53).

Connerton grounded his investigation of rituals and bodily practices on the concept of habit-memory.⁹ This concept can be distinguished from both biographic memory (the ability to recollect episodes of one’s life and place them into a coherent narrative) and cognitive memory (the ability to recollect information). Habit-memory is simply the “capacity to reproduce a certain performance” i.e., the ability to read, write, or ride a bicycle, for example, in virtue of our having acquired these skills in the past. Connerton rejected the Bergsonian view that opposes habit-memory to genuine recollection.¹⁰ Instead, he relied on Dewey’s and Merleau-Ponty’s conceptions of habits as deep-seated inclinations to action that are responsible for the faring well of human cognitive and affective faculties (Connerton 1989, 93–95).

Both based on habit-memory, rituals and bodily practices are, in turn, internally differentiated. Bodily practices break down into three categories: *techniques of the body*, *proprieties of the body*, and *ceremonies of the body*. Despite their names potentially suggesting otherwise, all three categories, not just the first, are indebted to the Maussian concept of bodily technique. They all encompass gestures, attitudes, and postures that are deeply conditioned by society (although they may sometimes “feel” natural) and act as vehicles of culture. “Techniques of the body” are, according to Connerton, communicative gestures and other forms of everyday actions. “Proprieties of the body” are bodily attitudes and postures that convey a sense of decency and adherence to social etiquette. Finally, “cere-

9 Connerton further specified his idea by saying that he was interested in “social habit memory,” that is, habits based on “others’ conventional expectations within the context of a system of shared meanings” (1989, 35). Compare this definition with my remarks on collective habits above (§3.3).

10 Connerton’s critique of Bergson falls within a tradition of anti-Bergsonian approaches to social memory that begin as early as Mauss (see above, §3.2) and Maurice Halbwachs (see Coser 1992, 7–9). More recently, see the remark by Dimbath and Heinlein that Bergson’s concept of habit-memory, because it is devoid of any real cognitive import, turns out to be an instrument of forgetting rather than recollecting (2015, 221). On Bergson and habit-memory, see also Casey ([1987] 2000, Chapter 8).

monies of the body” are ritualized ways to use one’s body to signal social status (Connerton 1989, 79–88).¹¹

The latter category—ceremonies of the body—refers to more ritualized gestures than the other two. It thus provides a link with the sphere of rituals. Connerton focused in particular on one kind of ritual, which he called *commemorative ceremonies*. These highly formalized rituals convey a conception of time and of the continuity of the social group. Commemorative ceremonies add to the repetitive nature of all rituals the intentional re-enactment of the past through gestures and symbols (Connerton 1989, 45 and 65). They thus represent the most explicit example of cultural memory as an instance of active recollection. In this sense, they provide a social equivalent to what biographical or narrative memories are to individuals: the foundation of identity (Connerton 1989, 70). Again, it is important to note that, according to Connerton, ceremonies succeed in their commemorative function because the gestures and actions of which they are composed are based on habit-memory: “if the ceremonies are to work for their participants, if they are to be persuasive to them, then those participants must be not simply cognitively competent to execute the performance; they must be habituated to those performances” (Connerton 1989, 71).

5 Conclusion: Gestures as Rites and Routines

We might conclude this brief historical survey by saying that Connerton systematized and developed the sociological paradigm I have explored in §3, and that he did so along two axes. On the one hand, he took up the problem of *cultural transmission*. Like many other representatives of social memory studies, he used the

¹¹ For the sake of simplicity, I omit Connerton’s further differentiation of social practices into “incorporating” and “inscribing” (1989, 72–73). This differentiation is relevant to his criticism of language-centered approaches to culture. Alongside Mauss, two further sources of Connerton’s classification of bodily practices are worth mentioning. The first is Norbert Elias’ study on the historical development of table manners (Elias [1939] 2012), which directly inspires Connerton’s concept of “proprieties of the body.” The other is David Efron’s study of communicative gestures among New York immigrants (Efron 1941). A student of Franz Boas, Efron analyzed how Southern Italian and Eastern European Jewish communities used gestures to accompany speech. He sought to show that the existence of different styles of gestural communication had nothing to do with biology but rather depended on social transmission (see Speyart 2020). This thesis was meant to contribute to Franz Boas’ project of rejecting the alleged scientific foundations of race theories precisely in the period in which the biological paradigm in the study of cultural transmission analyzed in this chapter was giving way to a sociological paradigm.

metaphor of culture as memory already present in the biological paradigm but gave it a sociological twist. The concept of habit is relevant to this side of Connerton's project because it is a key instrument of incorporation, as can be seen from his analyses of gestures, manners, and ceremonies. On the other hand, Connerton dealt with another crucial problem in social memory studies, namely, the analysis of memory as *recollection* rather than as *transmission*. To do so, he focused on rituals, which he understood as the means by which the social group thinks about its past and constructs its identity. Habit here is not so much what allows culture to be passed on from one generation to the next, but what allows rituals to function, i.e., to be correctly performed and interpreted within the dense network of norms and conventions that characterize every society.

Connerton's emphasis on ritual as a vehicle of social identity may evoke Durkheimian sociology, with which the British anthropologist maintained, in fact, an ambivalent relationship. Durkheim had already ascribed to ceremonies and rituals the role of producing new collective representations for a social group, establishing traditions, and reworking the past. However, Connerton charged Durkheim with having underestimated the diachronic dimension of rituals and with having therefore been more interested in rituals as an instrument of social cohesion rather than as an instrument of recollection. Moreover, whereas Durkheim tended to demote habitual actions to mere routines,¹² Connerton insisted on a non-dualistic conception of habit as a crucial component of all spheres of human action.

We may contrast Connerton's reception of Durkheim with that of Jan Assmann, a founding figure of cultural memory studies in Germany. According to Assmann, cultural memory establishes the identity of a social group mainly through the transmission of myths and rites. This thesis is close to Durkheim's notion that rituals are a key aspect of how a social group constitutes itself and develops its own traditions. In contrast to Connerton, however, Assmann sharply separates ritual action from routinized behavior. According to him, humans are "two-dimensional" beings who oscillate between the poles of ceremony and the pole of everyday life, or "rite" and "routine." Both poles capture one sense in which human action can be habitual, or schematized. However, "[r]outines are schematizations of action for the purpose of repeatability and relief from effort. They are oriented towards the goal of action and have no other meaning than the fulfilment of that action. [. . .] Rites, on the other hand, are schematizations of action for the purpose of meaning-making, and they convey that meaning in the

¹² See Camic (1986, 1052–54), who also claims that the realm of education (see §3.1 above) was the one aspect of social life regarding which Durkheim was most inclined to nurture a positive understanding of habit.

performance itself” (Assmann 1991, 16–17, my translation). Moving from these definitions, Assmann argues that rites and rituals contribute to the formation of cultural memory in the strict sense of the term, while routines can only play a role in the formation of what he calls “communicative memory,” a layer of memory that fulfils the instrumental function of helping social actors orient themselves in everyday life.¹³

It is beyond the scope of this chapter to provide a detailed analysis of the contrasting approaches of Assman and Connerton to the role of habits, rituals, and routines in the formation of social memory. However, it is worth pointing out that Assmann’s sharp demarcation between rites and routines can be challenged when we consider micro-sociological studies like those conducted by Erving Goffman, who sought to unearth the ritual component of even the most basic interactions of everyday life (Goffman 1967). Following Goffman, we may read seemingly mundane gestures, like greeting a passer-by or offering a seat to a stranger, as “interaction rituals” through which individuals demonstrate their adherence to social norms. Viewed from this perspective, everyday gestures take on a layer of meaning that goes beyond their practical function. They may convey a sense of continuity with the past and even function as micro-commemorative rituals. Think of social interactions that revolve around the celebration of specific events: wishing a friend a happy birthday, raising a glass to a colleague who has reached retirement age, and so on. Or consider social media activities such as sharing photos that capture past moments of our lives that we spent with friends. In all these cases, the commemorative ceremony is embedded in everyday life and appears inseparable from routine.

This adds an extra layer of complexity to the relationship between gestures and habits explored in this essay. As discussed throughout the chapter, gestures exhibit a bidirectional relationship with habits, in the sense that they both *govern* and are *governed by* habits. Now, however, we can identify a second duality of gestures. Gestures can be *habitual*, in the sense that they are schematic and routinized, even as they take on a *ritualistic* quality, by virtue of which they convey a meaning that transcends the immediate context of action and makes our past an integral component of our present identity.

¹³ §§2 and 3 of this chapter take up, with some changes, my entry on routines and habits in the 2022 *Handbuch sozialwissenschaftliche Gedächtnisforschung*, edited by Gerd Sebald, Mathias Berek, Kristina Chmelar, Oliver Dimbarth, Hanna Haag, Michael Heinlein, Nina Leonhard, and Valentin Rauer; Wiesbaden: Springer (Viola 2022). I thank Gerd Sebald and Cori Antonia Mackrodt for their permission to translate and use that material.

References

- Alexander, Jeffrey C. (Ed.). 2004. *Cultural Trauma and Collective Identity*. Berkeley: University of California Press.
- Assmann, Jan. 1991. "Der zweidimensionale Mensch: Das Fest als Medium des kollektiven Gedächtnisses." In Assmann, Jan and Theo Sundermeier (Eds.). *Das Fest und das Heilige: Religiöse Kontrapunkte zur Alltagswelt*, 13–30. Gütersloh: Gütersloher Verlagshaus G. Mohn.
- Bourdieu, Pierre. 1981. "Men and Machines". In Knorr-Cetina, Karin and Aaron V. Cicourel (Eds.). *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro- Sociologies*, 304–317. Boston: Kegan and Paul.
- Bourdieu, Pierre. 1997, 2000. *Pascalian Meditations*. Translated by Richard Nice. Stanford: Stanford University Press.
- Bourdieu, Pierre and Loïc Wacquant (Eds.). 1992. *An Invitation to Reflexive Sociology*. Cambridge: Polity Press.
- Butler, Samuel. 1878. *Life and Habit*. London: Trübner.
- Camic, Charles. 1986. "The matter of habit." *American Journal of Sociology* 91 (5): 1039–1087.
- Carey, Benedict. 2018. "Can We Really Inherit Trauma?" *New York Times*. <https://www.nytimes.com/2018/12/10/health/mind-epigenetics-genes.html>, last accessed March 6, 2024.
- Carlisle, Clare. 2014. *On Habit*. New York: Routledge.
- Casey, Edward S. 1987, 2000. *Remembering: A Phenomenological Study*, 2nd ed. Bloomington: Indiana University Press.
- Connerton, Paul. 1989. *How Societies Remember*. Cambridge: Cambridge University Press.
- Coser, Lewis A. 1992. "Introduction: Maurice Halbwachs, 1877–1945." In Halbwachs, Maurice. *On Collective Memory*, 1–34. Chicago and London: University of Chicago Press.
- Curry, Andrew. 2019. "Parents' Emotional Trauma May Change Their Children's Biology. Studies in mice show how." *Science*. doi:10.1126/science.aay7690.
- Darwin, Charles. 1872. *The Expression of the Emotions in Man and Animals*. London: John Murray.
- Dawkins, Richard. 1976. *The Selfish Gene*. Oxford: Oxford University Press.
- Dewey, John. 1916, 1985. "Democracy and Education." In Dewey, John. *The Middle Works of John Dewey, 1899–1924*, Volume IX, edited by Jo Ann Boydston. Carbondale: Southern Illinois University Press.
- Dewey, John. 1927, 2008. "The Public and Its Problems." In Dewey, John. *The Later Works of John Dewey, 1925–1953*. Volume II, edited by Jo Ann Boydston. Carbondale: Southern Illinois University Press.
- Dimbath, Oliver, and Michael Heinlein. 2015. *Gedächtnissoziologie*. Paderborn: Fink.
- Efron, David. 1941. *Gesture and Environment. A Tentative Study of Some of the Spatio-Temporal and "Linguistic" Aspects of the Gestural Behavior of Eastern Jews and Southern Italians*. New York: King's Crown Press.
- Elias, Norbert. 1939, 2012. "On the Process of Civilisation: Sociogenetic and Psychogenetic Investigations." In Mennell, Stephen J. (Ed.). *The Collected Works of Norbert Elias*. Volume III. Translated by Edmund F. N. Jephcott. Dublin: University College Dublin Press.
- Fischer, Georg and Lorenz Grünewald-Schukalla. 2021. "Memes." In Berek, Mathias, Kristina Chmelar, Oliver Dimbath, Hanna Haag, Michael Heinlein, Nina Leonhard, Valentin Rauer, and Gerd Sebald (Eds.). *Handbuch Sozialwissenschaftliche Gedächtnisforschung*. Wiesbaden: Springer.
- Frega, Roberto. 2018. "The Social Ontology of Democracy." *Journal of Social Ontology* 4 (2): 157–185.
- Goffman, Erving. 1967. *Interaction Ritual*. Chicago: Aldine Publishing Company.

- Heinlein, Michael, Oliver Dimbath, Larissa Schindler, and Peter Wehling (Eds.). 2016. *Der Körper als soziales Gedächtnis*. Wiesbaden: Springer.
- Hering, Ewald. 1913. *Memory; Lectures on the Specific Energies of the Nervous System*. 4th ed. Chicago and London: The Open Court Publishing Company.
- James, William. 1890, 1981. *Principles of Psychology*. In James, William. *The Works of William James*. 3 Volumes. Cambridge: Harvard University Press.
- Kastl, Jörg Michael. 2016. "Inkarnierte Sozialität—Körper, Bewusstsein, non-deklaratives Gedächtnis." In Heinlein, Michael, Oliver Dimbath, Larissa Schindler, and Peter Wehling (Eds.). *Der Körper als soziales Gedächtnis*, 79–98. Wiesbaden: Springer.
- Mauss, Marcel. 1934, 1973. "Techniques of the Body." Translated by Ben Brewster. *Economy and Society* 2 (1): 70–88.
- Mitchell, Kevin. 2018. "Grandma's Trauma. A Critical Appraisal of the Evidence for Transgenerational Epigenetic Inheritance in Humans." <http://www.wiringthebrain.com/2018/05/grandmas-trauma-critical-appraisal-of.html>, last accessed March 6, 2024.
- Olick, Jeffrey K., Vered Vinitzky-Seroussi, and Daniel Levy. 2011. "Introduction." In Olick, Jeffrey K., Vered Vinitzky-Seroussi, and Daniel Levy (Eds.). *The Collective Memory Reader*, 3–62. Oxford: Oxford University Press.
- Otis, Laura. 1994. *Organic Memory: History and the Body in the Late Nineteenth & Early Twentieth Centuries*. Lincoln and London: University of Nebraska Press.
- Pinotti, Andrea. 2004. "Materia è memoria. Aby Warburg e le teorie della mneme." In Cestelli Guidi, Benedetta, Micol Forti, and Manuela Pallotto (Eds.). *Lo sguardo di Giano. Aby Warburg tra tempo e memoria*, 53–78. Racconigi and Turin: Nino Aragno.
- Pinotti, Andrea. 2016. "La replica non indifferente. Mosse di iconologia politica all'epoca dell'internet-meme." In Guastini, Daniele and Adriano Ardovino (Eds.). *I percorsi dell'immaginazione. Studi in onore di Pietro Montani*, 417–431. Cosenza: Luigi Pellegrino Editore.
- Portera, Mariagrazia and Mauro Mandrioli. 2021. "Who's Afraid of Epigenetics? Habits, Instincts, and Charles Darwin's Evolutionary Theory." *History and Philosophy of the Life Sciences* 43 (1).
- Schacter, Daniel L. 2001. *Forgotten Ideas, Neglected Pioneers: Richard Semon and the Story of Memory*. Philadelphia: Psychology Press.
- Semon, Richard. 1904. *Die Mneme als erhaltendes Prinzip im Wechsel des organischen Geschehens*. Leipzig: Wilhelm Engelmann.
- Settis, Salvatore. 1997. "Pathos und Ethos, Morphologie und Funktion." In Kemp, Wolfgang, Gert Mattenklott, Monika Wagner, and Martin Warnke (Eds.). *Vorträge aus dem Warburg Haus*. Volume I, 31–73. Berlin: Akademie.
- Speyart, Anna. 2020. "Boas, Saxl and Wind on Race, Gesture and Art." *The Warburg Institute Blog*. <https://warburg.blogs.sas.ac.uk/2020/07/09/boas-saxl-wind-race-gesture-art/>, last accessed March 6, 2024.
- Targia, Giovanna. 2022. "Pathosformel." In Berek, Mathias, Kristina Chmelar, Oliver Dimbath, Hanna Haag, Michael Heinlein, Nina Leonhard, Valentin Rauer, and Gerd Sebald (Eds.). *Handbuch Sozialwissenschaftliche Gedächtnisforschung*. Wiesbaden: Springer.
- Testa, Italo. 2016. "Dewey's Social Ontology: A Pragmatist Alternative to Searle's Approach to Social Reality." *International Journal of Philosophical Studies* 25 (1): 40–62.
- Viola, Tullio. 2022. "Routine/Gewohnheit." In Berek, Mathias, Kristina Chmelar, Oliver Dimbath, Hanna Haag, Michael Heinlein, Nina Leonhard, Valentin Rauer, and Gerd Sebald (Eds.). *Handbuch Sozialwissenschaftliche Gedächtnisforschung*. Wiesbaden: Springer doi:10.1007/978-3-658-26593-9_24-1.

- Weber, Max. 1922, 1978. *Economy and Society*, edited by Guenther Roth and Claus Wittich. Berkeley: University of California Press.
- Wedepohl, Claudia. 2014. "Mnemonics, Mneme and Mnemosyne. Aby Warburg's Theory of Memory." *Bruniana & Campanelliana* 20 (2): 385–402.
- Yehuda, Rachel, Nikolaos P. Daskalakis, Linda M. Bierer, Heather N. Bader, Torsten Klengel, Florian Holsboer, and Elisabeth B. Binder. 2015. "Holocaust Exposure Induced Intergenerational Effects on FKBP5 Methylation." *Biological Psychiatry* 80 (5): 372–380.
- Young, Iris Marion. 1980. "Throwing like a Girl: A Phenomenology of Feminine Body Compartment, Motility and Spatiality." *Human Studies* 3 (2): 137–156.

Pierpaolo Donati

Chapter 7

A Relational Reading of Gesture

Abstract: According to the author, gesture theory needs to be inserted in a new relational framework. This perspective is advanced here using the contributions of abduction and retroduction jointly in view of a theoretical explanation of the gesture that goes beyond Peirce's pragmatism. Maddalena's thesis of the "complete gesture" is appreciated as a significant step forward from classical pragmatism. However, since theories based essentially on phenomenology and semiotics are at risk of nominalism, if we want to understand the gesture from a realistic perspective, we need to complement the theory of gesture with a critical relational social ontology. This means that the theory of the gesture as action (unit act) must be placed within an ontological and epistemological framework, in which Peirce's triangle is related to the latent value of the real as indicated by the sign.

Keywords: relational sociology, gesture, pragmatism, semiotics, critical realism

1 Evaluating Maddalena's Theory of Gesture

The purpose of this contribution is to show why and how gesture theory should be inserted into a new relational framework in which pragmatism (notably Charles Peirce) and critical realism (notably Roy Bhaskar) can converge, however distant they may be. I will consider Giovanni Maddalena's theory (2015, 2021) as the most advanced reference for developing a perspective that can elaborate a certain convergence between pragmatism and critical realism with regard to the theory of gesture. As Elder-Vass and Zotzmann (2022) recently pointed out on the basis of an abundant literature, it is true that, although pragmatism and critical realism represent different and distinct cultural traditions, there have always been significant interactions and convergences between them. A comparative analysis, however, shows that critical realism can provide a stronger ontological basis for applied research. I will try to verify this line of thought regarding the theory of gesture.

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As a critical realist, I will rely not only upon the method of reasoning generally used by pragmatists and phenomenologists, namely, abduction, but also the method called retroduction.¹ In my view, as claimed by Ritz (2020), abduction in the Peircean sense and retroduction in the critical realist sense refer to different, but complementary, modes of inference. The abductive conclusions that follow from relying upon Peirce's method provide the starting point for retroductive inferences. The latter inform the tenability of the former. Together, abduction and retroduction contribute to theoretical explanation. I consider Ritz' (2022) thesis that Peirce is only "implicitly" a realist worthy of discussion.

In formulating the concept of the complete gesture, Maddalena definitely abandoned a purely descriptive definition of gesture as a movement of the body expressing a state of mind, which is still found in many encyclopedias. Maddalena's definition generalizes the concept: "What is a gesture in general? Gesture is any performed act with a beginning and an end that carries a meaning (from *gero* = I bear, I carry on). Meaning will be pragmatically understood as the cluster of conceivable effects of an experience. Generally speaking, we can say we clarify something when we transform our vague, familiar comprehension into a habit of action, not when we have a good definition" (Maddalena 2015, 69–70).

Maddalena's generalization (2015, 170–171, footnote 2 to Chapter 4) follows his consideration of the fact that many previous studies have seen the gesture as limited to the movements of the body which are in some way related to the meaning of words. "It is a long story—he argues—in which gestures have been read as primitive or parallel forms of language. Here I will consider gesture as a completion of reasoning and communication in which words can cooperate. This view is much broader than a bodily articulation: (complete) gestures are the original form of reasoning from which all other forms—language included—derive. [. . .] This perspective also opens up a new way to look at body gestures, furnishing a better pattern to the admirable studies that have been carried out."

According to Maddalena, knowledge is summarized in the complete gesture, and reality is formed by complete gestures: "the meaning that we embody in one complete gesture is part of a complex net of complete gestures that form reality" (Maddalena 2015, 162).

¹ According to Olsen (2007), the four modes of reasoning used most in social research are induction, deduction, abduction, and retroduction. In brief, these mean (respectively), Induction: reasoning from data to generality; Deduction: reasoning from generality to data via hypothesis testing; Abduction: reasoning from immersion in a scene to a verbal summary; Retroduction: reasoning about why things happen including why the data appear the way they do (used by critical realists).

By following this assumption, the gap is bridged between a gnoseological vision of ethics and its practical consequences. One discovers that a “completely synthetic pattern” (Maddalena 2015, 162) unites theory and practice, theoretical ethics and practical ethics. This is, in my view, the *summum bonum*, understood as the maximum good that human action can aspire to achieve. This scheme is understood as a “concrete” totality (see the concept of “concrete” according to Romano Guardini 1997) which Maddalena (2015, 161) perceives as “a sort of phenomenological/semiotic totality, like the gesture of gestures.” In this way, he can reject the analytical totality that modernity has conceptualized as an entity made up of antinomies and paradoxes, and therefore a totality that, within modernity, remains incomprehensible in itself and in its consequences.

In everyday reasoning—just like in science and art—more knowledge is acquired “by doing” than by lengthy analysis. What do we “do” when we discover something new? How can we define and explore the model of this reasoning, traditionally called “synthetic?” Following in the footsteps of the classical pragmatists (in particular Charles S. Peirce), Giovanni Maddalena’s philosophy of gesture has revolutionized the model of synthesis through ideas of change and continuity, and has proposed the “gesture” as a new instrument of synthesis.

By defining the gesture as an action with a beginning and an end that bears a meaning, Maddalena explains that it is a complex combination of all kinds of phenomena, such as vague feelings and ideas, practical habits and enacted actions, together with signs such as icons, indexes and symbols. When the combination of phenomena and signs is denser, the gesture is “complete” and its power to produce new knowledge is at its greatest. Examples of complete gestures are religious liturgies, together with public and private rites and actions, that establish an identity (e.g., circumcision, baptism, marriage etc.), and also artistic performances and experimental hypotheses. Moving away from the traditional Kantian framework within which to understand the nature and function of reason, Maddalena’s philosophy of gesture proposes an approach more in tune with our ordinary way of reasoning and of acquiring fresh knowledge.

2 Gesture as an Action and as a Relationship

The gesture of which Maddalena speaks is a semiotic action with an underlying psychological structure (Maddalena 2015, 161–162).

In my view, it is a question of going beyond the limits of a mechanically understood form of semiotics.

For a realist like myself, the significant structure of agency and the psychology of action underlying that agency and its mobility, are necessary, but not sufficient, elements for an understanding of the gesture as a “complete argument.” The problem lies in the network of gestures to which Maddalena rightly refers. This relational network is not only the result of a combination of individual gestures, but possesses its own reality on which the same gestures depend (Singh 2016).

We know that the gesture, to be meaningful, must constitute communication. And we also know that there is no communication without relationship. In my opinion, the action to which Maddalena refers must be a form of communication, even if not intended as such by the agent. It cannot be a “gesture” if the action is performed by an isolated individual. Without relationships, gestures do not exist. For example, if I go to the bathroom on my own, without saying anything and without being seen by anyone else, this does not constitute a gesture. It only becomes so if others see me, or get news of my doing so, and therefore even if not conveyed intentionally, it still assumes the value of a communication for others with whom I have a relationship (even if only latent). This is where the relationship takes root, and which is necessarily involved in any form of communication.

In the family, every gesture constitutes communication as long as others see that gesture. If, for example, one walks up and down in the living room at home, this becomes a gesture if others see it or know of it, and they cannot help but attribute a meaning to such behavior because in the family the rule that one cannot not communicate applies. In other words, every gesture necessarily constitutes communication, and as such it requires a position to be taken by those who are aware of it. Therefore, the gesture is an action; but to be socially significant, it must be the subject of communication. If I turn on the TV at home when I am alone, and no one sees me, that action is not a gesture, unless my Ego understands it as a gesture (of a Me) towards myself, which is a communication pertaining to an inner conversation. For example, Paul says to himself that he wants to relax, and so he turns on the TV; this is a gesture made to himself, which can have various meanings.

Obviously, the significance of the meaning borne by a gesture varies enormously. Such meanings range from that of the simple gesture of an old husband who gets up at night to go to the bathroom, to the strongly symbolic gesture of circumcising a child according to the will of Jehovah (Gen. 17:11), or of Christian baptism, both of which embody a reference to transcendence. Again, the point is that the communicated gesture necessarily evokes relationships, the significance of which is the object of the process of signification.

We need to consider how phenomenology and semiotics understand and treat relationships from the epistemological viewpoint. We must ask ourselves whether they have a “relational gaze” (Donati 2021b), including the effective ac-

tion of social actors who are not only individuals, but also collective subjects. For example, an orchestra, a football team, a political party, a trade union or other organization which, as social networks, require a relational framework within which individual actions can be understood.

If I receive a gift from a person or institution I hardly know, I wonder why I have received that gift. The gesture in question must be interpreted. In the case of the gift, I have to ask myself what relationship the donor has, or wishes to establish, with me; and this will be different depending on whether the giver is an individual or a social organization or institution.

From the viewpoint of semiotics, a sign is in general something that refers to something else (for the medieval philosophers *aliquid stat pro aliquo*); however, this reference is not thematized as a social relationship in the proper sense. It is a question of redefining the process of signification as a relational process.

It is generally acknowledged that Husserlian phenomenology fails to grasp the social relationship starting from the transcendental Ego (Toulemont 1962). Semiotics has a logical rather than a realistic understanding of the relationship, since its interest is centered on the more or less logical correspondence between “things” (i.e., between the sign and the meaning-object, *aliquid* and *aliquo*) rather than thematizing the process of signification as a generation of a relationship, namely, the one that emerges from the reference-bond (*refero-religo*) between sign and meaning, *aliquid* and *aliquo*.² By signification, in fact, we necessarily mean any *relationship* that links something materially present to something else that is absent (the red of the traffic light means “stop” and communicates to the driver or pedestrian that he/she must stop). Each time a meaningful relationship is put into practice or used, a communication *process* is activated (if the traffic light is red then the driver is being ordered to stop the car). The relations of signification define the *system* that is presupposed by the concrete processes of communication.

In sum, how can someone who makes a sign speak without saying a word? Look at the relationship: it is the relationship that explains the meaning of a gesture.

2 According to relational sociology, a relationship, when it is properly significant, is not a simple symbolic reference (*refero*), but is an “emergent” (a *sui generis* reality) that is generated by the fact that the symbolic reference becomes a bonding structure (*religo*) between the related terms, so that the combination of *refero* and *religo* originates a Third entity, i.e., the relation as such. The Third is an entity in itself, which is not the sum of the contributions given by the terms it connects, but is a different order of reality, the relational order of reality (see Donati 2011 and 2021a, 29–33).

3 Peirce and the Question of Realism

Some Peircean scholars proposed an interpretation of Peirce's theory of signs that established a rapprochement with the continental hermeneutical tradition. My opinion is that, as Maddalena himself (2015, 20–21) recalls, the criticism of Peirce advanced by other scholars for failing to completely avoid nominalism and constructivism are not without reason. In my view, Peirce's realism is not wholly capable of sustaining a genuinely realistic approach. We could say that Peirce's theory *tends* towards realism, but does not reach that goal due to an insufficient conception of the relationship that mediates reality and knowledge.

Peirce (1958) affirms that a sign is something that stands, towards someone, for some other thing in some relation and in some capacity. He proposes a typology of signs that distinguishes between: (i) the *icon* (the signifier has a relationship of analogy with what it represents, for example: photography, figurative drawing, in which there is similarity or an imitative sign); (ii) the *index* or *clue* (the signifier has a causal relationship of contiguity with what it represents: the sign is caused and refers to a status/situation, for example: pallor, smoke, cloud, footprints . . .); (iii) the *symbol* (the signifier embodies a convention/has an arbitrary relationship with what it represents, for example: words of natural language, coats of arms, flags, etc.).

What kind of signs do gestures belong to? They are not icons, they are not clues, but perhaps in some cases they could be symbols. According to Peirce, when it comes to a symbol, the gesture is the arbitrary result of conventions: pragmatism = nominalism.³ With this, he offers a particular interpretation of what Hegel affirms in his *Aesthetics*, when he discusses the difference between sign and symbol: that is, that in a gesture the inside (spirit) and the outside (matter) become one, that is, there spirit and matter coincide (which makes their relationship vanish), while the symbol attempts to bridge the gap between spirit and matter without ever succeeding to do so (as Hegel says: “without finding oneself perfectly”).⁴

Peirce conceptualizes the problem of the interpretation of signs in his famous “triangle” of interpretant, sign and object.

³ I am aware there is a serious problem about the “true meaning” of pragmatism, and what the “true” reading of Peirce, or Mead, is. The literature on these topics is abundant, especially on Peirce's triangle, and its intriguing theory of signs that cannot be reduced to three types of them. I apologize if I have to omit this discussion due to lack of space.

⁴ According to Hegel (1997), due to the excess of meaning over the sign expression in the symbol, what seems to be missing is the adequacy of, and the conformity between, sign and meaning, which are only found in classical art.

The main problem concerns the so-called “interpretant,” that is, thought, or rather a thinking being who ponders a concept; the thinking being attributes a meaning (as a symbol or mental image) to the object, on the basis of emotions and habits. In other words, the interpretant is a meaning attributed by the interpreting body that responds to the pressures of the environment.

Two causal relationships are taken to exist in the triangle, that is, the relationship between the concept (connotation) and the sign and that between the concept and the object, while the relationship between sign and object is an “imputed relationship,” i.e., it is claimed to consist in the ability of the sign to represent the real object.

The interpretant subject is, in essence, a mind governed by habits (little is said about reflexivity as an alternative to *habitus*), on which the body, with its physicality, emotions and feelings, is claimed to exercise a certain influence. These elements remain indeterminate, are subject to chance, contingencies and situationism. There are also problems with regard to the sign and the object, as the social and cultural context in which they are found are ignored (Fig. 1).

The triangle can be depicted as follows (Fig. 1):

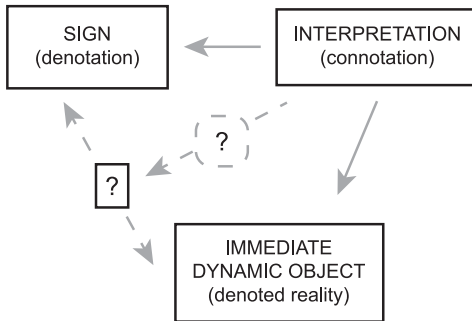


Fig. 1: Peirce's semiotic triangle as a relational problem.

What relational structure are we talking about?

- 1) the sign's interpretant seems to be a human being, but in reality this is only partially true since the mind seems to have no significant relationship with the rest of the world;
- 2) in principle, it is assumed that the subject is linked to a context and a culture, but the representation of him in the triangle runs the risk of constituting an abstract *homunculus*, as the sociological phenomenology of Alfred Schütz (1971) has shown;

- 3) the relationship between sign and object (the reality denoted by the sign) is supposed to be a “truth,” but in fact it is only a provisional narrative that remains uncertain.⁵

In this triangle, therefore, the interpretation of the meaning of the gesture given by the interpretant remains indeterminate. It should grasp the relationship between sign and designated (that is, between the signifier and the signified), while this relationship is not thematized in itself (whereas the relationship between the two cultures should be thematized). The interpretant is conditioned by a potentially different culture from that of the person making the gesture. In this case, what is signified by the gesture is subjectively interpreted on the basis of a conditioning culture that phenomenology takes for granted (the “given for granted” by Alfred Schütz [1971]), and therefore it is of a constructivist (rather than a realist) nature.

Peirce recognizes these limitations and therefore performs two operations. First, he distinguishes between the *interpretant* (Fig. 1) and the *interpreter* (Fig. 2). The interpreter is the one who grasps the link between sign and object, while the interpretant is a second sign that indicates in what sense it can be said that a certain sign refers to a given object.

Secondly, Peirce distinguishes between the immediate object (it is “the object as the sign represents it”: CP 8.343) and the dynamic one (“really efficient but not immediately present”: CP 8.343). This distinction is interesting, because the dynamic object alludes to the level of a deep, invisible layer of reality, in which the basis of meaning resides, which corresponds to the level of the “real” according to Bhaskar’s critical realism.

It is well known that Bhaskar’s *stratified ontology* sees reality as consisting of complex overlapping layers. These layers each have their own distinctive properties and characteristics, but are part of an interacting whole. There are deeper, underlying layers that produce causal effects at higher levels. Bhaskar embodies this in his distinction between the empirical, the actual and the real (Bhaskar 1997, 56).

Critical realism looks at reality from a perspective that ought to make it possible to distinguish the different layers of that reality in terms of the following three domains: (i) the most superficial domain, that of empirically observable social phenomena (the domain of the observable, the “*empirical*”), which concerns

⁵ It is well known that Peirce has a limit concept of truth, understood as a provisional and approximate common opinion: “The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth” (Peirce, 1958, CP 5.407).

the events we witness and actually experience; (ii) a deeper domain beyond the realm of human experience, where the interaction of causal structures generates the empirically observable events (this is the level of reality at which the causal structures actually operate to generate the on-going phenomenon—called the “*actual*”—which is analyzed using the methods of the social sciences); and (iii) the even deeper, unobservable domain in which the underlying causal structures of the observed objects are found; these causal structures are of a potential character, and this potential is only partially realized in the observed phenomenon (this is the level of the “*real*”). This tripartite division of reality is described as a profound ontology assumed within a metatheoretical research perspective that differs from the flat and monovalent ontology of empiricism (Sousa 2010 and Bhaskar 2012).

I believe that the interpretation of gestures implies knowledge of the constitutive relationship between the sign and the object. This knowledge can be conceptualized using the relational AGIL scheme (see Fig. 2). According to the relational AGIL scheme: the meaning to be attributed to the gesture is the purpose (G); the sign is the means (A) of achieving the purpose; the cultural pattern used by the interpreter is his/her way of reflexively integrating (modality I) the cognitive elements at his/her disposal regarding knowledge of A (signs) and G (purpose of the enacted gesture), in order to relate them to one another, while the “complete” meaning of the gesture is grasped as the latent reality (L) of the dynamic object signified by the sign.

The significant sign (*representamen*) is a means (A) of interpreting the dynamic object placed in a situational context from which the gesture draws its meaning (G). The interpreter grasps the relationship (link) between sign and reality by exercising his/her relational (meta) reflexivity on his/her own ethical and aesthetic culture (I) applied to the sign and its possible meaning. The “complete” meaning of the gesture (L) is therefore given by the relationship between the sign and the reality denoted by the dynamic object signified by the sign (which in Peirce’s view remains without any foundation).

According to Peirce, semiosis, which in theory is unlimited, may have a realistic outcome. Any sign is capable of generating a theoretically infinite chain of interpretations and translations. However, according to Peirce, this theoretically infinite flow of interpretants can find its (always transitory) fulfilment in a final logical interpretant.

Is this possible? I personally believe it to be highly problematic. Even when the triangle is interpreted in a dialogical way, achieving a realistic solution remains very difficult due to both the binary opposition in the interpretation of signs, and the recursivity inherent in the networks of relationships.

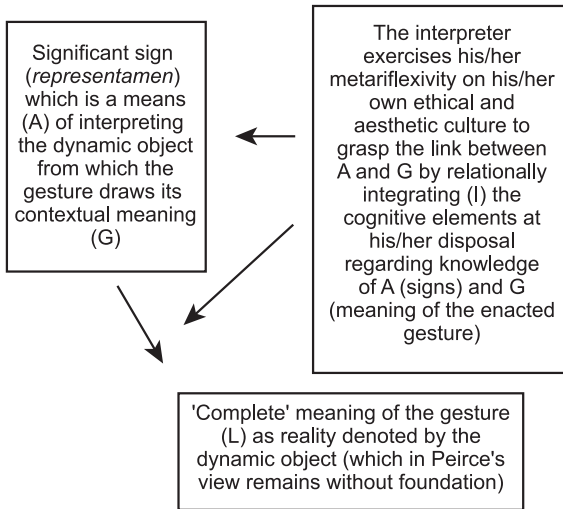


Fig. 2: The gesture is a source of knowledge, as it constitutes a relationship between the sign and the object.

My theory of the gesture as a relationship that behaves like a fractal (Donati 2021b), converges with what Maddalena (2021, 33) observes regarding the fact that it is precisely in the area of vagueness (“vague gesture”) between the synthetic gesture and the analytical one, that the ambiguity/ambivalence of the gesture’s impact on the relational order or disorder is to be found.

My reservations about Peirce’s purported realism concern the fact that, in my opinion, his understanding of relations is an abstract one, which implies the view that the sign is arbitrary (“Truth belongs to signs, by truth we therefore mean not as every single man grasps a certain thing, but as the majority grasps it” (W 2.440).

His conclusion is comprised in the following pragmatic maxim: “The whole function of thought is to produce habits for action. [. . .] To develop the meaning of anything, we simply have to determine what habits it produces, because what a thing means is simply the habit it entails. [. . .] there is no distinction of meaning so fine as not to consist of a possible practical difference. [. . .] Our idea of something is the idea of its sensible effects; and if we imagine we have another, we deceive ourselves, and confuse a mere sensation that accompanies the thought with a part of the thought itself. [. . .] Let us consider what effects, which could

conceivably have practical consequences, we think the objects of our conception have. So, our conception of these effects is our entire conception of the object.”⁶

The relationship between the gesture and its deep, full meaning remains hidden beyond the realm of public opinion and behavioral traits. This point of arrival, in my view, is the result of the fact that in Peirce, the relations of semiosis remain abstract (or virtual), and are constructivist in nature. Only real relationships reveal both the meaning of the terms of the relationship (i.e., sign and dynamic object) and the adequacy of this relationship from the point of view of the correct knowledge of the meaning of the gesture, because the real relationship contains the mechanisms generating actual reality, whereas virtual reality is imagined and fictional, even when it presents itself as *habitus*.

The meaning of a gesture changes completely if I do not take into account the fact that it was generated by a particular mood (Silver 2011). That state of mind changes the signification, even if Peirce’s triangle remains unchanged.

Peirce could have found the road to realism if he had cultivated the idea that social relations, unlike mental categories, possess a reality of their own. If the gesture is a social relationship, then as Maddalena rightly argues, it is necessary to assume that the “everything” in which the gesture is completed (the fully-fledged gesture) cannot be reduced to the sign and its interpretation, but refers to what this “everything” implies and underlies, that is, a “social molecule” which has a complex sociological existence, founded *in re ipsa* (in the very nature of the thing), and not a purely representational entity (such as the flag of a nation state designed to designate the reality of an entire country).

4 The Gesture as a “Social Molecule” with Its Own Relationality

In order to view things realistically, we need to consider Peirce’s triangle, in which *the value of the sign/symbol expressed* in the interpretation (which some call the observer’s “judgmental rationality”) is inscribed, as being connected to the triangle containing *the latent value of the real*, which is signified by the sign (some call this the “latent rationality of the real” that the observer refers to), so as to form a quadrangle (Fig. 3).⁷

⁶ Peirce. 1878. “How to Make Our Ideas Clear.” *The Popular Science Monthly* 12: 286–302; in CP 5.400 (Italian translation in Peirce 2003, 383).

⁷ Here, I refer to the concept of value as Collier (1999) understands it.

The quadrangle can be considered to be the social molecule of the gesture. In it, as with all molecules, its quality and causal properties are characterized by the bond forming said molecule. This is always problematical and needs to be understood as a relational gap between the value expressed in the gesture and that same gesture's latent value.

The gap between the upper triangle, in which the *actual* is expressed (the *empirical* of the gesture that is performed), and the lower triangle containing the *real* (Bhaskar's "real" level), can only be bridged by knowing the reciprocal generative mechanisms operating between the upper and lower triangles; that is, between the value expressed in the sign, and the latent value of the designated real. These are relational mechanisms (Donati 2021a, 117–119).

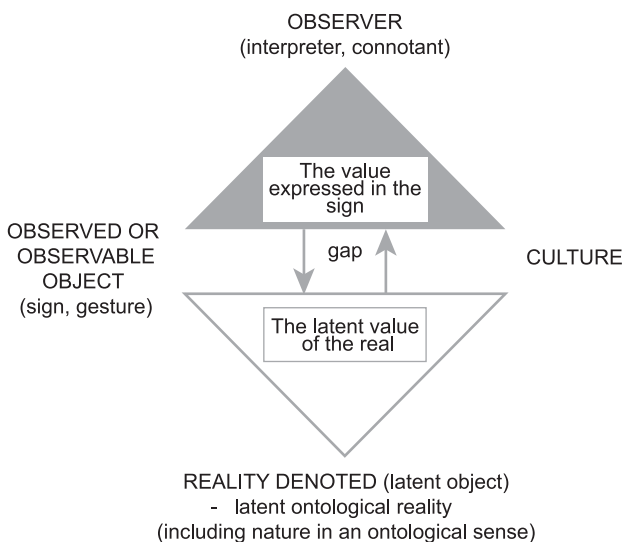


Fig. 3: The fully-fledged gesture according to relational sociology, which broadens the observer-culture-observed epistemic triangle (i.e., observer-interpretation-gesture), transforming it into an epistemic quadrangle that includes latent ontological reality.

In semiotics, symbols are generally considered to be a type of sign. In particular, Peirce believes that symbols have an arbitrary character, that they refer to the object by virtue of a law, and that their decoding depends on prior knowledge of the code. Examples of such symbols are the signs of verbal languages, mathematical symbols, road signs, and so on. According to relational sociology, on the other hand, there are symbols that belong to a different order of reality from that of signs understood in this sense, owing to their transcendental character, i.e., they

refer to the deepest, ultimate, latent reality of the social without which the signification of the gesture cannot be complete.

Just consider the symbol of love: we can indicate it with an emoticon, but is this love? Consider the symbol of peace: we can portray it in the form of a rainbow, but is this peace? Surely it is necessary to reflect on the relationship that the emoticon or the rainbow have with that reality (the real object) they allude to, in order to understand the most authentic meaning of the sign? Is phenomenology capable of grasping this relationship? I rather doubt it.

Take the case, for example, of a dinner invitation addressed to a person. This gesture means something (for instance, the latent possibility of generating a relational good). The person invited to dinner should know the cultural aspects of gathering together in such a situation. Judging rationality ought to, and indeed can, establish a connection with the latent rationality of reality⁸ (whether or not the relational good can be generated, and what kind of relational good can emerge) provided that the invited (interpreting) subject knows the mechanisms that generate the meaning of being together at dinner in that situation.

The question is: if the invited subject (who must interpret the gesture of the invitation to dinner) is unable to reflect realistically on the relationship between the sign (gesture of invitation) and the object (being together at dinner) to which the sign refers (which I would call the latent reality signified, as I would define what Maddalena calls “the thing-in-itself”), then are we doomed to nominalism and constructivism? Maddalena is confident that this is not the case, because the complete gesture can avoid this drift. My argument is that this theory holds provided a supplement of critical and relational realism is comprised therein (Donati 2011). (I will expand on this the topic in Figure 4).

On the one hand, the semiotic perspective remains formal. As Peirce states: “Logic is just another name for semiotics, the formal doctrine of signs” (CP 2.227). On the other hand, it has been made clear that Husserlian phenomenology cannot draw on the reality of social relations, because the object of its knowledge is the action of the transcendental ego (Toulemont 1962).

Critical relational realism cannot be satisfied merely with the triangle of interpreter, sign and object. This triangle has to be connected to the underlying triangle formed by object-culture-ontological reality of the object (Fig. 3).

Critical realism holds that the semiotic triangle (sign, interpretation and object) has to be placed in a square that includes the interpreting subject (Fig. 4). It is important to underline the point that the interpreting subject is not a mind, but a person in flesh and blood who is embedded in a social context, that is, in the

⁸ I refer to the previous Figure 3.

social network of which he/she is a member. Likewise, all the other constituent parts of the interpretative process (i.e., the sign, the interpretative model and the object itself) are embedded within a specific context (see Fig. 4). The case of the dinner invitation is a case in point.

Figure 4 aims to summarize the interpretative process of the subject (for example, the person invited to dinner) who wonders what relationship exists between the sign (the gesture of invitation) and the object of the sign (what the invitation alludes to). In Fig. 4, the arrows are social relations depicting a reflexive circuit. This is the circuit of interpretation of the meaning of signs (gestures) according to relational sociology, whereby the relationship between sign and object is supposed to be verified by the reflexivity of the interpreting subject (according to critical realism).

The circuit begins with the interpreting subject (SI) who takes note of the sign (the invitation to dinner) (arrow 1) and then has to interpret it (arrow 2), in order to understand which real object the gesture refers to (arrow 3): path $1 \rightarrow 2 \rightarrow 3$.

This path ($1 \rightarrow 2 \rightarrow 3$) constitutes the first order of observation by the interpreting subject (SI), which is where Peirce stops. Then the subject reflects on the object of his interpretation (arrow 4), assuming the stimuli from the dynamic object that was provided by the first observation, to return to the sign (new arrow 1^*) and then to the previous interpretation to get to know the real object better (new path $1^* \rightarrow 2^* \rightarrow 3^* \rightarrow 4^*$). The subject does so in order to verify the correspondence between the interpretation and the object, that is, the adequacy of the relationship between sign and object (arrow 5), which is the target of second-order reflexivity.

Critical realism is interested in distinguishing the semiotic experiential reference (the sign at the level of the empirical), the event (the level of the actual), and the underlying reality of the object of the gesture that has been generated by relational mechanisms at the level of the real, in order to avoid reducing the real object to a mere sign. That is, critical realism tries to grasp the reality (i.e., the real that generates the actualized and the experienced-empirical) underlying the sign and transcending the pure sign or symbol (the real of the object).

Take, for example, the case of a national flag. Is carrying a national flag a gesture signifying a reality or just an abstract idea? For many, it means the reality of the nation as a people of a state. However, when the flag of the United States is waved at an event, are we sure that the real referent is all the people present, or is it just some of them? In fact, the real object to which the flag alludes is not a compact reality, but a very diverse and even conflicting one, so a realistic interpretation of the national flag symbol will have to be expressed by a second-order reflection on who and what that flag represents.

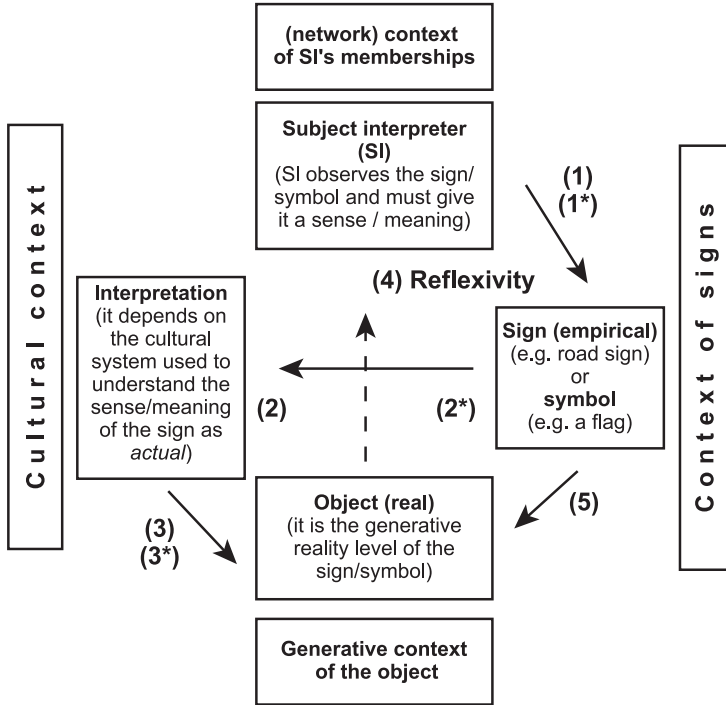


Fig. 4: The circuit of interpretation of the meaning of signs (gestures) according to relational sociology, in which the relationship between sign and object is verified by the reflexivity of the interpreting subject (according to critical realism).

If there is realism in pragmatists (Dewey, Peirce, James, Mead, and so on), it is a realism that lies between naturalism and subjectivism. Basically it is believed that what is real is what is “true” for the community, which the way in which my conscience operates, and the sense that the I attributes to itself through the “Me,” depends on. The dialogue between the I and the Me becomes my-Self, in which the I component depends on the Me which has temporal, logical and causal priority.

The concept of “looking glass-self,” suggested by Charles Cooley, is the basis of the Meadian theory according to which “individuals learn to see themselves based on how society views them” (Rahim 2010). This means that the person has little, if any, possibility of transcending the socio-cultural context in which he/she has lived and continues to live. Reflexivity is much more like a mirror reflection than the subject’s autonomous consciousness.

According to Mead (1962), the individual is a product of society, or more precisely, of social interaction. The self arises when the individual becomes an object

to him/herself; but who or what makes the individual see him/herself as an object? Mead mentions the reflexivity of the ego, but since he argues that we are first objects with respect to other people and secondly we become objects with respect to ourselves by taking the point of view of other people, it is unclear how the ego can break away from the influence of others, the generalized other, the community.

Mead (1962) sees the thought process as the inner dialogue between the ego and the Me. According to Mead's theory, the self has two sides or phases: Me and I. The Me is considered to be the socialized aspect of the individual. The Me represents the learned behaviors, attitudes, and expectations of others and of society.

The "I" represents the identity of the individual based on the response to the Me. Mead roots the perception of the Self and the meaning to be attributed to actions in "a common praxis of subjects," found in particular in social encounters (Joas 1985: 166). Understood as a combination of the Ego and the Me, Mead believes that the Self (personal identity) reveals itself as non-autonomous since it is deeply embedded in the context within which it exists. He argues that community existence comes before individual consciousness and that people picture themselves through their interaction with others. In Mead's view, the self, which is the part of a person's personality made up of self-awareness and self-image, is a product of social experience. Gestures are an expression of this reality.

The theory expounded in *Mind, Self and Society* is effectively a philosophy of the act—not of the relationship—from the point of view of how a social process involves the interaction of many individuals. Likewise, his theory of knowledge and value is a philosophy of the act from the point of view of the experience of individual subjects interacting with an environment. Social relationships play a secondary role and are not investigated as such.

According to Mead, actions occur within a communicative process. The initial phase of an act constitutes a gesture. A gesture is a preparatory movement that makes other individuals aware of the intentions of a given physical body (human organism). The situation, in its rudimentary state, is a conversation made up of gestures, in which a bodily gesture on the part of the first individual invokes a preparatory bodily movement also on the part of the second individual. The gesture by the second individual, in turn, calls for a response from the first (behaviorism). There is no communication at this level. None of the individuals concerned is aware of the possible effect of his/her own gestures on the others; gestures are meaningless. For communication to take place, each body must know how the other person will respond to their on-going action. Only in this way do gestures become meaningful symbols.

A meaningful symbol is a type of gesture that only humans are capable of. Gestures become significant symbols when they arouse in the individuals who propose

them the same type of response that they suppose they are getting from those to whom the gestures are addressed. Only when we have meaningful symbols can we have meaningful and effective communication. Mead based human perception on an “action-connection” (Joas 1985, 148). We perceive the world in terms of the “means to live” (Mead 1962, 120). The action of perceiving food is connected with eating. Distinguishing a house is connected with shelter. That is to say, perception is conceived in terms of action. Mead’s theory of perception is similar to that of behavioral psychologist Jerome J. Gibson.

I have tried to explain why a critical realist cannot accept this reductive vision of the social reality of the gesture and its meaning.

5 Summary

Gestures express a very particular relationship for various reasons. The relationship in question is between mind and body; it occurs within a specific social structure and culture; it is liminal with respect to the boundary between communicative order and disorder. The structure and dynamics of that specific, complex form known as gestural communication needs to be investigated in a relational framework. The gesture can reinforce or change the order of verbal and formal communication.

The reason for this is that a gesture, especially when possessing symbolic value, has the task of substantially reinforcing or modifying the frame of communication, and it does so by transcending what is said and shown. Maddalena rightly identified the limits of a pragmatism that can easily lead to nominalism.

Umberto Eco’s semiotic nominalism is a case in point. In the novel *The Name of the Rose*, Eco (1983) distorts the realistic meaning of the original sentence from which he drew inspiration (“*stat Roma pristina nomine, nomina nuda tenemus*,” “Ancient Rome exists only in name,” which is a realistic statement since ancient Rome no longer exists);⁹ he transforms this phrase into “*Stat rosa pristina nomine, nomina nuda tenemus*” (“the primeval rose exists only in name, we only have bare names,” which is an ontological statement of pure nominalism). Consequently, for the nominalists the gesture is always a groundless sign. Their motto is: “*Stat gestus pristinus nomine, nomina nuda tenemus*” (the ancient/original gesture exists only in name, we have only bare names).

In the present essay, I have tried to show that a nominalistic outcome is not inevitable. Gestures are not just names. A gesture expresses an “other” order of

⁹ Taken from Verse I, 952, of the poem *De contemptu mundi* by Bernard of Cluny.

communication that is immaterial, like the order of the relationship, but not for this reason is it groundless. On the contrary, it alludes to a reality that transcends that which can be objectified in verbal or digital communication. However, we must distance ourselves to a degree from those who, like Umberto Eco, state that “the only truth lies in learning to free ourselves from the insane passion for the truth.”¹⁰

A gesture of tenderness by Alter towards Ego symbolizes a relationship, whatever its interpretation (it may be true tenderness or merely tenderness of a simulated kind, or even an ironic gesture signifying the exact opposite). The meaning of the gesture is clarified by the reality of the relationship that exists between Ego and Alter; it does not lie in the gestural sign as such. The gesture must be interpreted as an expression of a relationship, which certainly depends on Alter’s subjective intentions, as well as on Ego’s actions. To understand this event, we cannot rely on either the gestural sign alone or on Alter’s subjective intentions, since we cannot read his mind. The difference between what, in the relationship, is true tenderness and what is not, is a notable gap that the critical realism approach applied to the relationship between Alter and Ego can clarify better than the representation provided by semiotics, even when supported by phenomenology.

A representation is a figure imagined to a certain degree, whereas a social relationship—if it is really such (and not simply the individual’s imaginary projection, or a subjective feeling, or a pure “event”)—is a bond between an Ego and an Alter, a sign and a real object. A gesture seals the reality of this bond. It would not have the meaning it bears if there were no socio-cultural context translating what it indicates—its indiciality—into a relationship with a reality that transcends it, but which nevertheless remains in the background of its being. What is real in the gesture is a stratified reality: the sign has its reality at the level of the surface, while at the level of latency, the reality lies in the relationship indicated by the gesture.

Regarding the latent reality, we can say about it what Vassily Kandinsky (1946, 68) said about “white” (the color): “White is a symbol of a world from which all colour, as a material quality and substance, has disappeared. This world is so far above us that we cannot perceive any sound coming from it. There is a great silence which, graphically represented, appears to us as a formidable,

¹⁰ “[. . .] those prepared to die for the truth, for as a rule they make many others die with them. [. . .] Jorge feared the second book of Aristotle because it perhaps really did teach how to distort the face of every truth [. . .] Perhaps the mission of those who love mankind is to make people laugh at the truth, to make truth laugh, because the only truth lies in learning to free ourselves from the insane passion for the truth” (Eco 1983, 598).

indestructible wall, though infinitely cold, reaching up into eternity. For this reason, white affects us with the absoluteness of a great silence. It sounds inwardly and corresponds to some pauses in music, which, though temporarily interrupting the development of a melody, do not represent a definite end of the musical sequence. It is not a dead silence but one full of possibilities. The white has the appeal of silence which has suddenly become comprehensible. It is a ‘blank,’ infinitely young, a ‘blank’ which emphasizes the Beginning, as yet unborn.”

To understand the meaning of significant gestures it is necessary, as Maddalena says, to refer to their ultimate meaning, but this meaning does not reside in the gesture as such, or in the minds of the subjects involved, but rather resides in the relationship with the possible latent meanings that the gesture can have in the social context in which the subjects relate to each other. The meaning of the sign, in short, lies on the border of the relationship between the Self and the Other (i.e., on the border of their otherness: Donati 2023, 125–127), because it is from the border—always variable, yet real—between the Self and the Other (person or object) that the sign takes on meaning. In short, the meaning of the gesture lies in the latency of social relationality, just as colors are real and derive meaning in relation to white.

References

- Bhaskar, Roy. 1997. *A Realist Theory of Science*. London: Verso.
- Bhaskar, Roy. 2012. *Reflections on MetaReality: Transcendence, Emancipation and Everyday Life*. London: Routledge.
- Collier, Andrew. 1999. *Being and Worth*. London: Routledge.
- Donati, Pierpaolo. 2011. *Relational Sociology. A New Paradigm for the Social Sciences*. Abingdon: Routledge.
- Donati, Pierpaolo. 2021a. *Transcending Modernity with Relational Thinking*. London: Routledge.
- Donati, Pierpaolo. 2021b. *Lo sguardo relazionale. Saggio sul punto cieco delle scienze sociali*. Milan: Meltemi.
- Donati, Pierpaolo. 2023. *Alterità. Sul confine fra l'Io e l'Altro*. Rome: Città Nuova.
- Eco, Umberto. 1983. *The name of the rose*. New York: Harcourt.
- Elder-Vass, Dave and Karin Zotzmann. (2022). “Overlapping traditions with divergent implications? Introduction to the special issue on pragmatism and critical realism.” *Journal of Critical Realism* 21 (3): 257–260.
- Guardini, Romano. 1912 (1st ed.), 1925 (2nd ed.), 1997. *L'opposizione polare. Saggio per una filosofia del concreto vivente*. Brescia: Morcelliana.
- Hegel, Georg W.F. 1997. *Arte e morte dell'arte, antologia dell'Estetica*. Milan: Bruno Mondadori.
- Joas, Hans. 1985. *G. H. Mead: A Contemporary Re-examination of His Thought*. Boston: MIT Press.
- Kandinsky, Vasily. 1946. *On the spiritual in art*, edited by Hilla Rebay. New York: The Solomon Guggenheim Foundation.

- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists' Incomplete Revolution*. Montreal: McGill-Queen's University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Carocci: Rome.
- Mead, George H. 1962. *Mind, Self, and Society. From the Standpoint of a Social Behaviourist*. Chicago: University of Chicago Press.
- Olsen, Wendy. 2007. "Critical Realist Explorations in Methodology." *Methodological Innovations Online* 2 (2): 1–5.
- Peirce, Charles S. 1931–1958. *Collected Papers*. Volumes I–VII, edited by Charles Hartshorne and Paul Weiss. Volume VIII, edited by Arthur Burks. Cambridge: Harvard University Press. [Abbreviated as CP.]
- Peirce, Charles S. 2003. *Opere*. Milan: Bompiani.
- Rahim, Emad A. 2010. "Marginalized through the 'Looking Glass Self.' The development of Stereotypes and Labeling." *Journal of International Academic Research* 10 (1): 9–19.
- Ritz, Bridget. 2020. "Comparing abduction and retroduction in Peircean pragmatism and critical realism." *Journal of Critical Realism* 19 (5): 456–465.
- Ritz, Bridget. 2022. "Peircean realism: A primer." *Journal for the Theory of Social Behaviour*. <https://doi.org/10.1111/jtsb.12340>
- Schütz, Alfred. 1971. *Collected Papers*. The Hague: Martinus Nijhoff.
- Silver, Daniel. 2011. "The Moodiness of Action." *Sociological Theory* 29 (3): 199–223.
- Singh, Sourabh. 2016. "What Is Relational Structure? Introducing History to the Debates on the Relation between Fields and Social Networks." *Sociological Theory* 34 (2): 128–150.
- Sousa, Filipe J. 2010. "Metatheories in Research: Positivism, Postmodernism, and Critical Realism." *Advances in Business Marketing and Purchasing* 16: 455–503.
- Toulemont, René. 1962. *L'essence de la société selon Husserl*. Paris: Presses Universitaires de France.

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Chapter 8

The Problem of Museum Accessibility: A New Perspective from Relational Sociology and Communicative Gesture

Abstract: By combining the philosophy of gesture with the approach of relational sociology, it is possible to help visitors “make sense” of exhibition itineraries and cultural objects. In this perspective, accessibility becomes a property of the museum-visiting experience for all audiences. It emerges from the relational network that visitors establish with the museum space, the exhibits, the museum staff, and other visitors. The level of accessibility is determined by how the logistic-adaptive component of relationships combines with the equally essential element of reference to meanings. Experimental museum accessibility projects have field-tested the potential of this new perspective by creating immersive itineraries supported by digital technologies.

Keywords: museum, accessibility, people with disabilities, social relations, philosophy of gesture, communication

*We had the experience but missed the meaning
and approach to the meaning restores the experience.*

Thomas Stearns Eliot, *Four Quartets*

1 Introduction

The definition of museums has been redefined by the International Council of Museums (ICOM) to reflect the profound changes that they are currently undergoing. According to the new definition, museums are not-for-profit, permanent institutions that serve society by researching, collecting, conserving, interpreting, and exhibiting both tangible and intangible heritage. They are open to the public, accessible, and inclusive, and they promote diversity and sustainability. Museums operate ethically and professionally, with the participation of communities, and

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offer a variety of experiences for education, enjoyment, reflection, and knowledge sharing. Some scholars have introduced the idea of a “relational museum” as an effort to trace the direction of changes happening in museums. This notion emphasizes the complexity of museums, which are made up of “a dense network of internal relations—between different functions and specializations—and external relations—between the museum, the territory, stakeholders and society at large” (Bodo and Demarie 2003, XI).

Maintaining a relationship with visitors is vital for museums. In this perspective, accessibility is a crucial factor museums can improve on in order to broaden the audience of visitors belonging to disadvantaged social groups, and among them, people with disabilities. In the last two decades, projects promoting the accessibility of museums have multiplied throughout Italy, showing considerable attention to the conditions that hinder access to cultural heritage by people with functional limitations.

Nowadays, on the subject of the accessibility of museums, and more generally of cultural heritage, a vast literature treats the topic from various scientific perspectives and constitutes a body of theoretical-practical knowledge that configures a specific disciplinary field (Ciaccheri 2022).

From a sociological perspective, the proliferation of initiatives on accessibility can be interpreted as the manifestation of a morphogenetic process that changes the social and cultural field of action in which museum institutions and their operators, people with disabilities, and their associations work.¹

Three main factors fuel this process. The first major factor of cultural change has been the emergence of the so-called “new museology” (Lugli 2015), which has helped shift the focus from collections to audiences, and in particular to visitors (Hooper-Granhill 1992 and 1994; Anderson 2012; Falk and Dierking 2013; and Bitgood 2013). After representing the emblem of an elitist conception of culture for decades, museums have opened up to the community and redefined their role by qualifying as *agents of social inclusion* (Sandell 1998, 2003, and 2012; McCall 2010; and McCall and Gray 2014). In this scenario, the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (United Nations 2006) gave further

¹ The concept of social morphogenesis provides a theoretical framework for understanding and explaining social change. Underlying the concept of social morphogenesis is the idea that change processes occur for social agents and structures in interconnected and temporally complex ways (Archer 2013). Space does not permit further exploration of this construct. For our argument here, we will use the concept of social morphogenesis elaborated by Margaret S. Archer (1995), but in the interpretation provided by Pierpaolo Donati’s relational sociology, for which structure and culture are relationships stabilized in previous temporal stages that can be regenerated (morphostasis) or changed (morphogenesis) through ongoing social relationships (Donati 2014).

stimulus to the transformation of the social role of museums and, more generally, cultural institutions. In addition to being a fundamental principle of the UNCRPD, defined in Article 9,² the concept of accessibility is recurrently mentioned in Article 30, devoted to participation in cultural and recreational life, leisure, and sports. Along with that of inclusion, the concept of accessibility also appears in the definition of museums adopted by the ICOM Assembly held in Prague in August 2022.³

Secondly, the process of morphogenesis was fostered by the spread of the *Universal Design* approach, developed by Ronald L. Mace, founder of the *Center for Accessible Housing* and one of the leading figures in the U.S. regulatory evolution on the removal of architectural barriers (Story, Mueller, and Mace 1998).

The cultural relevance of the concept of accessibility has grown as a result of a third factor: the rise of the so-called “social model” of disability. According to this social model, the causes of social exclusion and discrimination lie in the physical, cultural, organizational, and relational barriers that hinder or prevent people with functional limitations from participating in social life based on equality with all others (UPIAS 1976; Oliver 1990; and Oliver and Barnes 2012). With the affirmation of the social model, accessibility became a prominent issue on the agendas of institutions and policymakers in countries that signed the UNCRPD. In short, the convergence and complementarity of ideas and values underpinning new museology, *Universal Design*, and the social model of disability changed the cultural context where the principal actors of the museum system and people with disabilities have been operating.

How have these ideas and values conditioned the actors’ social actions? The mobilization of associations of people with disabilities played a significant role in ensuring that regulatory measures promoting accessibility in the cultural sphere were adopted at various institutional levels. In the mid-1990s, an intense debate developed in Italy on how to enhance cultural heritage while improving the social

2 Article 9 of the UNCRPD stipulates that “To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas.”

3 The 26th General Conference of ICOM, held in Prague August 20–28, 2022, approved the following definition of a museum: “A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing.”

function of museums and the enlarging of visitor audiences.⁴ At the same time, regulations were issued on the management, protection, preservation, and enhancement of cultural heritage and on improving visitor facilities. We cannot analyze the main measures that have marked the evolution of cultural heritage accessibility policies in Italy⁵ in this chapter, nor can we comment on the major empirical evidence currently available that provides insight into some aspects of the state of museum accessibility.⁶

Drawing a sketchy overview of what happened in Italy, one has to acknowledge that the principle of accessibility has effectively translated into a set of standards that have contributed to broadening the enjoyment of cultural heritage.

By meeting more demanding standards than in the past, museums have implemented structural interventions and offered services that have significantly improved their accessibility, as reflected by the increase in the number of visitors with functional limitations.

Between 2013 and 2020, the percentage of visitors to museums with non-severe limitations increased slightly from 21.8% to 24.8%. Meanwhile, the percentage of visitors with severe functional limitations remained smaller—from 9.7% to 11.4%. Visitors without functional limitations increased from 29.6% to 33.1%. Despite the impact of the Covid-19 pandemic, which led to museum closures and a lower propensity to visit from vulnerable individuals, data shows an increased interest of persons with disabilities towards museums, which is higher than for other forms of cultural enjoyment such as theater, classical music concerts, and opera. However, the percentage of people who did not visit museums in 2020 is still high for all categories of people. 75% for people with non-severe limitations and 88.6% for people with severe limitations, which are considerably higher per-

⁴ In the rich literature produced on this subject, without any claim to exhaustiveness, we refer to Solima (2000), Bodo and Da Milano (2004), Bollo (2008), Solima (2012), Bollo (2012), Sanesi (2014), and Brambilla (2021), among others.

⁵ For a more in-depth examination of these issues, see, among others, Cetorelli and Guido (2017). Alongside the measures taken by the Ministry of Culture, the idea of the museum as an agent of social inclusion has spread among professionals, thanks to ICOM's initiatives. The Italian section, for example, has established several working groups, including one dedicated to museum accessibility, and is planning to establish a new working group on accessible communication.

⁶ Since 2011, the National Institute of Statistics (ISTAT) has conducted surveys on museums and similar institutions involving nearly 5,500 museums, monuments, and archaeological areas. The surveys, among other aspects, note the spread of services, including those for visitors with functional limitations. For more details, see <https://www.istat.it/it/archivio/6656>, last accessed March 6, 2024. Data on the accessibility of museums and libraries for 2021 have recently been published. See <https://www.istat.it/it/files/2022/12/accessibilita-luoghi-cultura-dic2022.pdf>, last accessed March 6, 2024.

centages than the 66.9% of people without limitations who did not visit museums in the previous year. The last available data on the reasons for not visiting museums date back to 2011, and since then, ISTAT has stopped collecting it. Among people with disabilities, 80% had not visited museums and were not interested in doing so, which is a higher percentage than 65.8% of people without limitations. Nonetheless, in both cases, there is widespread disaffection with museums. The attractiveness of museums to potential visitors is still limited and appears to be relatively independent of the presence of functional limitations. Even if all museums were fully accessible, visitors would not increase to any considerable extent because a widespread lack of interest in this type of cultural enjoyment persists among people both with and without limitations. The available data does not make it possible to ascertain whether the museums best equipped in terms of accessibility are also the most attended by people with functional limitations. The regulatory measures providing museum accessibility requirements define a “disability friendly” structural context. That said, it is a necessary but not sufficient condition for people with functional limitations to opt to visit museums rather than other forms of cultural entertainment.

Why does the museum visit show weak attractiveness among the many options for spending free time?

We need to start from this question to ensure that the accessibility outlined in the regulations does not remain mere “potential accessibility.” We need to ask how to make it effective.

In our view, we need to reformulate the problem of accessibility in such a way that it becomes a property of the museum-visiting experience for all audiences, including visitors with functional limitations, and not just a regulatory principle consolidated at the normative level. We will develop our argument in two stages. In the second section, we will propose a brief excursus of the concept of accessibility in order to highlight its potentialities and, at the same time, its inadequacies when its inherently relational character is identified solely with the adaptive dimension. In the third section, drawing on the contribution provided by *visitor studies*, we will argue for adopting a perspective of museum accessibility capable of fully actualizing the potential related to the “relational” nature of museum visiting. Combining the philosophy of gesture with the approach of relational sociology, we will try to show how it is possible to “make sense” of the exhibition itineraries and cultural objects visitors come across, making them effectively accessible. The arguments we will introduce in the third section will account for the outcomes of several experimental museum accessibility projects that involved the creation of immersive itineraries supported by digital technolo-

gies. These projects, primarily aimed at people with functional sensory limitations, have been extended to visitors without limitations.⁷

2 Accessibility as a Regulatory Principle: From Prescription to Performance

The concept of access has been variously defined, revealing its polysemic and multidimensional nature. Since the earliest studies, scholars have distinguished its different semantic areas. In their paper on access to health care, Pechansky and Thomas (1981)⁸ define accessibility as the relationship between the location of a service and the location of the customer, taking into account the transportation resources available to the customer, travel time, distance, and cost. In addition, the authors distinguish accessibility from other related concepts (availability, accommodation, affordability, and acceptability). The term “accessibility” thus identifies the spatial dimension of access to a place or service. It is a particularly relevant dimension for people with functional limitations. Accessibility depends on the infrastructure connecting particular places and the presence of barriers nearby or within these places. A common element among the different semantics of the concept of “access” proposed by Pechansky and Thomas is their relational character. Arengi points out that, most appropriately, the authors “defined access as a concept that represents the degree of adaptation between the characteristics of providers and customers” (Arengi 2020, 11–12).

⁷ This guiding idea started to be implemented through the experimental project Smart Cultural Heritage 4 All

(<https://www.heritage-srl.it/case-studies/sanniti-experience>, last accessed March 6, 2024) realized at the Museo Sannitico of Campobasso (Italy), by developing two mobile applications, *Museo Sannitico Blind Experience* and *Museo Sannitico Deaf Experience*. The first proposes two immersive tours for visitors with visual limitations (*Sanniti Experience* and *On a Journey with Asparukh*); while the second application, aimed at visitors with hearing limitations, includes a video (*Tik and Tuk*) by means of a fast motion technique. The peculiarity of this second tour is that it proposes a mode of enjoyment that does not differentiate between visitors with hearing limitations and visitors without limitations. Further development of this approach to accessibility was conducted as part of the Progetto Vasari VAlorizzazione Smart del patrimonio ARTistico delle città Italiane (<https://www.vasariartexperience.it>, last accessed March 6, 2024), PNR 2015–2020: ARS01_00456 | Area di specializzazione: Cultural Heritage.

⁸ A more in-depth examination of the notion of accessibility cannot be carried out here. For an analysis of the concept and relevant regulations see, among others, Arengi (2020). From the latter we have drawn some of the ideas developed in this section as well as some bibliographical references.

Iwarsson and Ståhl (2003) do not diverge from this “relational” conception. However, while they define accessibility as the objective dimension of the relationship between a person’s functional capabilities and the physical environment, they introduce the concept of “usability” to highlight its subjective dimension. Usability is defined by specific standards of effectiveness, efficiency, and satisfaction—that people derive from their relationship with the physical environment. What distinguishes accessibility from usability is the activity that an individual or group performs in a given environment to satisfy particular needs. On this view, *Universal Design* constitutes “the best approximation of an environmental facet to the needs of the maximum possible number of users” (Iwarsson and Ståhl 2003, 62).

After that, the concept of accessibility was progressively generalized to the extent of identifying not only the interaction with the built environment but the interaction of the person with the environment *tout court*. This generalization is evident in the case of legislation concerning people with functional limitations. The semantics of accessibility is no longer limited to overcoming/removing architectural barriers, as it was initially. It assumes a broader scope, affecting goods, services, and, more generally, the actions and interactions in physical and digital spaces. In a nutshell, accessibility has evolved into an inescapable regulatory principle by which to meet the needs of people with functional limitations.

The UNCRPD devotes a specific article (Article 9) to accessibility by configuring it as a principle to promote social inclusion. It is also true regarding accessibility to cultural heritage (Arengi, Garofolo, and Sørmoen 2016). Accessibility regulations enacted in Italy have triggered a structural change in the relationship between museums and people with limitations. They pushed museums to pay more attention to their visitors. Despite the spread of services that increase museum accessibility and the visible increase in visitors with functional limitations, the gap with the generality of visitors has widened. We believe the explanation lies in the persistence of a reductive conception of accessibility that does not develop its full potential. The current limits can be attributed to its conceptual matrix primarily focusing on adaptive problems. The regulation exerted by the principle of accessibility has obliged museums to conform to standards deemed appropriate to achieve the best possible fit between visitors and museum environments and collections. In addition, the spirit of *Universal Design* encouraged the usability of environments and services by as many people as possible. The *Uniform Minimum Levels of Quality for Public Museums and Places of Culture*, adopted by the Italian Ministry of Culture with ministerial decree n. 113 on February 21, 2018, derives from the same approach. This has encouraged the flourishing of innovative projects that have paid attention to the different func-

tional abilities of visitors by improving museum accessibility in its adaptive dimension.⁹

However, the relationship that visitors establish with the collections shown in a museum is far more complex and, in some ways, paradoxical. Indeed—as Ciaccheri notes (2022, 13)—“when moving through galleries or other museum spaces people rely primarily on content without realizing that the museum’s choices regarding mediation, education, and accessibility implicitly influence them; at the same time, museums believe they have fulfilled their duty by adopting minimal guidelines that ensure access for people with disabilities.”

While we agree with the idea that accessibility is an inherently relational phenomenon and that the adaptive dimension is an essential component of it, we believe it is misleading to identify accessibility exclusively with this component. As a disabled activist keenly observes, “Able bodied people treat access as a logistical interaction, rather than a human interaction” (Mingus 2017, cited in Arenghi 2020, 23). Interaction is humane if the means and ways in which we make cultural heritage accessible are not divorced from the purpose for which we make it accessible. The principle of accessibility cannot be limited to prescribing compliance with specific standards that establish the relationship between people with limitations, museum spaces, and the collections displayed therein. Accessibility is fully realized when the adaptive component combines with reference to meanings. That is when the former can *intentionally* convey meanings that visitors can understand. In this perspective, accessibility is not an end, but a means for establishing the relationship between visitors and museums to communicate meanings.

Making cultural heritage accessible does not necessarily mean moving where we want or being able to touch everything, according to Sørmoen (2016). In the example of Stonehenge, which he cites, he points out that both the position of the stones and the play of shadows and light over the stones constitute the monument more than the individual stones that make it up. For a blind person to touch them one by one is not the best way to access their meaning. Perhaps, the most appropriate way to know the meaning of that monument might be through the tactile exploration of a miniature reproduction of it.

If the purpose of a visitor’s relationship with a cultural artifact is to convey meanings, adaptation is undoubtedly a necessary but not sufficient requirement.

⁹ Many museum accessibility projects, including in Italy, place at the center of their deployment strategy the factors that condition the interaction between visitors with limitations and the museum context, suggesting solutions that enable their mutual adaptation. Of particular interest for the systematic setup of the problem of museum accessibility and the solutions offered is the project Interreg Central Europe COME-IN! (<https://programme2014-20.interreg-central.eu/Content.Node/COME-IN/COME-IN-GUIDELINES-FINAL-Italian-version.pdf>, last accessed May 14, 2024).

To stay with the example of Stonehenge, the meaning of this monument is not communicated in the same way by the tactile exploration of a miniature reproduction as it is by being able to touch the individual stones that constitute it. It is not a question here of deciding which modality is best but of detecting its connection with the meaning to communicate. The reference to meanings guides the choice among the possible adaptive modes of the relationship. As Baraldi observes: “Physical access to a museum does not mean access to its content. Actually to see a picture does not mean to access the conceptual framework of the work, but to reach the threshold. The real question is how to go ahead” (Baraldi 2016, 30). Frequently, people who visit a museum—regardless of whether or not they have functional limitations—are pervaded by a feeling of frustration when they establish a sensory relationship with the objects exhibited in a museum without understanding their meaning.

It thus happens that, paraphrasing Solima (2012, 34), museums are often perceived as a distant place, mainly accessible to experts. This deceptive image discourages people from considering museums a valid option for spending their free time. The sense of “cultural inadequacy” is often complained about by the so-called “non-public” to justify why they do not visit museums. The transmission of meanings fails either because museum itineraries often do not incorporate meanings or they incorporate self-referential meanings. That is to say, meanings shared only by the small circle of scholars and curators, representing the actions of “experts” and precluding most visitors. Itineraries and curatorial choices provide visitors with an interpretive frame in which not only the artifacts but also their meanings become more or less accessible. How, then, can we rethink accessibility in a way that allows visitors (with or without limitations)—to use Baraldi’s expression—to “cross the threshold,” that is, to access meanings and even co-produce them?

Regarding empirical research, *visitor studies* represent an inescapable landmark for those who want to understand the behavior of museum visitors. In this field, a well-established approach studies the “‘embodied experiences’ of visitors who gaze, walk and talk as they chart their way through an exhibition” (Roppola 2013). Abandoning the idea that visitors are passive subjects, the most promising avenues of inquiry consider the museum visit an experience. We have several interpretive models to analyze it, such as the Contextual Model of Learning developed by Falk and Dierking (2013) or the process model proposed by Roppola (2013). Both models focus on the museum experience generated by visitors’ relationship with the exhibition spaces and the objects shown. In fact, “the relationship between visitors and exhibition environments—according to Roppola (2013, 117)—is influenced not only by the content of exhibits and museums but also by exhibits and museums as particular types of culturally-constructed representational forms.” Studies carried out assuming a material semiotic network perspective “consider

that as people make meaning and perceive ‘reality’ through their experience, they are embedded in a network of relations, network which are simultaneously human and nonhuman, social and material” (*Ivi*). Roppola identifies four processes (framing, resonating, channeling, and broadening) that, operating simultaneously as a system, condition the creation of meanings and the museum visitation experience. The four constructs are attributable neither to visitors nor to exhibition itineraries alone but rather to their relation. “They capture how visitors and exhibition environments become integrated with each other in a moment-by-moment fashion and through extended space-time scales. The duality of the findings—being at once about visitors and about exhibition environments—suggest where museum professionals have agency in fostering quality visitor experiences: within the textures of the relational processes” (Roppola 2013, 263).

We believe that we need to rethink accessibility from scratch, starting from its situated relational character, both at the level of the practical order of reality, that in which we relate to objects or situations, and at the symbolic level in which we refer to meanings. The referents of these relations are objects that “encapsulate[s] the representation of actions previously performed by human beings, and therefore, it incorporates a relational message” (Donati 2021, 60). Observing the different components of these relationships requires “a sort of relational “dialogue” with objects and not just a physical relationship” (Donati 2021, 61). The absence or incompleteness of this “dialogue” prevents the accessibility of cultural heritage from being effective.

In the third section, we will propose a new perspective on museum accessibility through which to “make sense” of culture. By the word “sense,” we refer to the enhancement of all perceptual channels through which visitors enter into a relationship with the cultural objects exhibited in a museum (sight, hearing, touch, etc.) and the associated meanings. The aim is to combine these two dimensions, which have been considered separately so far, by showing how they are closely connected in the relationships visitors establish with the objects displayed in museums.

3 Accessibility as an Emerging Museum Experience

Considering a museum visit as an experience implies a redefinition of the visitor’s identity. The usual segmentations applied to museum audiences, based on “fixed” attributes—age, gender, ethnicity, educational qualification, and functional limitations—must make way for new categories defined from the following question:

Why do people visit museums? From this perspective, visitors differ according to the motivations and expectations (and underlying needs) that lead them to museums. One of the most influential scholars in this field points out that, unlike the usual audience segmentation schemes, categories based on visitors' motivations are not static but dynamic. The same person may visit a museum to satisfy different needs at different times. For example, they may do so to indulge cultural interests or to stimulate children's learning processes (Falk and Dierking 2013, 49). In addition, this type of classification considers the possibility that the decision to visit a museum is the outcome of a combination of the different motivations and expectations.

The positivistic approach, still prevalent in the field of *visitor studies*, tends to privilege “what” visitors learn rather than “how” they learn it. However, several scholars consider this approach inadequate for understanding the museum visiting experience. Tiina Roppola, in particular, argues that “it is insufficient to study an environment in isolation, nor is it enough to study people's responses without regard to the environment in which they were made.” Drawing on arguments made by other authors as well, she concludes that “The smallest unit of analysis is the *persons-in-environment*” (Roppola 2013, 59, emphasis original). When they visit a museum “People are embedded in a network of relation, a network which is simultaneously human and nonhuman, social and material [. . .]. The point is not to examine the human and nonhuman symmetrically, but that their relational processes are the locus of inquiry” (Roppola 2013, 59). To conduct this investigation, Roppola adopts a transactional approach to the museum experience, ascribing to both human subjects and material objects the status of co-constitutive agency in the relational network from which that experience emerges. It follows that to study the characteristics of the museum experience, it is necessary to focus on what happens between visitors and exhibitions by considering it as a kind of “black box” (Roppola 2013, 60).

We are of a similar opinion that the museum experience should be studied starting from the relationship between visitors and the objects in the exhibition spaces. However, we believe that the perspective adopted by Roppola leads to a reductive interpretation of this relationship. Although implicitly, Roppola seems to move in the wake of *Actor Network Theory* (ANT) elaborated by Bruno Latour, which, by blurring the different orders of reality, dissolves the distinction between human and non-human. Social relations are no longer independent of the material world and, as a result, “If we lose the specificity of the different relationships and their own contribution, we can no longer see the responsibilities of the network's various agents” (Donati 2021, 62). Within a museum, the relationship a visitor establishes with an artifact involves several components engaging differ-

ent actors each of whom has some degree of responsibility in making that relationship accessible.

In this section, we will present a condensed reformulation of the social problem of accessibility, taking into account the multidimensionality of the phenomenon (Solima 2012), including its semiotic dimension. To do so, we will combine the philosophy of gesture with the approach of relational sociology.

As proposed by Maddalena (2015, 2021), the philosophy of gesture sheds new light on forms of reasoning and knowing meanings that appear particularly promising in various fields, including accessibility to cultural heritage.

The term “gesture” is defined as “any performed act with a beginning and an end that carries meaning” (Maddalena 2015, 69). Gestures have a dual structure, phenomenological and semiotic, through which it is possible to acquire new knowledge of reality phenomenally articulated in different types. After a tight critique of analytical reasoning and discussing the different existing types of gestures while highlighting their limitations, Maddalena proposes two types of gestures that, depending on the combination of the types of reality (*firstness*, *secondness*, and *thirdness*) and signs (icons, indices, and symbols), are characterized by their different ability to synthesize meaning. Complete gestures exhibit phenomenological and semiotic features such that, operating together, produce better synthesis and carry new meaning. On the other hand, incomplete gestures are deficient in one or more phenomenological or semiotic elements and consequently operate a weaker synthesis of new meaning. A museum visit can also be considered a gesture with the potential to expand knowledge. It can be more or less significant depending on its degree of completeness.

On the sociological level, the gesture of a museum visit cannot be identified with a single action but rather with a network of actions that the relational perspective, with its conceptual and methodological apparatus, allows us to investigate in its components (Donati 2011, 2013). Taking a relational perspective, what happens during a museum visit can be described as follows: “Objects offer us perceptive stimuli, memories, signs, and symbols which we ourselves give meaning to, and which we mentally ‘converse’ with/reflect on in order to relate to them. If we want to understand the contribution to the relationship made by the observer and by the observed respectively, a reflexive relational gaze is needed” (Donati 2021, 62).

In this perspective, we define *accessibility* as an emergent property of the relational network that visitors (with or without limitations) establish with the museum space, the exhibits, the museum staff, and other visitors. The lesser or greater accessibility generated by the network will depend on how the logistic-adaptive component of relationships combines with the equally essential component of reference to meanings. The potential of this new perspective has been field-tested

through experimental projects on museum accessibility aimed at people with functional sensory limitations but also involving visitors without limitations.

The problem of accessibility can be reformulated by drawing on the “cultural diamond,” a tool developed by Wendy Griswold (2004) to analyze cultural phenomena from a sociological perspective.

The cultural diamond consists of four elements (the cultural object, the creators, the receivers, and the social world) and six relationships that connect these elements (Fig. 1).

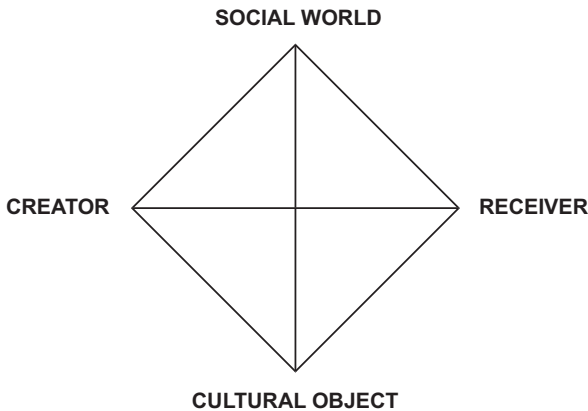


Fig. 1: The Cultural Diamond.

Source: Griswold 2004, 17, Figure. 1.1.

By “cultural object,” Griswold intends “shared significance embodied in form” (Griswold 2004, 13). Griswold further specifies that: i) it is an audible, visible, tangible, meaningful expression that can be articulated; ii) it tells a story, and that story can be sung, recited, sculpted, published, or painted on the body.

Museums are chock-full of cultural objects because they house visible human expressions (e.g., think of a picture gallery or an archaeological site). For protection and preservation, visitors cannot touch cultural objects except under certain conditions, especially if they are works of art or archaeological artifacts. Cultural objects presuppose creators who can be individuals or groups of people. While the “Primavera” is the work of a single painter (Sandro Botticelli, 1445–1510), the creation of the Sagrada Familia in Barcelona required (and continues to require) the efforts of a large group of workers. To be cultural objects in their own right, they also require receivers, that is, of “people who receive them, people who hear, read understand, think about, enact, participate in, and remember them” (Griswold 2004, 16). In the case of museums, receivers include not only visitors

but also a composite group of professionals and practitioners who enable the operation of a museum rather than an archaeological site or art gallery. Both creators and receivers are anchored in a social world characterized by economic, political, social, and cultural needs that change over time. Often the social world of those who create the cultural object is not the same as that of the receivers. Visitors to the Uffizi Gallery in Florence, enraptured by Sandro Botticelli's "Primavera," do not share the same social world as its creator, the Medici court in Renaissance Florence. Nevertheless, thanks to the museum organization, they experience the Florentine painter's masterpiece.

From what we have been saying so far, it should be clear that by the expression "experiencing," we do not mean merely the establishment of a purely sensory relationship but rather a meaningful relationship, that is, one that carries meaning. A visitor establishes a relationship with a cultural object in a relational network that connects multiple material and symbolic elements. Griswold resorts to the cultural industry model developed by Paul M. Hirsch to analyze the complex apparatus that stands between creators and receivers and includes "facilities for production and distribution; marketing techniques such as advertising, co-opting mass media, or targeting, and creation of situations that bring potential cultural consumers in contact with cultural objects" (Griswold 2004, 80). In this model, museums appear as organizations belonging to the managerial subsystem that, in a broad sense, "produce" a cultural object. An artist's work, or archaeological finding, becomes a cultural object when placed within an exhibition itinerary and made accessible to the public. The exhibition itineraries are "cultural objects" insofar as they have a form into which curators and exhibition managers "embed" meaning. Through their relational and discursive practices, professional figures in a museum influence how an exhibition itinerary is realized and construct the semiotic network established among cultural objects. The specialized and organizational cultures of museum workers play a crucial role in the construction of visitor experiences.

Moreover, they do so from certain assumptions about visitors' sensory behavior (Mangione 2016). Those who create an exhibition itinerary often start from the (implicit) assumption that visitors have a similar experience of visiting the museum. In reality, this is frequently not the case. The same cultural object can take on multiple meanings: the one attributed to it by its original creator, the one attributed to it by museum workers by placing it within a specific exhibition itinerary, and the one attributed (or not attributed) to it by visitors. Thus, works, artifacts, or exhibits in a museum may not be accessible because their form is not sensorily perceptible and/or because visitors do not understand their meaning.

Therefore, accessibility (or inaccessibility) is the experience emerging from the network of relationships on which museum visitation depends. Specifically, it is the

experience of the reception of meanings inherent in the relationship between cultural objects and receivers (cultural objects–receivers). This relationship cannot be adequately understood by privileging only the point of view of museum professionals who work to make exhibition spaces accessible, nor the point of view of visitors. It is necessary to place oneself in a “third” perspective that allows one to observe the receiving relationship as such. We need what Donati calls a “relational gaze,” that is, a gaze in which the agents—in our case, museum professionals—are capable of relational reflexivity, that is, of the “reflexivity that an agent exercises not on him/herself in relation to the context (as inner conversation), or on what the Other thinks or does, but on the relationship with the Other” (Donati 2021, 59). The relational gaze makes it possible to thematize the communicative dimension of reception properly.

The usual paradigm designs the communication of cultural heritage for non-disabled people. As a second step, it expands the enjoyment of cultural objects to people with functional limitations or other visitors with special needs.

The situation, however, is slightly different. Concerning cultural property, most people are often “disabled,” left to their own devices in exhibition routes that they cannot decipher or interpret. This largely explains the widespread lack of interest in museum enjoyment, not only among people with functional limitations. The stories told by the objects visitors come across along exhibition routes are hardly accessible to a broader audience. Museums are the result of a type of analytical conception of knowledge according to which an expert (archaeologist, historian, geographer, musicologist, anthropologist) discovers the cultural object; another expert takes care of its preservation; a third takes care of its exhibition arrangement; and finally, it comes to communication often understood as marketing to the public.

The development of museum culture and new technologies allows for a different understanding of communication and, more broadly, of epistemology. Object, finding, preservation, curatorship, exhibition, and communication are in profound continuity. No part of this process can be analytically separated from the others. It is, therefore, necessary to think of all these dimensions synthetically.

The philosophy of gesture makes its specific contribution to reformulating the problem of accessibility. What are the main characteristics of a gesture? First, from a phenomenological point of view, it must have an emotional and ideal dimension concerning meaning. Then it must involve a physical experience. Finally, it must be replicable, a *habitus* of action. From the semiotic point of view, it must possess iconic elements, that is, related to the evocative resemblance of signs to the object to be communicated; indexical elements, which fix references; and symbolic elements, which involve an interpretation of meanings. The accessibility of a cultural object is fully implemented when the visitor establishes a “physical” type of rela-

tionship with it, which does not prevent the perception of the form but, at the same time, allows the sharing of meanings through communicative modes that have the characteristics of a gesture. In this perspective, communication is no longer understood as a mere transmission of information but as a “ritual that draws persons together in fellowship and commonality” (Carey 1989), even when meanings are divergent. In this regard, Antinucci argues that “to say or think that there are works of art and then there is communication, as more or less many do, is erroneous and extremely misleading. Communication is intrinsic to the work of art; in fact, the latter is realized in its way, that is, according to the nature of the act that generated it, only when the communicative act is completed, that is, it successfully reaches its recipients” (Antinucci 2014, 5, my translation).

Antinucci’s argument is shareable and does not apply to works of art alone but can be extended to all objects in the practical world. Each of them incorporates a meaning that must be shared, that is, successful in reaching its recipients.

The prototype *Blind Experience* application created for the Sannitico Museum in Campobasso concretely realizes our idea of communication as a gesture. To safeguard the phenomenological aspects of the museum experience, the visit for blind persons involves physical elements, like downloading the app, opening it, walking on an itinerary progressively activated by beacon technology and listening to the narrative broadcasts through earphones, and touching an object reproduced three-dimensionally through 3D scanning and 3D printing. These are repeatable sensations, physical experiences, and habits of action. In terms of meaning, it is realized in the storytelling that blind people listen to as they move outside and inside the museum space. Moreover, through narrative (symbolic) storytelling, people are involved in the story of a protagonist (indexical element) who makes them experience his/her emotions through an actorly performance of the story and music (iconic elements). The symbolic aspect of storytelling must have a teleology: the story must be a story intended to illustrate meaning. In the *Blind Experience* project, the meaning intentionally conveyed by the curators is that the Samnites represented the cultural-historical and losing alternative to Rome. The storytelling is developed under the guidance of experts to possess the aesthetic characteristics that make it plausible.

The *Blind Experience* communication project synthesizes the museum itinerary, the objects visitors come across, and their knowledge about them into a gesture to which the visitor is asked to give assent. In other words, by entering into a relationship with the objects exhibited in the museum, the visitors also participate in the meanings that the experts know and want to communicate. Synthetic communication allows the transmission of meanings through a gesture, that is, the sharing of the experience of the meaning that the museum wants to communicate and in which the visitor participates and cooperates with his or her visit-

ing. The more appropriate the gesture, the more the synthetic understanding will be facilitated, and the museum enjoyment will result in a meaningful experience.

The role assigned to digital technology is a further aspect of the project to highlight. As Maddalena argues, it forms “new knowledge by operating on a second-level reality” (virtual reality) (Maddalena 2021, 76). Namely, through the *Blind Experience* application prototype, the visitor not only expands his or her knowledge through the acquisition of new information—an effect for which an audioguide would have been sufficient—but deepens it because he or she gains insight into one of the possible meanings to which the museum leans.

The most striking outcome is the impact of the *Blind Experience* application on non-disabled visitors. After experiencing the same itinerary blindfolded, many of them claimed to have “seen the museum as they had never seen it” or “to have understood the museum.”

4 Conclusion

There has been a significant increase in the number of projects promoting museum accessibility in Italy over the past two decades. These projects have shown great attention towards the challenges that prevent individuals with disabilities from accessing cultural heritage. Improving accessibility is vital to attract visitors from socially disadvantaged groups, particularly people with disabilities. However, we need to rethink our approach to accessibility. While we acknowledge the importance of the adaptive dimension, it is misleading to solely identify accessibility with this component.

We need to rethink accessibility from scratch, taking into account its relational character that is deeply embedded in both the practical reality of how we interact with objects and situations, as well as the symbolic level of meanings. Any attempts to improve accessibility must consider both of these aspects in order to be truly effective.

In this chapter, we have presented a new perspective on accessibility. We argue that accessibility is an emergent property that arises from the relational network that visitors, whether they have limitations or not, establish with the museum space, exhibits, cultural objects, museum staff, and other visitors.

The *Blind Experience* project tested a new way of realizing the accessibility of cultural heritage by combining the theoretical and empirical assumptions of the philosophy of gesture and relational sociology.

In a nutshell, the project acknowledges the idea that accessibility is the property of social relations, and it is in social relations that by combining the adaptive

dimension with the dimension of reference to meanings, it is possible to make museum enjoyment a meaningful experience for all visitors. That is—to use the categories of the philosophy of gesture—a more or less complete gesture that allows one to acquire new meanings to expand one’s knowledge.

Moreover, it has been possible to verify that it is not digital technologies themselves that, by mediating the relationship between visitors (whether they have functional limitations or not) and cultural heritage, make them more accessible. Cultural heritage becomes such only if the technology realizes a complete gesture, one capable of conveying possible meanings. The use of technologies should therefore take place based on new assumptions that consider the transmission of meanings as the purpose of the social relationship that visitors establish with cultural heritage.

References

- Anderson, Gail. 2012. *Reinventing the Museum: The Evolving Conversation on the Paradigm Shift*. 2nd ed. Lanham: AltaMira Press.
- Antinucci, Francesco. 2014. *Comunicare nel museo*. Rome and Bari: Laterza.
- Archer, Margaret S. 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.
- Archer, Margaret S. 2013. “Social Morphogenesis and the Prospects of Morphogenic Society.” In Archer, Margaret S. *Social Morphogenesis*, 1–22. Dordrecht: Springer.
- Arenghi, Alberto. 2020. “L’accessibilità: definizioni e profili di indagine.” In Almici, Alex, Alberto Arenghi, and Renato Almodèca (Eds.). *Il valore dell’accessibilità: una prospettiva economico-aziendale*, 9–51. Milan: Franco Angeli.
- Arenghi, Alberto, Iliaria Garofolo and Oddbjørn Sørmoen (Eds.). 2016. *Accessibility as a Key Enabling Knowledge for Enhancement of Cultural Heritage*. Milan: Franco Angeli.
- Baraldi, Luca. 2016. “Sense Beyond Perception: Conceptual Accessibility and Social Inclusion.” In Arenghi, Alberto, Iliaria Garofolo and Oddbjørn Sørmoen (Eds.). *Accessibility as a Key Enabling Knowledge for Enhancement of Cultural Heritage*, 29–40. Milan: Franco Angeli.
- Bitgood, Stephen. 2013. *Attention and Value: Keys to Understanding Museum Visitors*. New York: Routledge.
- Bodo, Simona and Cristina Da Milano. 2004. “Politiche culturali e sociali per l’inclusione: una prospettiva italiana.” *Economia della cultura* 14 (4): 529–538.
- Bodo, Simona and Marco Demarie. 2003. “Perché il museo relazionale.” In Bodo Simona (Ed.). *Il museo relazionale. Riflessioni ed esperienze europee XI-XXIV*. Nuova edizione. Turin: Edizioni della Fondazione Giovanni Agnelli.
- Bollo, Alessandro. 2008. *I pubblici dei musei. Conoscenza e politiche*. Milan: Franco Angeli.
- Bollo, Alessandro. 2012. *Il marketing della cultura*. Rome: Carocci.
- Brambilla, Giovanna. 2021. *Soggetti smarriti. Il museo alla prova del visitatore*. Milan: Editrice Bibliografica.
- Carey, James W. 1989. *Communication as Culture. Essays on Media and Society*. Boston: Unwin Hyman.

- Cetorelli, Gabriella and Manuel R. Guido (Eds.). 2017. *Il patrimonio culturale per tutti. Fruibilità, riconoscibilità, accessibilità Proposte, interventi, itinerari per l'accoglienza ai beni storico-artistici e alle strutture turistiche. Quaderni della valorizzazione ns. 4*. Rome: Ministero dei beni e della attività culturali e del turismo.
- Ciaccheri, Maria Chiara. 2022. *Museum Accessibility by Design. A Systemic Approach to Organizational Change*. Lanham: Rowman & Littlefield.
- Cock, Matthew, Molly Bretton, Anna Fineman, Richard France, Claire Madge, and Melanie Sharpeet. 2018. *State of Museum Access 2018*. London: VocalEyes. <https://vocaleyes.co.uk/research/sector-access-reports-and-audience-surveys/state-of-museum-access-2018>, last accessed March 6, 2024.
- Donati, Pierpaolo. 2011. *Relational Sociology. A New Paradigm for the Social Sciences*. Abingdon: Routledge.
- Donati, Pierpaolo. 2013. *Sociologia della relazione*. Bologna: il Mulino.
- Donati, Pierpaolo. 2014. *Morphogenic Society and the Structure of Social Relations*. In Archer, Margaret S. (Ed.). *Late Modernity. Social Morphogenesis*, 143–173. Cham: Springer.
- Donati, Pierpaolo. 2021. *Transcending Modernity with Relational Thinking*. Abingdon, OX: Routledge.
- Falk, John and Lynn D. Dierking. 2013. *The Museum Experience Revisited*. London and New York: Routledge.
- Griswold, Wendy. 2004. *Cultures and societies in changing world*. 2nd ed. Thousand Oaks: Pine Forge Press.
- Hooper-Granhill, Eilean. 1992. *Museums and the Shaping of Knowledge*. London: Routledge.
- Hooper-Granhill, Eilean. 1994. *Museums and their Visitors*. London: Routledge.
- Iwarsson, Susanne and Agneta Ståhl. 2003. "Accessibility, usability and universal design—Positioning and definition of concepts describing person-environment relationships." *Disability and Rehabilitation* 25 (2): 57–66.
- Lugli, Adalgisa. 2015. *Museologia*. Milan: Jaca Book.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture*. Montreal: McGill-Queen's University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Rome: Carocci.
- Mangione, Gemma. 2016. "Making Sense of Things: Constructing Aesthetic Experience in Museum Gardens and Galleries." *Museum & Society* 14 (1): 33–51.
- McCall, Vikki. 2010. "Cultural Services and Social Policy: Exploring Policy Makers' Perceptions of Culture and Social Inclusion." *Journal of Poverty and Social Justice* 18 (2): 169–183.
- McCall, Vikki and Clive Gray. 2014. "Museums and the 'new museology': Theory, practice and organisational change." *Museum Management and Curatorship* 29 (1): 19–35.
- Mingus, Mia. 2017. *Forced Intimacy: An Ableist Norm*. August 6, 2017. <https://leavingevidence.wordpress.com/2017/08/06/forced-intimacy-an-ableist-norm/>, last accessed March 6, 2024.
- Oliver, Michael. 1990. *The Politics of Disablement*. Basingstoke: Macmillan and St Martins Press.
- Oliver, Michael and Colin Barnes. 2012. *The New Politics of Disablement*. Basingstoke: Macmillan and St Martin's Press.
- Peckhansky, Roy and J. William Thomas. 1981. "The Concept of Access: Definition and Relationship to Consumer Satisfaction." *Medical Care* 19 (2): 127–140.
- Roppola, Tiina. 2013. *Designing for the Museum Visitor Experience*. Abingdon: Routledge.
- Sandell, Richard. 1998. "Museums as Agents of Social Inclusion." *Museum Management and Curatorship* 17 (4): 401–418.
- Sandell, Richard. 2003. "Social inclusion, the museum and the dynamics of sectoral change." *Museum and Society* 1 (1): 45–62.

- Sandell, Richard and Eithne Nightindale (Eds.). 2012. *Museums, Equality and Social Justice*. London: Routledge.
- Sanesi, Irene. 2014. *Il valore del museo*. Milan: Franco Angeli.
- Solima, Ludovico. 2000. *Il pubblico dei musei*. Rome: Gangemi.
- Solima, Ludovico. 2012. *Il museo in ascolto. Nuove strategie di comunicazione per i musei statali*. Soveria Mannelli: Rubbettino.
- Sørmoen, Oddbjørn. 2016. "Access to Life. Rethinking Accessibility." In Arenghi, Alberto, Ilaria Garofolo, and Oddbjørn Sørmoen (Eds.). *Accessibility as a Key Enabling Knowledge for Enhancement of Cultural Heritage*, 41–48. Milan: Franco Angeli.
- Story, Follette M., James L. Muller, and Ronald L. Mace. 1998. *The Universal Design File: Designing for People of All Ages and Abilities*. Revised Edition. Raleigh: North Carolina State University, The Center for Universal Design.
- Eliot, Thomas S. 1943. *Four Quartets*. London: Faber and Faber.
- United Nations. 2006. *Convention on the Rights of Persons with Disabilities* (CRPD). New York: United Nations. <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>, last accessed March 6, 2024.
- Union of the Physically Impaired Against Segregation (UPIAS). 1976. *Fundamental Principles of Disability*. London: UPIAS.

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Chapter 9

The Socio-Relational Roots of the Creative Gesture

Abstract: Creativity is a human potential structured in the dynamics of our species. It has to do with our ability to establish a relationship with the everyday reality outside of us, a relationship capable of generating the “meaning” of everyday life. Creativity has to do with the capacity to generate “analogies,” to create “connections,” “more possibilities,” a revolutionary ability that is unknown, at these levels, to all other living species. Creativity can be considered a process that takes place through a new combination of pre-existing elements. In a nutshell, we could say that the first form of human creativity was the invention of “meaning.” This chapter, after proposing a possible definition of the concept of creativity, aims to explore the socio-relational roots of this strange human capacity, departing from the fact that the environment is not only around us but is an intrinsic part of ourselves; we will then continue with a reflection on the relational dimension of the creative gesture and its motivations. We conclude by saying that the most favorable ground for the development of creativity is not to be found in any “instrumental” motivation but in the “trust” relationships that support the individual’s expressive capacity.

Keywords: creativity, relational sociology, gesture, possibility studies

1 What Is Creativity?

Margaret Boden describes creativity in a conversational way: “Creativity draws crucially on our ordinary abilities. Noticing, remembering, seen, speaking, hearing, understanding language and recognizing analogies: all these talents of Everyman are important. [. . .] [Creatives] are in a sense more free than us, for they can generate possibilities that we cannot imagine. Yet, they respect constraints more than we do, not less” (Boden 1990, 260 and 270).

Creativity is a human potential structured in the dynamisms of our species. It has to do with our ability to establish a relationship with the daily reality that lies outside of us, a relationship capable of generating the “meaning” of everyday life.

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Plessner (1928) says that “the mystery of creativity, of the glaring idea, consists in the successful move, in the encounter between man and things.”

Creativity has to do with the ability to generate “analogies,” to create “connections,” “more possibilities,” a revolutionary and unknown ability, at these levels, to all other living species. In this sense, creativity liberates, precisely because it helps us find more ways to solve problems than a mechanical approach. Yet, creativity does not coincide with fantasy (even if it feeds of it in abundance): creativity finds its culmination and its *raison d'être* in the “constrained” condition of our daily life.

It is therefore a structural capacity. The more, however, we deepen our awareness of everyday life, of the simple things we take for granted, the more we find inevitable within ourselves a trigger that pushes us towards overcoming the “here and now,” an urgency to “transcend” space and time of our actions, even the most common ones, even when performed with scant attention. Creative innovation is one of the characteristics of human action. The openness to ever new possibilities “shows the dimension of transcendence inherent in individual and collective actions and is directly connected to the reflexivity of self-awareness” (Crespi 2010, IX).

From the sociological point of view, it seems appropriate to identify a source of consciousness in the reflections of Vilfredo Pareto. In his *Trattato di sociologia generale* (1916 [1988]), the Italian sociologist focuses on a particular “push” inherent in human beings that he defines “instinct for combinations.” In practice, this “instinct” defines that strange “human disposition to innovate, invent and produce new facts and connections from known elements, moving the forces of the imagination and generating an a-logical vitality.” Creativity can therefore be considered a process that takes place through “a new combination of pre-existing elements.”

Indeed, the definition of creativity attributed to him today has spread over many communication agencies and Human Resources websites. Even though it does not appear as such in his *Treatise*, it is significant for at least three reasons: a) it is very effective; b) it is nonetheless “derivable” from his thought; and c) it attests to the extent to which today’s “creativity fever” seeks scientific foundations to justify its pervasive development in every aspect of advanced societies. What Pareto says, in being interested in this particular aspect of human action, is that the ability to “combine” is what brings about innovation: “The contrast between the tendency to combinations which innovates, and the tendency to the permanence of aggregates of sensations, which preserves, may put us on the way to explaining many facts of human societies” (Pareto 1916 [1988], 154). This “instinct” defines that strange human disposition to innovate, invent and produce new facts and nexuses through imagination and non-logical action: the instinct of

combinations “is considered particularly strong in man, placing itself in all probability at the origin of the development of human civilization” (Padua 2017, 11).

Whether it is expressiveness, art, technology, discovery, or invention, the dynamic is always the same, the “connecting of dots,” as Steve Jobs explained, referring to his well-known creative enterprise, *Connecting Dots*. On the other hand, discovering previously unknown relationships is a central goal of scientific research: theoretical models such as maps, for example, show previously unknown connections between events. Like maps of unknown regions, “theories present white spaces to indicate connections not yet known” (Elias 1978).

In a nutshell, we could say that the first form of human creativity was the invention of “sense.” It is a prerogative of our species that has developed to inconceivable levels merely thanks to a competence potentially present only in the human being: the “symbolic” capacity. As Alfred Schütz says, the symbolic capacity represents the main instrument of our capacity to transcend ordinary experience (Schütz and Luckmann 1973, 21). If, therefore, every day is made up of many “finite provinces of meaning” (i.e., “experiences compatible with meaning”; Schütz and Luckmann 1973, 23), the real problem turns out to be that of being able to hold together a series of experiences that are not “naturally” connected: they are, on the contrary, “provinces of reality with a finite structure of meaning” that have no automatic capacity to dialogue with each other and instead have boundaries that cannot be crossed without resorting to “transcendent” dynamics.

The only way to reconnect what is not by nature is the great invention of “symbolic relations,” as we are about to explore: in this perspective, creativity can thus be considered “the ability to ‘move an idea from one state to another’” (McWilliam and Dawson 2008, 635), be it instrumental and ordinary connections or, on the contrary, of a high level of expression, that depth that even attempts to reestablish and restore “the link with the lost love object” (Melucci 1994, 17).

2 The “Community” Dimension of Creativity

When we are preparing to analyze the countless forms of human action, even in the most intimate, subjective and creative expressive action, we have to remember, with Edgar Morin, that “the environment is not only around us, but is an intrinsic part of ourselves” (1990, 49).

Creative capacity seems to have not only an individual dimension, but it seems to be above all a community value. The “community” dimension of creativity was, conceptually speaking, a fairly recent conquest. When we talk about creativity we usually refer to the individual because this is the only dimension that

studies have taken into consideration. This “reductionism” would be a consequence of two historical and cultural reasons: the first is linked to the fact that the research available on the subject is mostly psychological. The second one is linked to the age-old tradition that culminates in Romanticism for which the true creative dimension is that of the “genius,” associated exclusively with the extraordinary experience.

A new awareness of identity processes, made explicit above all in the psychological and psychoanalytic fields, has come to the aid of this daring methodological and disciplinary counter-offensive and it links to the so called “internal group” concept (Arbiser 2004). This theory is very interesting for its applications and possible developments within sociological research. It states, ultimately, that individual consciousness must be considered a resultant of the encounter between the biological disposition and the socio-cultural imprint mediated through the main human groups. It is a question of reversing the problem of the origin of groups and society, traditionally seen as a mere sum of individuals, with the question of how the person becomes an individual starting from an inexorable group implication. We float in a semantic universe of values and contents of culture and social organization that shapes us just as how air shapes our vital environment, even without being seen or smelled.

Human expressiveness, even the most intimate, will be the result (the emergence) of an active social relationality:¹ the important concept of “latency” is used to indicate this original dynamic. Latency is an “exclusively human” phenomenon, being considered the factor responsible for the gap that also separates us from our biological relatives, the superior animals: in summary, the millennia of human cultural experience are assimilated over the course of a few years by each generation and latency plays a central role in this process.

In other words, everything that has introduced us into the world, pointing out to us its meaning “in progress,” remains in our depths, that is, it remains at the origin of all our actions, at the bottom of human agency, even the most personal, creative ones, constituting its starting humus. All this, we can already guess, is far from leading us to the easy syllogism of a social determinism that would eliminate any possibility of the individual’s original move: on the contrary, the infinite variety of personal stories determines the singularity with which each subject decodes and elaborates social universe and cultural heritage.

All this is far from leading us to the easy syllogism of social determinism that would eliminate any possibility of the individual’s original move. On the contrary, “the infinite variety of personal histories determines the singularity with which

1 On the *relation* as an *emergent* property, see Donati (2021) as well as Archer and Donati (2015).

each subject decodes and elaborates the social universe and cultural inheritance” (Arbiser 2004, 1). The accumulation of facts and ideas does not proceed by its energy. When the process is at the right point, someone succeeds in grasping its synthesis and arriving at discovery “simply because favorable cultural circumstances converge on him” (De Masi 2003, 519).

Recent psychology has contributed significantly to the close link between creativity and culture: the former uses the signs and tools provided by the latter, thus producing new cultural resources. Culture is neither external to the person nor static but constitutive of the mind and society, “offering the symbolic resources necessary to perceive, think, remember, imagine, and ultimately create” (Glăveanu, Hanson, Baer, Barbot, and Clapp 2019, 742). Referring to the thinking of Hungarian psychologist Mihály Csikszentmihályi, some scholars have recently begun to argue that the community, not the individual, is the appropriate unit of analysis in any research on how creativity is nurtured. The creative process is complex because it includes the salient elements of the context with which humans interact: “It is at the intersection of these interactions that creative enterprise emerges” (McWilliam and Dawson 2008, 637). Where the dividing line between the two elements at play lies is not a secondary problem, nor is it easy to solve: it is therefore not free from the risk of radicalism to say that “the true historical subject of creation is not man but society: creative society” (De Masi 2003, 21).

The creative process is complex because it includes the salient elements of the context with which human beings interact: it is at the intersection of these interactions that creative venture emerges.

3 The “Unresolved” Gesture

It is necessary to do a quick dive into a delicate topic which is rarely addressed in the sociological literature. It is the dynamics of (social) recognition, which is necessary for the definition of processes, relationships, self-affirmations. More precisely, can a creative gesture, not recognized by anyone other than the creator, be considered creative?

Schubert’s *Unfinished Symphony* literally remained in a drawer for about forty years before it was performed publicly for the first time, and by then the composer had been long dead. The question is: was the *Unfinished Symphony* a masterpiece even before it was performed publicly for the first time? Does posthumous creativity become such only when it is publicly recognized? And by how many? We could widen the field of examples to non-specifically artistic sectors.

Does a truth that has been intuited by an individual but never explicitly told or written less true? Is an affection perceived but never demonstrated less valid as a sentiment? Does an unshared discovery prevent it from being defined as such? Is an identity “for itself,” when not recognized by others, illusory?

When answering, it is important to clarify the distinction between the concept of creativity and that of “creative success,” which is evidently of a social nature, is assessable intersubjectively and “is best measured by its reception. For Simonton, ‘unrecognized genius becomes an oxymoron’” (Fleming, Mingo, and Chen 2007, 450). But precisely, we are dealing with two different objects.

I do not think I am able to respond in a demonstrative way to these questions. I can only state that this problem leads us perhaps to consider an even deeper aspect of the human structure and condition, which I believe to be the expectation, the ultimate waiting of any conscious or unconscious gesture (which, by the way, rarely reaches the goal). I take a stand: is a solitary gesture creative? Yes. Because it is the gesture of the child, for whom everything is new and also valid and appreciable. So, from his point of view (from the point of view of his conscience), seeing a cow (let us say) and marveling, the child is creative in trying to connect that new being to what he already knows, regardless of the social consequences of this personal conquest.

It is also true that in general, people, becoming adults, continue to produce interesting ideas, many of which, however, are already known to other people, even though they are new to the creator. In this case, Margaret Boden speaks of people who are “‘psychologically’ or ‘personally’ creative: P-creative, in short” (Boden 2009, 237). The creative attitude (which we will discuss) is therefore not necessarily “social”: others may have already created what we have achieved with effort and creativity, “but this does not dilute or diminish his personal cognitive success” (Dasgupta 2019, 28).

Now, however, I have to resume the statement to complete it: a solitary gesture can be creative, but it is always “unresolved.” It is a “creativity in search of an author” (in this I am perhaps approaching the psychoanalytic theories of “lack”). It is a creativity in search of the fecundating presence of a recipient. Consciously or not, the creative act is an attempt to establish a strong, reassuring, sensible bond with the concrete and mysterious reality that surrounds us, especially at the most mysterious level of its mysteriousness, that is, the human being.

Recognition is not just the “condition” for the attribution of the status of “creativity.” It is, rather and more precisely, the “aspiration” of every creative act, which cannot be reduced to a simple “progress.” To fully understand the meaning and deep aspiration of the creative drive, an energy that can be used in the face of any pro-vocation of reality, we need to make a logical leap, and not stopping at its instrumental functions: creativity underlies an ultimate *relational* urgency.

In artistic creation this appears more evident: as Jean Duvignaud (1967) says, artwork recomposes an unanimity that re-welds the fragments of a divided humanity, not in an absurd and vague idea of man, but in a participation and a viable communication, in which our freedom can find its place. And, reciprocally, when he has composed a work, the artist seems to include himself in an invisible community.

This fraternity, which has become unrealizable, “takes the form of a creative and effective attitude, but as nostalgia for a lost communion, as a forbidden dream, incessantly revived by an irrepressible desire for emotional fusion” (Duvignaud 1967 [Italian Translation 1969], 11 and 62). What Duvignaud called “aesthetics of absolute communion,” as an attempt to fill a “violent need for unsatisfied participation” is extendable, in my opinion, to every attempt at creative action by humans, well beyond the boundaries of artistic production.

More recently, using very similar metaphors, it has been stated that the great enterprise of the artist is to transform others and themselves into a new form, gathering everyone in a new shared reality: therefore, as the bridge unites the opposite banks of the river, joining lives in continuous movement, “so the creative person throws a bridge over otherness to gather what is foreign into a new belonging” (Hofstadter 2009, 211).

When the rare event (the affective fusion) occurs, we are faced with what perhaps Giovanni Maddalena would call “complete gesture” (Maddalena 2015, 2021). More generally, “Gesture is any performed act with a beginning and an end that carries a meaning” (Maddalena 2015, 69) and complete gestures densely blend their semiotic and phenomenological elements.² Herbert von Karajan’s gestures³ powerfully introduce us to an experience of total reunification. His hands express the (successful) attempt to live together universal human experiences (the sweetness of birth, the discouragement of violence, the dismay in the face of death, the surprise of a new feast). His gestures include the past (Mozart), the present (the soloists, the choir, the orchestra, the public) and the future (the hope of a new vitality). They go beyond the separateness of codes (verbal, musical and gestural), re-welding the fragments of a divided humanity.

2 Maddalena’s theory moves from Peirce’s investigations of existential graphs. In sociology, an important view of creative human action rooted in the pragmatist tradition is by Joas (1996).

3 During the author’s speech at the conference, a few minutes of the Maestro’s direction of W.A. Mozart’s Coronation Mass, “Credo”, were projected.

4 Motivation and Creativity

Why dedicate a space to the theme of motivation within a research path on creativity? And, above all, why place this in-depth study in a research that deals with the social components of the creative attitude?

To answer the first question, it is sufficient to take a look at the existing interdisciplinary scientific literature: many scholars have argued that a high “intrinsic motivation” (that is, the individual is driven to an activity and engages in it out of love for the activity itself) is a necessary ingredient for creative improvement (Baer, Oldham, and Cummings 2003, 569).

If the definition is rich and fascinating and, at the same time, enigmatic, the critical point is the “management” of this necessary ingredient. A new professional figure, the “motivator,” has even developed in recent decades (so crucial is the presence of this energy!). It is, therefore, a drive for creativity that can only be personal but is affected by the stimuli of the environment. We could therefore answer the question by stating that motivation is partly a result of the subject’s initiative and partly a consequence of a particular “cultural” influence of the social context in which one is operating.

What culture is developing today to achieve the development and continuity of this fundamental energy to increase all human activity? We could introduce the path of the answer with a general statement: the call to be creative today relies on reasons that we can generically define as “instrumental” (primarily for economic purposes), and this, in the long run, inevitably ends up wearing out and drying up the most intimate sources of the creative move. Within organizations, motivation comes to occupy “the hegemonic role that was before control” (De Masi 2003, 668).

Actually, it has been psychology that has pointed out specific relational and contextual characteristics that favor a creative approach, especially, if not exclusively (a limitation of so many investigations), in the work environment: one can understand the reasons for this, but this situation already suggests that these will be “sectoral” motivations, which go to pragmatically stimulate creativity in specific situations, without bothering to cross-reference the underlying, original motivation of the operating subject.

Therefore, an urgency that is different from the strictly instrumental one, gradually emerges as a perspective that operates regardless of the stated or conscious objectives, a thrust that arises from the need to express oneself and that does not care primarily, ultimately, the effects of one’s own commitment.

In 2008, Richard Sennett paid attention to the *modus operandi* typical of the *craftsman*, the artisan man, an operational wealth that is at risk of being lost: “The carpenter, the laboratory technician and the conductor are all craftsmen, in the

sense that they care about the work well done for itself. They carry out a practical activity, but their work is not simply a mean to reach an end. The ethics of the work well done for the sake of doing it well is proper to the craftsman, and it is often not rewarded or even noticed” (2008 [Italian Translation 2009], 27 and 43).

But, while many have recognized intrinsic motivation as a precious source of creative energy, research has produced ambivalent results at the moment in this area. For this reason, some scholars argue that the relationship between intrinsic motivation and creativity is enhanced by “other-focused” psychological processes. Creative action, in fact, “challenges the separation between the self and the other” (Glăveanu 2018, 299). A perspective-taking generated by prosocial motivation “encourages the development of ideas that are useful as well as new” (Grant and Berry 2011, 73).

The “prosocial” motivation (the desire to benefit others) is therefore considered complementary to the intrinsic one, coming to correct its possible distortions. It has been observed, in fact, that in certain cases, rather than provoking creativity, the productions of intrinsic motivation “could derive from a greater enjoyment and satisfaction experienced in expressing creativity” (Amabile, Hennessey, and Grossman 1986, 21).

It is important to note that, starting from the 1990s, research (especially American) has increasingly focused on the growing phenomenon of the “third sector,” highlighting aspects which non-profit companies can teach to those which operate for profit. Observing the activities that were carried out in those years in environments supported by volunteers (churches, hospitals, orchestras, museums, universities, Red Cross, Salvation Army, Boy Scouts, etc.), a vertiginous increase in efficiency was recorded just when the performance of human resources was decreasing in large companies. In creative groups, as in “third sector” organizations, there is a strong tension towards the mission which is given “priority over everything else.” The mission is taken as an operational reference point, as a guide to action and as a parameter of evaluation: “Volunteering and disinterest constitute the main spring of belonging” (De Masi 2003, 661).

It has therefore been concluded that intrinsic motivation, can be considered fundamental in the field of artistic creativity, in writing and in the solution of business problems; however, in other applications may be guiding the production of ideas that are certainly new, but not necessarily useful. In this sense it has been pointed out, for example, that “many intrinsically motivated architects had difficulty producing creative ideas because they were focused on the novelty of their projects” (Grant and Berry 2011, 75). Prosocial motivation would therefore be able to improve the impact of intrinsic motivation on creativity by providing the stimulus to “engage based on the concern to help or support other people [. . .]. In this way, our research presents a new relational view of creativity”

(Grant and Berry 2011, 77 and 91). So, our research presents a new relational view of creativity.

5 Conclusion

What we are saying means, in other words, strongly supporting the primacy of the person over his products: favoring creativity means accepting the individual as an “unconditional value.” The teacher, parent, psychotherapist or anyone else who performs a caring function promotes creativity whenever he ultimately feels that the individual entrusted to his care represents a value in himself and in his development, regardless of those that it may be his current condition or behavior. Probably this attitude can be genuine only when the teacher, the parent or whoever perceives the potential of the individual and, consequently, “is able to have unconditional trust in him or her, whatever the conditions of the moment” (May 1959, 106).

During the 2017 International Conference on Trust hosted by the Institute of Social Sciences at Chuo University, Professor Bart Noteboom made a very interesting reference to the new model of worker that is imposing itself in our production system, using the expression “Isolated and fully monitored professionals.” At this point he asked himself: “Is there any need for trust left?” The answer, very interesting for our investigation, is linked exactly to the risks for creativity when trust fails: “No creativity without trust” (cf. Noteboom 2017)

This “unconditional trust” is perhaps the most essential relational condition to support the weight of the dark side of any creative undertaking: risk. Creativity inherently involves risks. That is, to develop new and useful products or processes, individuals have to be willing to try and potentially to fail. Nobody can relieve the subject from the bottleneck of risk and possible failure, because, should it happen, the subject may no longer be creative.

Interpersonal relationships guarantee that human have psychological support to not give in to the temptation of withdrawing from the venture before even “trying.”

It is useful to establish a hermeneutic starting point that lies at the root of every investigative approach focused on social relationships: the concept of “emergence” is fundamental to adequately understand relationality. With its roots in 19th century organicism, emergence can be defined as the theory “according to which the organism is different from the sum of its parts and depends on the structural arrangement of the parts” (Sawyer 2003, 14). From this perspective, every innovation, every change is the result of an organism-environment interaction: in a cer-

tain sense, therefore, “all creativity is an emerging process that involves a social group of individuals engaged in complex and unpredictable interactions” (Sawer 2003, 19).

Starting from this general premise, it can therefore be stated that creative action is, at all times, relational. In fact, there is no form of human creativity that is not based on direct, mediated or implicit social interactions or exchanges and even when we work in solitude we interact with the opinions, knowledge and expectations of others: therefore, “the permanent development of creativity cannot be conceived outside of self-other relationships” (Glăveanu, Hanson, Baer, Barbot, and Clapp 2019, 742).

Alfred Schütz, by identifying the keystone of every cultural and anthropological process in the “bond,” proposes an original perspective, starting precisely from the mother-relationship of creative action and, therefore, of its purposes. Creativity, for Schütz, is a process that finds its original impetus in what he defines as “orientation to the Other”: all the experience of social reality is based on the fundamental axiom “that postulates the existence of other beings “like me,” whose constitution is directly based on the orientation to you” (Schütz and Luckmann 1973, 61). Such orientation, it should be clarified, is conceived not as a spontaneous feeling or a moral inclination, but rather as a structural element, anthropological: “As long as man is born of woman, intersubjectivity and the we-relationship will be the foundation of all other categories of human existence [. . .]. Precisely for this, everything in human life is based on the primordial experience of the we-relation, since all other categories of human existence are based on this primordial experience of birth, the fundamental ontological fact of human existence in the world and therefore of all philosophical anthropology” (Schütz 1966, 82).

In his essay, Scheler’s theory of intersubjectivity and the general thesis of the alter ego, Schütz emphasized that there is a presupposition taken for granted that no one, not even the most skeptical, doubts even for a moment: “We are simply born into a world of Others. As long as human beings are not invented as homunculi in replicas, but are born and grow from mothers, the sphere of “We” will be naively presupposed” (Schütz, 1962). More recently, Hans Joas arrives at similar “presuppositions” by another route: the starting point of his analysis draws from Merleau-Ponty’s *Phenomenology of Perception*, which considers the relationship of the subject with others in a pre-linguistic sense, in the stage of infant development. At the base of every experience, there would not only be corporeality, but the interrelation between the experience of our body and the experience of the bodies of others, the “intercorporeity.” By different paths, the thought of the French philosopher also goes to the care that the mother reserves for the newborn through position, gesture, and voice, “because it is this that allows the new-

born to emerge from his original state of indifference and to relate to the world as a separate self” (Joas 1996, 181).

Creativity, from this perspective, can only be conceived as a “penultimate good,” whose goal is to restore an original and no longer guaranteed relationality (as stated in many of the reflections reported here), to manifest the “primary sociality of every human capacity for action” (Joas 1996, 148). Joas, like Schütz, speaks of a “tacit presupposition,” so tacit and so presupposed that it would be inscribed even in the very body of humans, a primary sociality not generated by conscious intentionality, but rather precedes it, “a structure of common action that initially consists only in our interaction with other bodies” (Joas 1996, 184).

Instrumentality is not the final word and not even the most appropriate term with which to describe an energy that inexorably tends to overflow its narrow limits.

References

- Amabile, Teresa M., Beth A. Hennessey, and Barbara S. Grossman. 1986. “Social influences on creativity: The effects of contracted-for reward.” *Journal of Personality and Social Psychology* 50: 14–23.
- Arbiser, Samuel. 2004. “Il gruppo interno come modello della mente.” *Funzione gamma* Oct.: 1–26.
- Archer, Margaret and Pierpaolo Donati. 2015. *The Relational Subject*. London: Routledge.
- Baer, Markus, Greg R. Oldham, and Anne Cummings. 2003. “Rewarding Creativity: When Does It Really Matter?” *The Leadership Quarterly* 14: 569–586.
- Boden, Margaret A. 1990. *The Creative Mind: Myths and Mechanism*. New York: Basic Books.
- Boden, Margaret A. 1998. “Creativity And Artificial Intelligence.” *Artificial Intelligence* 103: 347–356.
- Boden, Margaret A. 2009. “Creativity: How Does It Work?” In Krausz, Michael, Denis Dutton, and Karen Bardsley (Eds.). *The Idea Of Creativity*. Leiden and Boston: Brill.
- Crespi, Franco. 2010. “Prefazione.” In Savonardo, Lello. (Ed.). *Sociologia della musica. La costruzione sociale del suono dalle tribù al digitale*. Turin: Utet.
- Dasgupta, Subrata. 2019. *A Cognitive Historical Approach to Creativity*. London and New York: Routledge.
- De Masi, Domenico. 2003. *La fantasia e la concretezza*. Milan: Rizzoli.
- Donati, Pierpaolo. 2021. *Transcending Modernity with Relational Thinking*. London: Routledge.
- Duvignaud, Jean. 1967. *Sociologie de l'art*. Paris: Presses Universitaires de France.
- Elias, Norbert. 1978. *Was Ist Soziologie?* München: Juventa.
- Fleming, Lee, Santiago Mingo, and David Chen. 2007. “Collaborative Brokerage, Generative Creativity, and Creative Success.” *Administrative Science Quarterly* 52: 443–475.
- Glăveanu, Vlad P. 2018. “Educating which creativity?” *Thinking Skills and Creativity* 27: 25–32.
- Glăveanu, Vlad P., Michael H. Hanson, John Baer, Baptiste Barbot, and Edward P. Clapp. 2019. “Advancing Creativity Theory and Research: A Socio-Cultural Manifesto.” *The Journal of Creative Behavior* 54 (3): 741–745.

- Grant, Adam M., Berry James W. 2011. "The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity." *The Academy of Management Journal* 54 (1): 73–96.
- Hofstadter, Albert. 2009. "On the Dialectical Phenomenology of Creativity." In Krausz, Michael, Denis Dutton, and Karen Bardsley (Eds.). *The Idea of Creativity*. Leiden and Boston: Brill.
- Joas, Hans. 1996. *The Creativity of Action*. Chicago: University of Chicago Press.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists' Incomplete Revolution*. Montreal, Kingston, London, and Chicago: McGill-Queen's University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Rome: Carocci.
- May, Rollo. 1959. "The nature of creativity." In Anderson, Harold H. (Ed.). *Creativity and its Cultivation*. New York: Harper & Row. [Italian Translation: Anderson, Harold H. 1972. *La creatività e le sue prospettive*. Brescia: La scuola.]
- McWilliam, Erica and Shane Dawson. 2008. "Teaching for Creativity: Towards Sustainable and Replicable Pedagogical Practice." *High Education* 56: 633–643.
- Melucci, Alberto. 1994. "Creatività: Miti, Discorsi, Processi." In Melucci, Alberto (Ed.). *Creatività: Miti, Discorsi, Processi*. Milan: Feltrinelli.
- Morin, Edgar. 1990. "Exergue." In Manghi, Sergio (Ed.). *Il Gatto Con Le Ali*. Milan: Feltrinelli.
- Noteboom, Bart. 2017. "Talk." International Conference on Trust, Institute of Social Sciences, Chuo University.
- Padua, Donatella. 2017. *L'azione non-logica paretiana*. In Padua, Donatella (Ed.). *La Sociologia tra Modernità e Postmodernità*. Perugia: Morlacchi Editor.
- Pareto, Vilfredo. 1916, 1988. *Trattato di sociologia generale*. Turin: Utet.
- Plessner, Helmuth. 1928. *Die Stufen Des Organischen Und Der Mensch: Einleitung in Die Philosophische Anthropologie*. Berlin: De Gruyter.
- Sawyer, R. Keith. 2003. "Emergence in Creativity and Development." In Sawyer, R. Keith, Vera John-Steiner, Seana Moran, Robert J. Sternberg, David Henry Feldman, Howard Gardner, Jeanne Nakamura, and Mihaly Csikszentmihalyi (Eds.). *Creativity and development*, 12–60. New York: Oxford University Press.
- Schütz, Alfred. 1962. *Scheler's theory of intersubjectivity and the general thesis of the alter ego. Collected Papers*, Volume I. The Hague: Martinus Nijhoff.
- Schütz, Alfred. 1966. *The problem of transcendental intersubjectivity in Husserl. Collected Papers*, Volume III. The Hague: Martinus Nijhoff.
- Schütz, Alfred and Thomas Luckmann. 1973. *The Structures of Life-Word*. Evanston: Northwestern University Press.
- Sennett, Richard. 2008. *The Craftsman*. New Haven and London: Yale University Press.

Giorgio Borrelli

Chapter 10

Gesture, Labor, and Semiosis: Some Research Hypotheses for a Theoretical Convergence between Semiotics and Dialectics

Abstract: In this chapter, I will try to illustrate how semiotics and dialectical theory can converge towards a common analysis of cognitive processes. The concept of “*gesture*” will constitute the meeting point between the two approaches. My starting point will be the argumentations thematized by Giovanni Maddalena in his 2011 article “Lavoro come conoscenza. Uno sguardo semiotico”—i.e., “Labor as knowledge. A semiotic overview.” According to Maddalena, the teleological structure of *labor*—understood in a Hegel-Marxian sense—presents some homologies with what he defines as “complete gesture” (Maddalena 2015), i.e., a *model of synthetic reasoning* based on the three *semiotic* elements posited by Charles S. Peirce (1839–1914), i.e., *Icon*, *Index*, and *Symbol*. More specifically, Maddalena’s proposal conjugates the Hegel-Marxian meaning of labor—understood precisely as “a type of purposeful action” (Maddalena 2011, 3, my translation)—with the pragmatist reworking of the Kantian paradigm, defining labor as a model of *synthetic reasoning*: labor is “our way of reasoning synthetically” (Maddalena 2011, 10, my translation). The theoretical convergence between the Marxian concept of “labor” [*Arbeit*] and the pragmatist concept of “gesture” can be further confirmed by developing a parallel between Peirce’ and Ernst Bloch’s (1885–1977) theories of knowledge. In this regard, I will underline two aspects: a) both authors hypothesize a *phenomenological* foundation for their theory of categories: categories are elements of *experience* (according to Peirce) and products of *praxis* (according to Bloch); and b) both authors develop a theory of categories strongly connected with the issue of *temporality*. Furthermore, I will underline that Bloch’s theory of knowledge is characterized by an element which contributes to the parallel between labor and gesture: indeed, by establishing a homological relation between the *act of gazing*—the theoretical act *par excellence* (see Petrosino 2004)—and the *act of manipulating*, Bloch emphasizes the fundamental role played by the *gestural dimension* in the knowledge process.

Keywords: dialectics, gesture, labor, Marxism, pragmatism, semiotics

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1 Introduction

In *Das Prinzip Hoffnung* [*The Principle of Hope*] (1959), Ernst Bloch (1885–1977) argues that pragmatist gnoseology is based on a kind of “aha-experience of truth” (Bloch 1996, 275); this means that a certain experience can be defined as “true” if it is “aimed at practical success and actually shows itself to be suitable for bringing it about” (Bloch 1996, 275).

More specifically, Bloch refers to William James’ (1842–1910) pragmatism, emphasizing its “life-promoting and optimistic” (Bloch 1996, 276) perspective. Indeed, pragmatism “professed to be the patron of those various, interchangeable, logical ‘instruments’ with which the higher order of businessman achieves almost ‘humanitarian success’” (Bloch 1996, 276). However, this was not enough to ward off the “agnostic” drift (see Bloch 1996, 276) of this philosophical approach. According to Bloch, from James onwards, pragmatism would no longer deal with the question of “truth,” “not even as if it were at least an ‘instrument’ to be maintained” (Bloch 1996, 276). Moreover, James’ epigones would have made the idea that truth is what is helpful to “humanitarian success” into the idea that truth is what is useful to “maximum profit” (Bloch 1996, 276).

These considerations by Bloch about pragmatism frame the background against which I will try to develop some research proposals. My intention is not to proceed with an in-depth analysis of the relationship between Bloch and pragmatism; nor, conversely, with an analysis of the relationship between Marxism—including Bloch’s version—and James’ pragmatism; likewise, I do not intend to formulate a critique of Bloch’s positions. In short, my aim here is not to demonstrate that Bloch’s misgivings about pragmatism are plausible nor that he misunderstood its assumptions.

Rather, with this chapter, I wish to propose a different background hypothesis: despite his “political” and “theoretical” judgement of pragmatism, in his later monograph *Experimentum Mundi* (1975), Bloch outlines a theory of knowledge that could be seen to converge with the theory of knowledge structured by another of the founders of this philosophical approach: Charles S. Peirce (1839–1914).¹ Developing this hypothesis, I will attempt to illustrate how the concept of “*gesture*”—as elaborated by Giovanni Maddalena (2015)—offers a point of en-

1 In my view, Bloch is actually referring to summary interpretations of pragmatism; interpretations from which Peirce—well before Bloch’s perplexities—distanced himself, going so far as to redefine the doctrine he founded with James as *Pragmaticism* (see CP 5.414). Indeed, in *What Pragmatism Is* (1905), Peirce explicitly criticizes those readings that reduce pragmatism to the assumption that “a conception is to be tested by its practical effects” (CP 5.422). Rather, pragmatism consists “in holding that the purport of any concept is its conceived bearing upon our con-

counter between Bloch's dialectical approach and Peirce's semiotics. More specifically, my proposal is inspired by Maddalena's argumentations as thematized in his 2011 article "Lavoro come conoscenza. Uno sguardo semiotico"—i.e., "Labor as knowledge. A semiotic overview." According to Maddalena, the teleological structure of *labor*—understood in a Hegel-Marxian sense—presents homologies with what he defines as "complete gesture" (Maddalena 2015), that is, a *model of synthetic reasoning* based on the three *semiotic* elements posited by Peirce: *Icon*, *Index* and *Symbol*.

Starting from these assumptions, my aim is to demonstrate that the theoretical convergence between the Marxian concept of "labor" [*Arbeit*] and the pragmatist concept of "gesture" can be further confirmed by developing a parallel between Peirce's and Bloch's theories of knowledge.

In the next section, I will briefly introduce two of the main concepts of this chapter: i.e., *labor* and *semiosis*. To illustrate the connection between them, I will mention two authors who structured their theories starting from Peircean semiotics: Charles Morris (1901–1979) and Ferruccio Rossi-Landi (1921–1985).

In §3, I will develop the parallel between Peirce and Bloch, focusing on two aspects: a) both authors hypothesize a *phenomenological* foundation for their theory of categories: categories are elements of *Experience* (according to Peirce) and products of *Praxis* (according to Bloch); b) both authors develop a theory of categories strongly connected with the issue of *temporality*.

In §4, I will underline how Bloch's theory of knowledge is characterized by an element which contributes to the parallel between labor and gesture: indeed, by establishing a homological relation between the *act of gazing*—the theoretical act *par excellence* (see Petrosino 2004)—and the *act of manipulating*, Bloch underlines the fundamental role played by the *gestural dimension* in the knowledge process.

2 Labor as *Purposeful Activity*: A Semiotic Insight

In this section, I will illustrate how a convergence between *labor*—understood in a Marxian sense—and *semiosis*—understood in a Peircean sense—can be established. As stated, this connection can be posited by starting from Morris' and Rossi-Landi's semiotics. In this regard, I believe that it is helpful to clarify how Morris re-elaborates Peirce's conception of *semiosis* and how Rossi-Landi in turn

duct" (CP 5.460). The acronym "CP" refers to the extended title *The Collected Papers of Charles Sanders Peirce*.

starts from Morris' sign model to posit his semiotic reading of the Marxian category of "labor."²

Therefore, to reconstruct this theoretical continuity, it is necessary to start with Peirce's definition of "semiosis": "by "semiosis" I mean [. . .] an action, or influence, which is, or involves, a cooperation of *three* subjects, such as a sign, its object, and its interpretant" (CP 5.484). According to Maddalena, this idea of semiosis introduces "a new form of representation centred on the analysis of the relationship between the representamen (namely, the sign itself), the object of reference, and the interpretant (namely, the function of interpretation)" (2015, 20). In addition, this inextricable connection between representation and semiosis implies another concept: *knowledge*. The Peircean approach assumes that "any knowledge is representation and any representation is constituted by semiosis" (Maddalena 2015, 119). In this context, the concept of *complete gesture* can be understood as a "particular kind of semiosis constituted by different and densely arranged types of signs and phenomena" (Maddalena 2015, 119).

In the light of these assumptions, it seems appropriate to consider (very briefly) how Peirce conceives "representation." In the 1865 *Harvard Lectures*, Peirce distances his understanding of the concept from the Kantian idea of *Vorstellung*: "Representation, indeed is not a perfect translation of the term, because it seems necessary to imply a mediate reference to its object, which *Vorstellung* does not" (Peirce 1982, 257);³ moreover, he not only refuses William Hamilton's (1788–1856) definition of *mediate cognition*, but also the Hegelian acceptance of representation as *mental image* [*Build*]. Instead, "representation" is used by Peirce in its etymological and ordinary meaning as "anything which is supposed to stand for another" (1982, 257). As we know, *icon*, *index*, and *symbol* are three different modalities in which the sign represents the object.

Starting from Peirce's theses, Morris in *Foundations of a Theory of Signs* (1938) defines semiosis as a process involving three (or four) factors:

that which acts as a sign, that which the sign refers to and the effect on some interpreter in virtue of which the thing in question is a sign to that interpreter. These three components in semiosis may be called, respectively, the *sign vehicle*, the *designatum*, and the *interpretant*; the *interpreter* may be included as a fourth factor. These terms make explicit the factors left undesignated in the common statement that a sign refers to something for someone. (Morris 1938, 3)

² Theoretical continuity between Peirce and Morris and again between Morris and Rossi-Landi has often been underlined; in this regard, see Petrilli (1999); A. Ponzio (2012); and Borrelli (2014 and 2020).

³ In this regard, see Julia Ponzio (2020).

More specifically, according to Morris, “in semiosis something takes account of something else mediately, i.e., by means of a third something. Semiosis is accordingly a mediated-taking-account-of. The mediators are *sign vehicles*; the takings-account-of are *intepretants*; the agent of the process are *interpreters*; what is taken account of are *designata*” (1938, 3). Nevertheless, semiosis is endowed with a further fundamental characteristic: *semiosis* is the process through which an interpreter “takes account of relevant properties of absent objects, or unobserved properties of objects which are present” (Morris 1938, 32). Starting from this property, it is possible to outline a convergence between the concept of “semiosis”—as structured by Peirce and Morris—and the Marxian concept of “labor.” For this purpose, it is helpful to focus on *materialistic semiotics* as elaborated by Rossi-Landi.

Indeed, Rossi-Landi proposed a semiotic interpretation of a fundamental acceptance of the Marxian category of “labor”: i.e., labor as *purposeful*—or, *goal oriented*—activity [*zweckmäßige Tätigkeit*]. This concept designates one of the four moments of the *labor process* [*Arbeitsprozess*] as structured in *Capital* (1867). It is common knowledge that, according to Marx, “the simple moments of the labor process are (1) purposeful activity [*zweckmäßige Tätigkeit*], that is work itself [*Arbeit selbst*], (2) the object on which that work is performed, and (3) the instruments of that work” (Marx 2002, 453).⁴ Furthermore, the *product* constitutes the fourth and final moment of the process: “in the labor-process, therefore, human activity, through the instruments of labor, effects an alteration in the material worked upon which was intended from the outset. The process extinguishes itself in the product [*Produkt*]” (Marx 2002, 460).

⁴ Reading this excerpt from *Capital*, the translation of the German word “Arbeit” with the English “work”—instead of “labor”—catches the eye. On this point, a terminological clarification is in place. In a footnote to the fourth German edition of *Capital* (Volume I), Friedrich Engels (1820–1895) proposes a terminological distinction between *work* and *labor*: “the English language has the advantage of possessing two separate words for these two different aspects of labor. Labor which creates use-values and is qualitatively determined is called ‘work’ as opposed to ‘labor’; labor which creates value and is only measured quantitatively is called ‘labor,’ as opposed to ‘work’” (Engels in Marx 2002, 2254, note 16). Nevertheless, as Ben Fowkes appropriately observes in his translation of *Capital*, “unfortunately, English usage does not always correspond to Engels’ distinction” (Fowkes in Marx 1990, 138).

In this chapter, I will use the term “labor” for two reasons: a) in line with Fowkes’ observations, I believe that Engels’ distinction is groundless from a linguistic point of view; b) Marx himself does not posit the concept of “purposeful activity” as a concrete particular process, but as a characteristic, a *moment* of a general process—i.e., the labor process—and, indeed, Marx affirms that the purposeful activity is *Arbeit selbst*, *labor itself*. Furthermore, most importantly Rossi-Landi argues that Marx’ idea of *zweckmäßige Tätigkeit* refers to a social human ability understood in its species-specific—therefore, *general/universal*—dimension.

According to Rossi-Landi, the presence of a purpose in the labor process demonstrates that labor takes place following a *program*, i.e., an *organized semiosis*. Actually, the *purpose* is “a conscious or unconscious, desired or endured, ‘mental’ anticipation of the product” (Rossi-Landi 1977, 40); namely, a *design* or a *project*. In my opinion, this latter assumption may refer to the fact that—according to Marx—labor is also *Vorstellung*, i.e., *representation*:⁵ this means that labor process *includes labor itself* understood as a) the human ability of generating an “ideal anticipation” (Bellofiore and Redolfi-Riva 2015, 35, note 1)—or an *image*—of the product; and b) the human ability of *realizing* that representation. In this respect, it should be underlined that this representation differs from *what* the human being—understood with his/her *species-specific laboring ability*—has in front of him/her: the *Gegenstand*, i.e., the object, the material that will be transformed by labor.

In my opinion, the idea of labor as *Vorstellung* presents some similarities with that particular aspect of semiosis identified by Morris: i.e., the fact that, in virtue of semiosis, the interpreter “takes account of relevant properties of absent objects, or unobserved properties of objects which are present” (Morris 1938, 32). From such a perspective, *what a material can become*—i.e., the ideal anticipation or representation of the product—could be understood as *an unobserved property*

5 This is the original German version of the excerpt in which Marx establishes a relation between *Arbeit* and *Vorstellung*: “Am Ende des Arbeitsprozesses kommt ein Resultat heraus, das beim Beginn desselben schon in der Vorstellung des Arbeiters, also schon ideell vorhanden war” (Marx 2002, 452). Ben Fowkes’ and Hans Ehrbar’s translations place “*Vorstellung*” near “*conception*”: “at the end of every labour process, a result emerges which had already been *conceived* by the worker [in der *Vorstellung* des Arbeiters] at the beginning, hence already existed *ideally* [Fowkes’ translation]/*notionally* [Ehrbar’s translation]” (Marx 1992, 284, and 2002, 452, emphasis added). Samuel Moore and Edward Aveling translate the same passage in a slightly different way, emphasizing the acceptance of “*imagination*”: “at the end of every labour-process, we get a result that already existed in the *imagination* of the *labourer* at its commencement” (Marx 1906, 198, emphasis added).

According to Ehrbar, “*Vorstellung*” can be rendered with “*conception*” understood as “a concept in the process of becoming” (Ehrbar 2010, 890); but the meaning of “*Vorstellung*” is specified in this excerpt by the proximity of the term “*ideell*”—which cannot be rendered with “*ideal*,” despite Fowkes’ translation—which means “*imagined, notional, as opposed to real*” (Ehrbar 2010, 890). In this sense, “*Vorstellung*” would encompass both the nuances of “*conception*” and “*imagination*.” A similar meaning is suggested by Riccardo Bellofiore and Tommaso Redolfi Riva who propose to understand “*Vorstellung*” as “a mental or notional representation: an ideal anticipation” (2015, 35, note 1). This acceptance seems to me pertinent with the semiotic perspective that I want to follow in this chapter; therefore, I have explicitly translated “*Vorstellung*” with “*representation*.” In support of this choice, consider the Italian translation by Roberto Fineschi, who coherently translates “in der *Vorstellung* des Arbeiters” with “*nella rappresentazione del lavoratore*” (Marx 2011, 198).

of an object which is present; in the same way, by working on a given object, the human being may become aware of *relevant properties of absent objects*; for example, the human/laborer can understand if the choice of a particular material is appropriate for realizing a certain product, or if a different—absent—material would be more suitable, or whether something should be changed in the *product design*, i.e., in the *representation* of the result of the labor process.

These considerations could be helpful to explain the convergence between *labor*, *semiosis* and *gesture*. By the term “gesture” Maddalena means “any performed act with a beginning and an end that carries a meaning (from gero = I bear, I carry on)” (2015, 70). From such a perspective a *meaning* has to be “pragmatically understood as the cluster of conceivable effects of an experience” (Maddalena 2015, 70). The gesture, therefore, is not a simple bodily articulation, but a *multimodal semiosis* constituting “the minimal unity of our synthetic reasoning” (Maddalena 2011, 6, my translation); that is, a reasoning in which “a never identical understanding of meanings is carried out; this understanding produces a development from the original vagueness to the generality of consequences through the concreteness of a time-limited event. It is an embodiment of vague meanings determined by the goal” (Maddalena 2014, 34, my translation); indeed, the goal or *telos*—or *Zweck*, as Marx would say—“is the embodied meaning itself” orienting the reasoning “from initial vagueness to meaningful generality through a singular event” (Maddalena 2015, 73)

The development from vagueness to generality can take place if the gesture is “complete,” that is, if it implies the three types of Sign theorized by Peirce: *Icon*, *Index*, and *Symbol*, which correspond—from a phenomenological point of view—to the categories of *Firstness*, *Secondness*, and *Thirdness*. From such a perspective, *labor* is a complete gesture encompassing these three semiotic/phenomenological modalities: a complete gesture implies a “teleological transformation of reality towards a goal (symbol), realized at a particular point (index) according to an infinite set of possibilities (icon)” (Maddalena 2011, 9, my translation).

3 *Phaneroscopy* and “*Anticipatory Consciousness*”

In the following sub-sections, I will frame the labor-semiosis connection in a parallel between Peirce and Bloch, illustrating their theoretical points of convergence. More specifically, I will illustrate how both authors consider the issue of *temporality* as strictly connected with the *gnoseological process*, that is with *experiential*, *practical* and *cognitive*—or, in one word, *experimental*—relation which human beings establish with matter. Particularly, I will illustrate how this rela-

tion originates a force field delimited by the concepts of “*possible*” and “*actual*.” The transition from one to the other of these poles takes place through the *subject’s* action: the subject can *design* the transformation of *what is external*—i.e., the *becoming* of matter; or, conversely, the subject can experience why what is external cannot be transformed, that is, the ways in which what is external opposes all its resistance.

The experience of *what is external* and the possibility of its transformation are inextricably linked with the issue of *temporality*. For Peirce, the *cognitive process* can be described through the phenomenological—or, as he would call it, “*phaneroscopic*”—analysis of the ways in which the subject experiences the *past*, the *present*, the *future*, and—consequently—the three categories of *Secondness*, *Firstness*, and *Thirdness*. More specifically, the cognitive process is configured as an attempt to *guess* the causes and effects of an unexpected event, trying to *anticipate* its *possible* developments in view of a given *purpose*. Homologically, in *Experimentum Mundi*, Bloch delineates the “cognitive relation” (Cunico 1980, 22, my translation) through a “phenomenological analysis of the ‘anticipatory consciousness’ [*das antizipierende Bewußtsein*]” (Cunico 1980, 20, my translation), i.e., through an analysis of the ways in which the subject seeks to *anticipate* the future, the “*possible*” contained in the present and the past of matter—i.e., to *anticipate* the “*possible*” of matter in order to *transform* the matter itself.

From a comparative reading of Peirce and Bloch’s arguments, the cognitive process can be read as a movement from the *vague* and *uncertain possibility* to a *complete gesture*—as defined by Maddalena—and, consequently, it is possible to posit a theoretical relation between *labor* and the act of *synthesis*—defined by Immanuel Kant (1724–1804) as the operation that “collects the elements for cognitions and unifies them into a certain content” (Kant 2000, 211).

3.1 *Firstness* and “*Ordinary Present*” [*Übliche Gegenwart*]

Both Peirce and Bloch conceive the *present* as a dimension characterized by the *pure* and *vague possibility*. According to Peirce, *experience* “is the cognitive resultant of our past lives” (CP 2.84).⁶ This cognitive resultant is independent from the will of the subject and—in fact—it cannot change at will. Therefore, what Peirce defines a *Binarité* or *Secondness* is the first category which is experienced by the subject—as experience deriving from the *Past*. Nevertheless, Peirce’s *Phaneroscopy* aims at analyzing the three categories as “indecomposable elements” (CP

⁶ The acronym CP refers to the extended title *The Collected Papers of Charles Sanders Peirce*.

1.28), that is, at considering them in their *pure* dimension. So, in this sense, Firstness has to be logically understood as the initial category.

It is common knowledge that, according to Peirce, the present coincides with the category of *Firstness*, or *Quality*, that is, “a mere abstract potentiality” (CP 1.422) and the error of the nominalist and conceptualist approaches “lies in holding that the potential, or possible, is nothing but what the actual makes it to be” (CP 1.422). At the temporal level, this mere abstract potentiality coincides with the *absolute present*, i.e., with what would appear if “being in the present instant were it utterly cut off from past and future” (CP 2.85). Furthermore, “nothing is more occult than the absolute present” (CP 2.85). Nevertheless, Peirce also considers Firstness as characterized by a “myriad-fold variety” (CP 5.44);⁷ indeed, in his writing a *On a New List of Categories* (1867), he defines this manifold character as “present, in general” (CP 1.547).

Bloch articulates his arguments in a similar way. First of all, Bloch also posits the multiple and undifferentiated dimension of the present as the starting point of the cognitive process. More specifically—in *Experimentum Mundi*—Bloch defines the “ordinary present [Übliche Gegenwart]” (Bloch 1975, 16, my translation) as the temporal dimension coinciding with the “multiple ‘something’ [das viele Etwas]” (Bloch 1975, 70, my translation). Furthermore, Bloch describes the present as a “blind spot [der blinde Fleck],” as the “obscurity of the lived moment [Das Dunkel des gerade gelebten Augenblick]” (1975, 15, my translation); an obscurity that recalls—in my view—the *occult* character of the absolute present as described by Peirce.

3.2 Secondness and “*Impetus*” [Anstoß]

Both Peirce and Bloch maintain that the factual dimension breaks into experience as a *shock*, as an *impact*. More specifically, according to Peirce, what is external—we could say, the matter or the external world—breaks into the subject experience as a “brute force” (CP 1.428), a *strike* or a *violent poke* which is independent on the subject will (see CP 5.45–5.47). In this way, the subject experiences the category of *Secondness*. As Peirce affirms, “we find secondness in occurrence, because an occurrence is something whose existence consists in our knocking up against it” (CP 1.358). The experience of an occurrence—the experience of *Secondness* understood as a “hard fact” (CP 1.358)—is experience of a “*fait accompli*” (CP 2.84),

⁷ According to Proni, this *myriad-fold variety* constitutes the way in which Firstness manifests itself into the experience: that is, as a “Second Firstness” (Proni 1990, 200, my translation).

i.e., something that has already happened and cannot be changed. Therefore, as already said, *Secondness* is the first category to be experienced, in the form of experience from the *past*: “experience is *esse in praeterito*” (CP 2.84). Furthermore, *Secondness* breaks into experience in the form of “a series of surprise” (CP 5.51). According to Peirce, “it is by surprises that experience teaches all she deigns to teach us” (CP 5.51). That is, it is by surprise that the subject becomes aware of the reality of the external world and—we might say, *dialectically*—of one’s *otherness* in regard to this world. As Peirce says, surprise determines “a double consciousness at once of an *ego* and a *non-ego*, directly acting upon each other” (CP 5.52).

In my view, these Peirce’ arguments present some interesting homologies with *Experimentum Mundi*. Just like Peirce, Bloch places the *factual dimension*—identified with the undetermined *That [Daß]*—as the starting point of his *phenomenology of anticipatory consciousness*. In this regard, it is interesting to note that Gerardo Cunico—the editor of the Italian version (1980) of *Experimentum Mundi*—explicitly translates “Daß” with the Italian expression “il fatto-che,” that is—in English—“the Fact-that.” In line with this interpretation, Wayne Hudson affirms: “the That is a categorical expression of *the fact that* something remains to be determined” (1982, 122, emphasis added).

However, just like Peirce, Bloch maintains that the *factual dimension*—namely, the “That”—presents itself as an “*impetus [Anstosß]* that occurs in the ‘now and here’⁸ but that “remains fluctuating even in the already occurred past” (Bloch 1975, 15, my translation). Furthermore, for Bloch also, the past experience is the dimension which determines the consciousness of an ego and a non-ego—as Peirce would say. Indeed, according to Bloch, the “*I [Ich]* and the “*Something [Etwas]*” can only be “experienced [. . .] when their simple ‘now’ has passed and their simple ‘here’ is no longer one among many” (1975, 15, my translation). It is never possible to see “the current ‘now’ [*das jetzige Jetzt!*], but only the ‘now’ that has just been [*das gerade gewesene Jetzt!*], which properly is no longer such” (Bloch 1975, 14, my translation). A similar vision about the transience of the present is thematized by Peirce, when he affirms that “all that is immediately present to a man is what is in his mind in the present instant. His whole life is in the present. But when he asks what is the content of the present instant, his question always comes too late. The present has gone by, and what remains of it is greatly metamorphosed” (CP 1.309).

Interesting to note is also how—according to Peirce—*Binarität* or *Secondness* appears as *negation* and as *doubt*: “the very word ‘doubt,’ or ‘dubito,’ is the frequentative of ‘duhibeo’—i.e., *duo habeo*, and thus [the word itself] exhibits its binarity. If we did not struggle against doubt, we should not seek the truth” (CP

8 Cunico translates “*Anstosß*” with “*urto iniziale*” (Bloch 1980, 46), i.e., *initial impetus*.

2.84). Homologically, Bloch underlines how the initial impetus of the “That,” before finding “its determining content, [its] ‘What’ (Was)” (Cunico 1980, 12, my translation), presents itself as “question [*Frage*]” (Bloch 1975, 73, my translation). As Cunico observes, the “That” is posited by Bloch as “the radical and constitutive negativity of immediate being” (Cunico 1980, 12, my translation).

3.3 Thirdness, “Guess,” and *Anticipatory Consciousness*

As we know, according to Peirce, *Thirdness* coincides with “being in future” (CP 2.86). *Being in future* “appears in mental forms, intentions and expectations” (CP 2.86). Starting from this assumption, it should be stated that, according to Peirce, the cognitive process is articulated through a tension between *expectations*—crystallized in *laws*—and *surprises*. As already said, Peirce describes *surprise* as an intrusion of an unexpected fact into the world of expectations. In this regard, Peirce observes that “nothing can possibly be learned from an experiment that turns out just as was anticipated” (CP 5.51). Moreover, “it is by surprises that experience teaches all she deigns to teach us” (CP 5.51). On the other hand, knowledge drives from the attempt to guess what is—or seems—*unpredictable* and to delineate its laws through experiments; actually, Peirce himself underlines that we construct our knowledge of natural laws proceeding “by experimentation. That is to say, we guess out the laws bit by bit” (CP 2.86). Moreover, “all our knowledge of the laws of nature is analogous to knowledge of the future, inasmuch as there is no direct way in which the laws can become known to us” (CP 2.86).

The fact that direct knowledge of the future is impossible implies the need for “a machinery, a medium”: this medium is “*intention*, the mind’s action” (CP 2.86). Intention poses the “final causes, or ends” and, in this way, future can “*influence*” the present (CP 2.86, emphasis added). From such a perspective, the experiment can be understood as a procedure aimed at confirming or confuting certain expectations. It is through the *imagination*—the hypothetical anticipation—of a possible, uncertain outcome that the future influences the present. In my view, homologous theses can be found in *Experimentum Mundi*.

As already mentioned, according to Bloch, the factual dimension—the “*Daß*”—presents itself as *radical negativity*: the “That” contains a “not” which designates its processual dimension. The dynamic character of the “*Daß*”—that is, the matter to be experienced and known—derives from a force that is “not [. . .] only hidden, but also driving [*treibende*]” (Bloch 1975, 21, my translation). This hidden and driving force determines the “*Daß*” as a “*not-yet* [*Noch-Nicht*]” (Bloch 1975, 15, my translation). And this *not-yet being* clearly refers to the temporal dimension of the *future*.

However, future can be experienced in a contradictory way; and, in this regard, Bloch distinguishes between an *ungenuine future* [*unechter Zukunft*] and a *genuine future* [*echter Zukunft*]. In my view, the tension between these two concepts could be compared with the tension outlined by Peirce when he refers to the relationship between expectations and surprises. The ungentle future “comes forth, as it were, in a schematic way” (Bloch 1975, 90, my translation): “in the ungentle future we are expected every night to see the regular bedroom, every business that is repeated every morning, as well as the rising and setting of the sun, and other such things” (Bloch 1975, my translation). It is a future that can be defined through “a sum of repetitions gathered under a law” and characterized by a *mechanism* that “only understands what can be expected, the repetition of what has always occurred” (Bloch 1975, 126, my translation). A future that is “so repeated that it can be expected with certainty” (Bloch 1975, 126, my translation); in short, it is a future “bended under the past, indeed it represents the past itself with the mere chronological index of posteriority” (Bloch 1975, 91, my translation). This mechanism cannot grasp the dynamic character of the “Daß” and this kind of future cannot correspond to its *not-yet being*—least of all exhaust it. On the contrary, the *genuine future* implies both the awareness of the *tendencies* of what appear in front of us, and the awareness of “the element of *surprise* [*das Element der Überraschung*]” (Bloch 1975, 90, emphasis added, my translation): that is, the fact that something *new* can *appear* in laws and tendencies. This brings us to a fundamental theme of Bloch’s theory: the genuine future can only appear through the *gesture* of “*Fortbilden*.” Analyzing this concept, my aim in the next section is to demonstrate that an idea of “complete gesture” can be detected in Bloch’s dialectics as well.

4 Complete Gesture and “*Imagining-Forth*” [*Fortbilden*]

Gerardo Cunico translates the German verb “*Fortbilden*” with the Italian expression “*ultra-figurare*”; a possible English translation can be “to imagine forth.” According to Cunico, the verb *Fortbilden* designates the possibility of a *mediated knowledge* (see Cunico 1980, 58, note 16): that is, a *creative knowledge* which overcomes any form of “absolute representation and reproduction” (Cunico 1980, 58, note 16, my translation).

From such a perspective, the act of *imagining-forth* consists in the possibility of foreseeing, of discovering the hidden, *latent element* in an already outlined *tendency*—in order to understanding the development of that tendency. According to Bloch, *Latency* anticipates the *Tendency* direction: Tendency pre-exists in the

form of Latency. This relation between *Latency* and *Tendency*—according to Gerardo Cunico—is explained by the prefix “*fort*”: indeed, “the prefix *fort* indicates precisely this going beyond, this anticipating without going over the real, but taking it with us” (Cunico 1980, 58, note 16, my translation).

However, it is interesting to note that in his 2009 essay on Bloch, Mauro Farnesi Camellone explicitly uses the word “gesture” to refer to the concept of “*Fortbilden*”: actually, he talks about the “*gesto dell’ultra-figurazione*” (Farnesi Camellone 2009, 53)—i.e., “the gesture of imagining-forth.” In my opinion, the concept of “gesture” properly designates the act of imagining-forth. Indeed, I believe that it is possible to affirm that Bloch describes the process of *imagining-forth* by three gestural modes: *Rotating* [*Drehen*], *Bringing-out* [*Herausbringen*] and *Lifting* [*Heben*]. Through these three gestures, the practical activity of the subject mediates the *possible latency* of matter, *aiming* at its *actualization*. The hidden, *latent element* in the tendency cannot emerge without an *anticipatory* and *goal-oriented manipulation* of matter, an *anticipatory* and *goal-oriented manipulation* of the external world. This consideration further clarifies how Bloch’s dialectical theory presents some convergences with Maddalena’s pragmatist interpretation of labor as complete gesture: indeed, as we have seen, *labor* can be considered as a complete gesture because it implies a “teleological transformation of reality towards a goal (symbol), realized at a particular point (index) according to an infinite set of possibilities (icon)” (Maddalena 2011, 9, my translation).

By positing “an *analogon* of human peculiar activity, especially labor” (Bloch 1975, 116, my translation), Bloch uses these three gestures as metaphors for operations of knowing and thinking. The thinking-subject does the same as the laboring-subject: operating on an equally “heavy” matter, the subject rotates, takes out and lifts from the indistinct manifold what can satisfy his/her needs, no matter “whether they arise [. . .] from the stomach or from the imagination” (Marx 2002, 45).

Important to underline is that Bloch does not simply refer to these modes—or actions—as mere body articulations. As I mentioned in the abstract, Bloch seems to affirm that knowledge—and possibly, the transformation of matter—involves a homological—we may say, *synthetic*—relationship between the *gaze*—as Silvano Petrosino would say, “the theoretical sense ‘par excellence’” (Petrosino 2004, 25, my translation)—and the *hand*. As Bloch says, “no mediation is possible if we do not leave the immediate proximity of the simple impression. That is, if the *gaze* does not act like a *hand* which keeps the thing at a distance, which keeps

it in front of the eyes” (Bloch 1975, 14, emphasis added, my translation).⁹ *Mediation* is possible if the gaze “distances itself a little from the immediacy of the thing” (Bloch 1975, 14, my translation).

For Bloch, the cognitive process starts with the gesture of *rotating* [*Drehen*]. And this rotation takes place *in* the gaze. The rotation in gaze interposes an initial mediation between the subject and the multiple, undifferentiated, *Daß*: “we do not see what we experience. What must be seen must be rotated [*gedreht*] in front of us. Only in this way we can keep it in front of us without remaining ourselves immediate” (Bloch 1975, 13, my translation). This rotation allows a first determination of the *Daß*: namely, the *Daß* can now be determined as *Etwas*—that is, as *Something*.

However, rotation—according to Bloch—contains a further gesture: the *bringing-out* [*herausbringen*]; “what” has been rotated must be brought out of immediacy in order to be “experienced [*Erlebt*]” (Bloch 1975, 13, my translation). The synthesis of these two gestures is the *rotating-out* [*herausdrehen*]. *This rotation towards the “outside”* [*Die Drehung aus*] coincides with what Bloch calls *Ergriff*—i.e., *prehension*. Prehension is—according to Bloch—“the first logical operation [. . .] by which something still indeterminate—but tending to clarify itself as something distinct—is detached from the vague emotionality of the factual and the experienced” (Cunico 1980, 73, note 27, my translation). This detachment happens when a completely indeterminate “*some*” [*Irgend*] attracts the *logical attention* [*ein logisch aufmerken*] of the subject. Prehension is the operation through which the “*Some*” can be defined as “an indeterminate, empty *Es* [*It*] about which something can be enunciated” (Bloch 1975, 39, my translation); more specifically, prehension coincides with the indeterminacy “to be determined” (Bloch 1975, 39, my translation) which is contained in every logical subject—that is, in every *Es*. The logical subject

⁹ In this regard, it is interesting to notice that the analogy between hand-movement and cognition is used in vector calculus: it is the case of the so called *right-hand rule*. This convention is a mnemonic device for visualizing the orientation of axes in three-dimensional space; more specifically, the right-hand rule establishes that three fingers of a right hand can constitute a three-dimensional space circumscribed by the *x* axis (corresponding to the thumb), the *y* axis (corresponding to the index finger) and the *z* (corresponding to the medium finger). Apropos, it is interesting to underline that the computer-aided design software AutoCAD includes a function based on the *right-hand rule*. This function is used to imagine the orientation and rotation of a certain three-dimensional object; the rotation is used—for example—to check the correct design of that object. Considering this rule, the user can employ the software interface a) to reproduce a three-dimensional space circumscribed by his/her hand; b) to inscribe certain object in that space; c) to rotate the hand in order to observe the different faces of the object. From such a perspective, the rotation-gesture is assumed as an instrument of knowledge to experience certain objects also when a certain work is performed in the field of information technology.

can be determined only through predication, that is, when “by means of the copula, the subject to be determined is connected with the determining predicate” (Bloch 1975, 39, my translation).

I believe that Peirce’s theory presents homologous arguments. In *On a New List*, for example, the concept of “attention” designates the “faculty that directs the mind to an object” (CP 1.547). Moreover, attention is the faculty that “works”¹⁰ (Proni 1990, 78, my translation) on the “manifold of sensuous impressions” (CP 1.547)—i.e., on the *present in general*—recognizing an “IT” (CP 1.547, capital letters). Nevertheless, the IT “contained in attention, has no connotation, and therefore no proper unity” (CP 1.547). Furthermore, Peirce—just like Bloch—considers that “the *it* cannot itself be made a predicate. This *it* is thus neither predicated of a subject, nor in a subject” (CP 1.547). Only the copula can be the “junction of predicate to subject,” completing “the work of conceptions of reducing the manifold to unity” (CP 1.548). In this way, it seems possible to affirm that Peirce and Bloch maintain that predication presupposes *attention*. Moreover, both authors theorize a kind of *pre-subjectivity* (IT or Es) which remains undetermined until the attribution of a predicate. Therefore, Peirce’s IT and Bloch’s *Es* can be understood as a *subject to be determined*.

Bloch uses the gestural metaphor of “rotating-out” to explain how attention and prehension operate on the “multiple ‘something’ [*vielen Etwas*]” (Bloch 1975, 70, my translation) which coincides with the *ordinary present*. Proni seems to find a similar metaphor also in Peirce’s thought; particularly, *attention* can be understood as “the faculty or principle which, as Michelangelo Buonarroti would say, ‘per forza di levare’ [*by the action of bringing away*] ‘removes’ the first nucleus of impressions from the sensuous manifold” (Proni 1990, 78, my translation). These considerations by Proni can be linked to Maddalena’s analysis of the connection between complete gesture and labor.

As we have seen, according to Maddalena, *labor* can be considered as a complete gesture because it implies a “teleological transformation of reality towards a goal (symbol), realized at a particular point (index) according to an infinite set of possibilities (icon)” (Maddalena 2011, 9, my translation). In this perspective, Maddalena’s arguments might highlight further points of convergence between Peirce and Bloch. More specifically, I believe that Bloch’s theory of knowledge exactly

¹⁰ Interesting to note is how, in his analysis of the fundamental elements of the labor process, Marx connects *attention* [*Aufmerksamkeit*] to the concept of “purposeful will [*zweckmäßige wille*]” (2002, 452): “Apart from the exertion of his organs, a purposeful will is required for the entire duration of the labour process, which manifests itself as the worker’s attention [*Aufmerksamkeit*]” (2002, 452).

describes this process which starts from original vagueness and arrives at the generality of consequences through the concreteness of a singular event.

Such theoretical convergence can be identified in how Bloch structures the relation between the “Possibility” and the “subjective factor of will [*der subjektive Willensfaktor*]” (Bloch 1975, 128, my translation). Bloch structures his category of “Possibility” [*Möglichkeit*] by taking up the dual Aristotelian formulation of “possible” as *δυνάμει ὄν* [*dynamei on*] and as *κατὰ τὸ δυνατόν* [*kata to dynaton*]: 1) the first meaning defines the “being-in-possibility [*In-Möglichkeit-Sein*]” (Bloch 1975, 139, my translation); namely, *what-is-in-possibility*: a possibility which is contained in the matter, a possibility not concretely realized but concretely existing. 2) The second meaning defines the “being-according-to-possibility [*Maßgabe des Möglichkeit*]” (Bloch 1975, 139, my translation); namely, *what-is-according-to-possibility*. In this case, possibility—as Cunico affirms—coincides with “the locus of the concrete partial conditions of realisation, the historical limit and framework, the contingent and changing measure of what is ‘from time to time’ possible” (Cunico 1980, 14, my translation).

The *subjective factor of will* is the element which can realize the possibility of matter; the *subjective factor* is the *power* [*Potenz*] that *rotates out* the objective *potentiality of matter* [*Potentialität*], i.e., the *objective factor*. The subjective factor transforms matter according to its potentiality. Therefore, this *subjective intervention* is nothing more than an attempt to *anticipate* the latent element in the possibility and regularity of matter; more specifically, the *Anticipation* [*Antizipation*] is the desire of rotating out the latent and utopian element of matter, the possible “good future [*die guten Heraufkunft*]” (Cunico 1980, 67, my translation) of the world. The liberation of this *utopian possibility*—through the mediating intervention of anticipatory praxis—coincides with Bloch’s third gestural modality: *lifting* [*Heben*]. According to Bloch, “everything that is no longer immediate coincides with this being *lifted up* [*Heraufgehobensein*]” (Cunico 1980, 14, my translation). It is the mediating action of gesture that allows matter to bring to light its possible-real, its utopian potential. In Bloch’s theory, this—we may say, *complete*—gesture coincides with the three categories of rotating, bringing out, and lifting.

According to Cunico, Bloch outlines the matter as a “mater gestante e par-toriente” (Cunico 1980, 14), that is as a *pregnant and parturient mother*. Indeed, according to Bloch, the knowledge process starts from the multiple and undifferentiated present. In that moment, the matter coincide with “the obscurity of the moment lived before the future” (Bloch 1980, 127, my translation). Thanks to the anticipatory praxis of the human being, matter “throws itself into the future

[*in die Zukunft einschießt*],” like a mother who “unburdens her womb [*Ausgebürdung seines Schoßes*]” (Bloch 1980, 91, my translation).¹¹

5 Conclusion

To conclude, starting from this latter image depicted by Bloch, I believe a continuum can be identified between two different acceptations of the Latin verb “gerere,” understood in its generic meaning of “to carry” (as also pointed out by Maddalena). The first acceptation coincides with the intensive verb “*gestare*,” “to carry somebody within ourselves”; the Italian words “*gestante*”—i.e., *pregnant*—and “*gestazione*”—in English, *gestation*—derive exactly from this intensive form of “gero.” The second acceptation coincides with the word “*gestus*,” understood not only as “gesture,” “gesticulation,” but also as “movement.” This is the root of the Italian verb “*gestire*” understood not only as “gesticulate,” but also—and above all—as “govern,” “administer,” “manage”—from Latin “*manu agere*,” i.e., to lead by (a gesture of) the hand, and—extensively—to “carry out” an action according to a purpose. We could say: “knowing how to transform by being aware of the goal.” It is therefore the “gesture” that *brings-out*, that *brings to light* what is “*gestating*,” the possible “not-yet being” of matter.

In the light of these argumentations, it could be hypothesized that the three gestural modalities of rotating, bringing out and lifting summarize the *iconic imagination* of the possibilities contained in matter, the *indicative* character of subjective intervention and the *symbolicity* of anticipatory practice, understood as detection of latency in the tendency.

References

- Bellofiore, Riccardo and Tommaso Redolfi Riva. 2015. “The *Neue Marx-Lektüre*: Putting the critique of political economy back into the critique of society.” *Radical Philosophy* 189 (Jan./Feb.).
- Bloch, Ernst. 1975. *Experimentum Mundi. Frage, Kategorien des Herausbringens, Praxis*. Frankfurt am Main: Suhrkamp.

¹¹ In this regard, it is interesting to recall that—in a letter to Peirce dated November 20, 1904—Victoria Lady Welby (1837–1912) proposed a parallelism between the experience of childbirth and the category of *Thirdness*, understood as projection into the future. More generally, Welby proposed to read the Peircean categories in the light of the racial *mother-experience*. For more on this topic, see Petrilli (2009 and 2014).

- Bloch, Ernst. 1975, 1980. *Experimentum Mundi*, edited by Gerardo Cunico. Translated by Gerardo Cunico. Brescia: Editrice Queriniana.
- Bloch, Ernst. 1996. *The Principle of Hope*. Volume I. Translated by Neville Plaice, Stephen Plaice and Paul Knight. Cambridge: MIT Press.
- Borrelli, Giorgio. 2014. "Consumo di merci-segni e di segni-merci nella riproduzione sociale." *Ocula. Commemorating Charles S. Peirce (1839–1914): Interpretive semiotics and mass media* 15. <http://dx.doi.org/10.12977/ocula30>.
- Borrelli, Giorgio. 2020. *Ferruccio Rossi-Landi. Semiotica, economia, pratica sociale*. Bari: Edizioni dal Sud.
- Cunico, Gerardo. 1980. "Il sistema aperto dell'esperienza cosmico. Nota Introduttiva a *Experimentum Mundi*." Brescia: Editrice Queriniana.
- Ehrbar, Hans G. 2010. *Glossary to Marx's Capital and other Economic Writings*. <http://content.csbs.utah.edu/~ehrbar/glossary.pdf>, last accessed March 6, 2024.
- Farnesi Camellone, Mauro. 2009. *La politica e l'immagine. Saggio su Ernst Bloch*. Macerata: Quodlibet.
- Hudson, Wayne. 1982. *The Marxist Philosophy of Ernst Bloch*. London: Macmillan.
- Kant, Immanuel. 2000. *Critique of Pure Reason*. Cambridge: Cambridge University Press.
- Maddalena, Giovanni. 2011. "Il lavoro come conoscenza. Uno sguardo semiotico." *Spazio filosofico. Lavoro* 1: 1–11.
- Maddalena, Giovanni. 2014. "Gesto completo: uno strumento pragmatista per l'educazione." *Spazio filosofico. Educazione* 10: 31–41.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists' Incomplete Revolution*. Montreal: McGill-Queen's University Press.
- Marx, Karl. 1890, 2002. *Das Kapital*. Volume I. 4th ed. Translated by Hans G. Ehrbar. <http://content.csbs.utah.edu/~ehrbar/cap1.pdf>, last accessed March 6, 2024.
- Marx, Karl. 1906. *Capital. A Critique of Political Economy*. Volume I. Translated by Samuel Moore and Edward Aveling. New York: The Modern Library.
- Marx, Karl. 1992. *Capital. A Critique of Political Economy*. Volume I. Translated by Ben Fowkes. London: Penguin Books.
- Marx, Karl. 2011. *Il capitale. Critica dell'economia politica. Libro primo. Il processo di produzione del capitale (1863–1890)*, edited by Roberto Fineschi. Translated by Delio Cantimori, Roberto Fineschi, and Giovanni Sgrò. Naples: La Città del Sole.
- Morris, Charles W. 1938. "Foundations of the theory of signs." In Neurath, Otto, Rudolf Carnap, and Charles W. Morris (Eds.). *International Encyclopaedia of Unified Science*. Volume I, 2, 1–59. Chicago: University of Chicago Press.
- Peirce, Charles Sanders. 1982. *Writings*, Volume I. Bloomington: Indiana University Press.
- Peirce, Charles Sanders. *The Collected Papers of Charles Sanders Peirce*. <https://colorysemiotica.files.wordpress.com/2014/08/peirce-collectedpapers.pdf>, last accessed March 6, 2024. [Abbreviated as CP.]
- Petrilli, Susan. 1999. "Charles Morris's biosemiotics." *Semiotica* 127 (1/4): 67–102.
- Petrilli, Susan. 2009. *Signifying and understanding: Reading the works of Victoria Welby and the signfic movement*. Berlin and New York: De Gruyter–Mouton.
- Petrilli, Susan. 2014. *Nella vita dei segni. Percorsi della semiotica*. Milan and Udine: Mimesis.
- Petrosino, Silvano. 2004. *Piccola metafisica della luce*. Milan: Jaca.
- Ponzio, Augusto. 1988, 2012. *Ferruccio Rossi-Landi e la filosofia del linguaggio*. Lecce: Pensa MultiMedia.
- Ponzio, Julia. 2020. *C. S. Peirce. Le avventure della forma*. Genova: il melangolo.
- Proni, Giampaolo. 1990. *Introduzione a Peirce*. Milan: Bompiani.
- Rossi-Landi, Ferruccio. 1977. *Linguistics and economics*. The Hague: Mouton.

Part III: **Gestures in Psychology and the Cognitive Sciences**

Michela Bella

Chapter 11

Toward a Psychology of Gesture

Abstract: In this chapter, I argue that a broader understanding of pragmatism can contribute to a psychologically informed development of Giovanni Maddalena's philosophy of gesture. Many contemporary studies, ranging from the philosophy of mind to the social sciences, testify to the centrality of the psychological perspective in the debates surrounding gesture. My proposal is to supplement Maddalena's theory with a Jamesian-inspired philosophical psychology of gesture. By integrating James' idea of psychological concreteness with Maddalena's notion of gesture and Peirce's theory of perception, I posit that a pragmatist psychology of gesture can improve the recognition of personal identity. This approach has potential applications not only in the philosophical sciences but also in psychology and social sciences.

Keywords: philosophy of gesture, pragmatism, concreteness, relational psychology, perception

1 Introduction

In recent decades, the traditional view of identities as fixed and unchanging has been challenged in scientific and cultural contexts. The metaphor of *solidity* to talk about identity turned into *fluidity* (Bauman 2000) as an opposition, carrying on another set of theoretical and socio-political problems whose effects are now being experienced. In the fragmentation of the public sphere, how we recognize evolving identities is a core theme for philosophy, psychology, and social sciences. Although constructing a social ontology is not the primary goal of social sciences, an epistemological and ontological understanding of how individual and collective subjects are recognized through time and change is needed to elaborate more convenient methodological instruments and approaches to analyzing social phenomena.

For at least three reasons, I claim that adopting a pragmatist epistemology in philosophical psychology could be a viable alternative to other epistemologies dominating the scientific panorama—namely, phenomenology, constructivism,

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new forms of positivism, and different dichotomous approaches to knowledge and reality.¹

- 1) Firstly, pragmatism shows deep compatibility with dynamic views of experience, drawing on an original reception of evolutionary continuity (in both epistemological and ontological aspects). For pragmatists, there is no change without novelty and no permanence (hence, identity) without continuity.
- 2) Secondly, pragmatism developed an integrated vision of humans as natural and cultural/enlanguaged beings. On the view shared by all classical pragmatists, normative and contingent aspects of reality are deeply intertwined (cf. Calcaterra 2019 and Dreon 2022).
- 3) Finally, pragmatism supports a specific synthetic approach to psychological issues by adopting internal and external criteria to evaluate experience, thus avoiding radical cognitivist and behaviorist outcomes.

This chapter paves the way for the development of a pragmatist philosophical psychology built in the philosophy of gesture and its connections with relational approaches to psychology and social sciences. I suggest that gestures enable us to fruitfully put relational conceptions of sociality developed in contemporary social sciences (Dépelteau 2018; Donati 2021; and Bellini 2024) in dialogue with the philosophical idea of changing identity (Maddalena 2015 and 2021), thus contributing to a more concrete and integral understanding of personal identity. My proposal is to supplement Giovanni Maddalena's theory of gesture, which relies mainly on Peircean epistemology, with a Jamesian-inspired philosophical psychology of gesture. By integrating James' idea of psychological concreteness with Maddalena's notion of gesture and Peirce's theory of perception, I posit that a pragmatist psychology of gesture can improve the recognition of personal identity. To this purpose, I will first adopt Maddalena's notion of gesture to recognize changing identities. Secondly, by considering some critical aspects of Peirce's theory of perception, I will focus on specific claims made by James that I wish to recover as complementary features of a pragmatist philosophical psychology of "gesture," specifically concerning the recognition of identities. In particular, for my purposes, it is significant that James insisted that 1) philosophical and psychological knowledge is rooted in direct perception; and 2) the embodied understanding of feelings is sensorially and relationally fringed.

¹ This step is crucial for social psychology and its dialogue with other social sciences.

2 Philosophy of Gesture: A Phenomenological and Semiotic Analysis

Maddalena's hypothesis of the "gesture" as a synthetic tool for acquiring knowledge comes to the fore as a contemporary reinterpretation of the notion of "synthesis" that he derives from Peirce's logical-mathematical conception of the continuum. In gestures, Maddalena identifies the completely synthetic instrument to acquire knowledge longed for by all classical pragmatists. Gestures are tools for synthetic reasoning, which is the way we understand something new, construct our knowledge and recognize identity.

The gesture is any performed act with a beginning and an end that carries meaning (from *gero* = I bear, I carry on). Meaning will be pragmatically understood as the cluster of conceivable effects of an experience. (Maddalena 2015, 69–70)

Complete and incomplete gestures show different levels of syntheticity according to the semiotic and phenomenological elements they blend. Respectively, these are generality (symbolicity), actuality (indexicality), iconicity (possibilities of forms and feelings); firstness (feeling), secondness (reaction), and thirdness (generality). Complete gestures are the original forms of reasoning from which all other reasonings (language included) derive (Maddalena 2015, 171). Liturgies, rites, performances, and experiments are complete gestures. They are "the expression of meaning embodied in one person at a singular moment, and [they tend] to become [habits] for the person and eventually for the generalized person, the people or the tradition" (72).

Maddalena underlines that complete gestures possess: 1) a "threefold relationship" in which two subjects (objects) are related according to a general law, to which they teleologically tend to embody a possible idea in a determinate way (2015, 72–73). 2) The embodiment enhances the general law and the path of determination that proposes, fosters, or reinforces a habit of action. 3) This relationship singles out the objects (by indices) according to an interpretative path that helps in determining and transforming some "form" connected to the two objects (icons). 4) And that the determination reinforces or proposes the interpretation or meaning.

In this framework, recognizing personal identity is part of the general problem of recognizing diachronic identity, which is the starting point of Maddalena's philosophy of gestures. We relationally recognize personal (diachronic) identity—the new in the same or the novelty in a continuity—through complete gestures (Maddalena 2015, 103). We cannot remember all of our personal history; we only remember some "actions (as relationships, encounters) as significant to establishing the

continuity of our identity [. . .] complete gestures that determined our identity” (Maddalena 2015, 109). Meaningful gestures have driving energy related to their semiotic nature. What is most relevant for personal identity, accordingly, is teleology: embodied meanings tend (phenomenologically and semiotically) to a telos. Actually, “The telos is the embodied meaning itself” (Maddalena 2015, 73), where *telos* means the tendency to generalization (from vagueness to meaningful generality), that is, the tendency to habit taking that the structure of (complete) gestures that form our identities possesses. In a nutshell, teleology relies on the semiotic nature of the embodied signs that we are. Personal identities can be seen as embodied signs, and in this perspective, gestures possess the potential for generalization to be interpreted by others contributing to a new understanding of ourselves through different embodiment and performance. In this way, personal identity is the result of the teleological drive of complete gestures (Maddalena 2015, 74) and a matter of continuity through time, novelty, unique embodiment, and significant relations.

3 Perception between Peirce’s Logic and James’ Psychology

Maddalena’s view of personal identity relies on Peirce’s phenomenology and semiotics. Accordingly, his understanding of the self as relational depends on the relational nature of the embodied signs that we are.² In line with Peirce’s view, Maddalena prioritizes a logical and metaphysical analysis of identity, admitting that while the psychological analysis is important, he postpones it for further investigation through his theory of gesture.

In order to elaborate a psychological analysis of personal identity informed by gesture theory, it is first necessary to highlight the risks and propose possible solutions to a perspective that looks at subjectivity primarily from the point of view of generalizable aspects. In other words, it is necessary to identify the limits of a logic that tends to foreground generality and communicability in all individual expressions. Perception is a privileged domain for making this point, as it is the first level of the relationship between the individual and the world. It is not surprising that developing a psychology of gestures related to the recognition of personal identity involves analyzing perception: the ground on which the game between a logical and a psychological declension of the issue could ever be

² Peirce famously considered the self a symbol. For Peirce, “[t]he subject in its innermost being is itself a form of semiosis” (Colapietro 1989, 37).

played. The study of perception shows the distance that exists between a logical-inferential interpretation of the relationship with reality, which tends to always bring the actual and relational aspects of perception to a level of communicability, and a reading of perception that emphasizes the central role of sensibility in its specific shaping of subjective experiences instead. The latter, although not (or not yet) communicable, produce decisive effects on the recognition of personal identity. From a psychological perspective, paying less attention to the fringes of feeling does not allow for a complete understanding of the singular character of the causal relations that contribute to determining personal identities.³

Maddalena has made progress in overcoming the limitations of logical-inferential analysis of perception. He places more emphasis than Peirce on the embodied aspects of synthetic reasoning by exploring the potential of its “gestural” nature. However, his investigation of the qualitative contribution of the perceptual-sensational dimension to reasoning is still primarily explained through logical and mathematical means.

Although Peirce’s interest in experimental psychology is well known today (Cadwallader 1974; Fisch 1987; and Ambrosio 2016), his assessment of psychology and its relationship with epistemology remains debated. Peirce insisted that logic should not rely upon psychology, but rather the reverse, arguing that psychology could not disregard the requirements of logic and ultimately required a metaphysics (Peirce, MS 1099, and Girel 2003, 174).⁴ His has been interpreted as a claim for disentangling the logical and the psychological (*as in* Bellucci 2015) or as a general warning on the limited role that psychology could have in logic and a specific objection against introspective psychology (Wilson 2024). Wilson underlines that Peirce draws on socio-psychological facts, as in his late 1870s essays, namely, “behavioral habits knowable by common experience” (Wilson 2024)⁵ and intentionally not on introspective analysis. For Peirce, introspective psychology posed epistemological problems related to the status and role of perception for knowledge.

An in-depth analysis of Peirce’s theory of perception goes far beyond the scope of this work.⁶ My aim in touching upon perception is to get a sense of the roots of the disagreement between Peirce and James’ epistemologies, which is, I claim, behind Maddalena’s postponement of psychological analysis. This step is

3 Probably this is a point at which Peirce and James’ views can integrate with one another most fruitfully.

4 Cristalli argues that in the Telepathy manuscript, we can find Peirce’s definitive idea in favor of a metaphysical investigation of perception (cf. Cristalli 2020, 206).

5 For introspective psychology, Peirce meant that “which focuses on *feelings* rather than on the mental phenomena that he [Peirce] tends to focus on—namely habits” (Wilson 2024).

6 See Wilson 2024 and Legg 2017.

necessary to further develop his philosophy of gesture from a psychological perspective.

The “percept” to which James refers in his psychological and philosophical works (James 1979) is the natural bone of contention. Peirce’s and James’ views channel diverging concerns on the subject that can be summarized as “logical-metaphysical” and “sensational-physiological,” respectively. According to Peirce, what people generally think to be immediate perceptions result from unconscious reasoning. Peirce investigates the logic of perception and accordingly classes it as: “anything [. . .] wherein a positive qualitative content is forced upon one’s acknowledgment without any reason or pretension to reason” (CP 7.623). More specifically, he distinguishes the “percept,” “perceptual judgment,” and the “percipiuum,” by which Peirce means the whole process of perception keeping together the two previous elements (CP 7.629). Peirce describes the percept as something “absolutely dumb” (CP 7.622) forced upon us, which phenomenologically is composed of elements of firstness (qualities) and secondness (vividness). The perceptual judgment, which is in relation to the percept as an index, neither differs from the “condition of forcefulness nor that of irrationality” of the percept save for the fact that it “professes to represent the percept” (CP 7.628). As Cristalli remarks: “The perceptual judgment testifies about the percept and gives it a name; it thus introduces in perception an element of mediation [. . .] it goes beyond the pure singularity of the percept” (2020, 194). Peirce’s strategy seems to shift the focus from the dumb percept to the whole perceptual process and foreground the reflexive element introduced by the perceptual judgment over the percept. Moreover, in line with his inferential view, Peirce finds that “the percept, in spite of its appearance as a dumb presence, is in fact the result of an unconscious process” (Cristalli 2020, 199).⁷

While Peirce’s theory of perception follows the inferential hypothesis of Wundt (Cristalli 2022), James’ opinions on perception are derived from the sensationist hypothesis of Ewald Hering (Madelrieux 2008). James was not against understanding perception as a form of reasoning, as he knew its meaning depends on a narrower or broader definition of reasoning. He strongly resisted associating reasoning with unconscious activities because he did not want the explanation of lower physical activities and logical operations to collapse into one another.⁸ The concept of “unconscious inferences,” is either “*a useless metaphor, or a positive*

7 “[T]he perfection of the percept’s surdity consists in its not so much as professing anything” (CP 7.628).

8 Klein (2020) argues that James’ rejection of unconscious mentality results from his objection to psychological elementarism: “So what I am calling James’s Master Objection to elementarism goes like this. Elementarism presupposes the existence of an unconscious mentality. If there is unconscious mentality then mental states can violate the logic of identity. But mental states so-

misleading confusion” (James 1981, 756). For James, perception and reasoning are two sides of the same coin, which is the psychological process of “the association of ideas” that in cerebral physiology corresponds to “the law of habit” (James 1981, 756; cf. Bella 2019).

For his part, Peirce believed James misunderstood the definition of unconscious inference since he thought about an argument with an utterly unconscious premise or term. Instead, the meaning for Peirce is nuanced and indeed behavioral: general beliefs exist in the form of *habits*, represented by the association “If A, then B.” That is why, upon a particular suggestion, we behave in a certain way without knowing why. In this view, perceptual judgments would be non-controlled operations of the mind close to logical inferences (Girel 2021). Perception misses two fundamental features of logical inferences: it is not generalizable to all (or most) analogous cases, and accepting its conclusion is not the result of a conscious inference (CP 8.67). These shortcomings justify why Peirce considers perceptual judgment not precisely as a logical judgment.

James is not interested in analyzing perception from a specific logical perspective. Instead, he appeals to an “uncritical” approach to immediate experience which was supposed to free psychology from the burden of metaphysical implications.⁹ In an 1885 essay, he offers elements for comparison with Peirce’s analysis. Here he does not address the specific content of perception but rather investigates the function of a “feeling of q” to notice its cognitive value. In this respect, one of the main upshots of the paper is the acknowledgment that 1) “A feeling feels as a gun shoots”¹⁰ and 2) the assessment of the cognitive value of feeling on the practical level, for “all feeling results in action” (James 1975, 23).

Not unlike Peirce’s analysis of the percept as “pure unreasonableness” presence (CP 7.628), James considers the feeling or sensation “speechlessness” (James 1975, 13). However, he harshly criticizes any philosophical attempt to make this notion meaningless by way of an “everlasting slip, slip, slip, of direct acquaintance into knowledge-about until at last nothing is left about which the knowledge can be supposed to obtain” and “all ‘significance’ depart[s] from the situation” (James 1975, 13). In this respect, both Peirce and James believe percepts are the compelling and

construed would be queer sorts of things that could not possibly be subject to scientific study. Thus, elementarism undermines the goal of establishing a genuine science that takes the mental state as its proper object, a goal elementarists themselves claimed to pursue” (304).

⁹ The disconnection of common-sense methodological assumptions from metaphysics was discussed between Peirce and James (see Girel 2003 and Bella 2019).

¹⁰ “A feeling feels as a gun shoots. If there be nothing to be felt or hit, they discharge themselves *ins blaue hinein*. If, however, something starts up opposite them, they no longer simply shoot or feel, they hit and know” (James 1975, 20).

unaccountable starting point of knowledge, and neither considers perception an “incorrigible” ground for it (cf. Putnam 2017, 35).¹¹ Perception is a complex and through and through fallible process that Peirce insists on investigating on a logical level, while James first and foremost explores in physiological terms and defends the sensational elements of perception as the real backbone of any gnoseological discourse.

Over the years, however, more than remaining loyal to the invoked separation between psychology and metaphysics, which proved unbearable on practical grounds, James wishes to renovate the categories coined by traditional empiricist philosophy into a pragmatist jargon informed by psychological knowledge, thus getting to the double goal of de-transcendentalizing the philosophical language concerning psychology and encourage philosophy and psychology’s mutual information. In this view, his 1885 essay foresees James’ debated theory of truth and his emphasis on the importance of the “transitive” parts of thought.¹² In this paper, the author tries to establish that the cognitive value of feeling is related to the function it performs, which means the behavioral consequences it produces in helping our adaptation to reality. This entails that one can only make hypothetical judgments about others’ beliefs based on the effects they produce. For James, the feeling’s function of cognition results in its practical self-transcendence: for two persons meaning the same world should result in “pointing to” the same world. The fact that another human being acts as I would act if I had a (feeling of a) headache, or that they are affected by my headache as if they had had the same feeling, is the sign by which I can think that we (or our feelings) are meaning the same world. In James’ view, practical effects are the self-transcendence of feeling, that is to say, another human being knows my world in as much as they affect my world as I do much of it; and “before I can be sure you mean it as I do, you must affect it just as I should if I were in your place. Then I, your critic, will gladly believe that we are thinking, not only of the same reality, but that we are thinking it alike, and thinking of much of its extent” (James 1975, 23–24).¹³

11 Like the Pragmatism/Pragmaticism debate, in connection with James’ “radical empiricism” (EP2, 334), Peirce revindicated himself as a “radical empiricist”: “I myself happen, in common with a small but select circle, to be a pragmatist, or “radical empiricist,”†7 and as such, do not believe in anything that I do not (as I think) perceive: and I am far from believing in the whole of that” (CP 7.617; see also Wilson 2016, 31).

12 For the terminological discussion on the “transitive” parts of thought between Peirce and James, see Bella (2019, 80 ff.).

13 Despite James considering it a “chapter in descriptive psychology—hardly anything more,” the text was later republished in *The Meaning of Truth* (1975 [1909]), thus testifying to its importance for James’ mature epistemology, as well as his attitude to move between psychology and philosophy on the epistemological level of analysis.

Against this backdrop, I can hint at divergencies between James' and Peirce's views that are relevant to the goal of developing a pragmatist psychology built in the philosophy of gesture. Peirce and James respectively foreground mediate or immediate processes of knowledge. On the one side, James distinguishes two kinds of knowledge—the knowledge by *acquaintance* and the knowledge *about*—to preserve the perceptual order as the natural origins and necessary conclusion of any conceptual chain. On the other, Peirce's inferential theory of perception excludes the possibility of immediate knowledge, at the same time remaining ambiguous about the compulsory force that percepts (and perceptual judgments) have on our consciousness.

Regarding perception, James' and Peirce's viewpoints are not necessarily in opposition to one another. They focus on different aspects of perceptual knowledge, which are related to their different ontological perspectives. Peirce's main concern lies in exploring the modal category of possibility, while James is more focused on actuality.¹⁴ Although both Peirce and James believe that the original matrix of knowledge lies in perception, they have different approaches to this cognitive process. While Peirce stresses the limits perception poses to the freedom of interpretation, James emphasizes the sensational richness that is given in perception. According to James, percepts provide us with a fuller understanding of reality, while concepts are “forever inadequate to the fullness of the reality to be known” (James 1979, 45) but serve as useful tools for practical purposes.

4 Developing a Relational Psychology of Gesture

As a psychological development of the philosophy of gesture, I should consider what James' sensationalist view of perception adds to the picture. James identifies an element of concreteness in how each person *feels* the ordinary reality largely shared by human beings. The sensational element of feeling conveys the importance of paying attention to psychological concreteness, which means the concrete embodiment coloring our feeling and relations, not only as dragged by the symbolic level, that is, by the many possible interpretations of feeling. In James'

¹⁴ A hint to this interpretation can be detected in Peirce's analysis of the “two kinds of definiteness” of the percept: “The percept, however, exhibits itself in full. These two kinds of definiteness, first, that the percept offers no range of freedom to anybody who may undertake to represent it, and secondly, that it reserves no freedom to itself to be one way or another way, taken together, constitute that utter absence of “range” which is called the singularity, or singleness, of the percept, the one making it individual and the other positive” (CP 7.626). Peirce also criticized James for his almost exclusive attention to the modality of *actuality* (CWJ).

description of the “stream of thought,” the continuity felt by consciousness in its thinking activity is ultimately traced back to our biological existence, which more or less consciously we perceive as a constant presence that tinges all our experiences with “warmth and intimacy” (James 1981, 316). The problem of recognizing personal identity can be seen in the continuous rebound between stability and change. In passing through different mental states, we perceive continuity with our bodily self, which allows us to recognize those thoughts as ours. Personal thoughts are suffused with the particular warmth and intimacy with which we perceive our bodies. Feelings change, but a sense of the continuity of personal identity is recognizable at this level.

From the point of view of this “fluctuating material” (James 1981, 279), it is difficult to draw a definite line between what is ours and ourselves: these things provoke the same emotions (cf. James 1981, 279–280). Self-awareness produces a kind of “organic emotion” whereby we feel our thoughts and the actual direct perception of our bodily existence wrapped in a kind of “warmth” (James 1981, 316).

The sense of personal identity that corresponds to the feeling of continuity between thoughts suffused with warmth and intimacy is not a logical condition for James but a concrete perception. For this reason, even if the psychologist could show that the judgment of personal identity was wrong, this would not invalidate the existence of the very sense of personal identity:

The sense of our own personal identity, then, is exactly like any one of our other perceptions of sameness among phenomena. It is a conclusion grounded either on the resemblance in a fundamental respect, or on the continuity before the mind, of the phenomena compared. (James 1981, 318)

The perceptual judgment from which we derive the sense of personal identity concerning different moments of our experience is not different from any other perceptual judgment about external phenomena. The feeling of “warmth” that pervades our different selves connects them in the same stream of thought without implying a substantial unity and, therefore, without excluding aspects of discontinuity, novelty, and change. This means that in the “flow” of subjective consciousness, judgments of partial similarity between feelings experienced as continuous constitute “the real and verifiable ‘personal identity which we feel’” (James 1981, 319) and also that where similarity or continuity are no longer felt it is impossible to conclude a judgment of personal identity.

Getting back to the connection with Maddalena’s paradigm, the recognition of an identity between two gestures that are part of a single relational experience can be seen in terms of the recognition of the relatively “substantive” aspects with respect to the “transitive” parts in the flow of personal experience.

It is worth noting that Peirce was convinced by the conceptual distinction between “substantial parts” and “transitive parts” elaborated by James in his *Principles*, considering it a good psychological description of the theoretical process of reasoning in the field of logic. For Peirce, the difficulty of grasping and converting a “transitive thought” into a “resting place” of the mind was, as Girel has well expressed, “exactly the difficulty of diagrammatic reasoning: to make the relations appear as relations” (Girel 2003, 188). In James’ classical analysis, the practical purpose of the transitive parts of thought is stabilization, while the substantive parts are constitutively fringed or relationally connoted. The substantive and transitive parts are comparatively defined with one another, some are more transitive than others, but there is gradation and instability. Fringed thoughts depend on the bodily perception, the self is described as the “storm centre” (cf. James 1976, 86), which is our constitutive medium—illness and health, old age and youth (James 1981)—but also on biographical, familial, historical, geographical, cultural, and linguistic situationality as more or less consciously affecting the body.

To recognize oneself as the same person at different moments, James pays great attention to the sensational and relational dimension through which personal continuity develops. In Maddalena’s hypothesis, personal identity finds expression in gestures as “embodied” signs that potentiate the significance. These gestures express a person’s temperament and attitudes, the same nuances with which meanings are understood, and also become the constituents of the very memory of personal identity. Hence, even the figural identity between so-called complete gestures, which is not mere similarity, seems to describe a continuous and unified development related to the complex semiotics of these signs that makes it possible for them to be recognized as the completion of meaning *a posteriori* and anticipation of the future realization of another “embodied” gesture (Maddalena 2009, 77).

5 Concluding (or Opening) Remarks

Recognizing evolving identity occurs through gestures that are characterized by psychical concreteness. The appeal to the sensible concreteness of mental states fits well with James’ idea that the original matrix of knowledge is perceptual and the fullness of reality is given in perception. Without attention to psychological analysis, many levels of relationship with others would not be understandable. In Peircean terms, this translates into the idea that iconic and indexical aspects guide perceptual judgment and condition it decisively. James’ dogged intention to save “*dumb* or anonymous psychic states” (James 1981, 239) from suppression or

reduction to conventional mental states about predetermined objects confirms the importance of preserving the plurality of nuanced idiosyncrasies of feelings. The image of the “sounding board,” used by James, clarifies his view: personal identity consists of a network of unique sensory reverberations. Understanding how one feels impressions and situations requires attention to the specific psycho-physiological and biographical constitution of persons, which includes their history of meaningful personal relationships and how these condition the way they reframe historical-socio-cultural sensibility.

From the categorical point of view, Peirce accused James of focusing mainly on secondness and thus on the mode of actuality—besides committing several other categorical confusions.¹⁵ James only partially accepts the inferential idea of Peircean continuous sign reference. Even when he carries out a philosophical investigation of perception in later years, he distances himself from Peirce by emphasizing the significance of the mute and sensational element of psychological phenomena, however uninterpreted. From this point of view, preserving mere presence without seeking a level of symbolic communication expresses a desire to give citizenship to all unidentified sensations while waiting to develop a psychological vocabulary capable of considering them. Meanwhile, it is good to remain in the vague linguistic territory to preserve the perceptual richness of mental life.

Peirce and James meet at the end of the road with the idea of habit-taking, and that embodiment enriches the meaning of signs. However, Peirce needs James’ attention to the depth and delicacy of the phenomenology of psychic life to say this. The specific way each person feels is something that psychological descriptions must consider, even when an interpretive explanation remains inaccessible to the person themselves.

This has to do with people’s physiological-biographical and relational-affective history: every meaningful action shows a potential for interpretation that arises from and depends—especially in the actual dimension—on the quality of meaningful relationships. People we have become familiar with are usually good interpreters of our actions. This means bringing to the forefront the contingent aspect of the biographical moment and the emotional-physiological condition of the individuals involved in gestures. Accordingly, recognizing personal identity is a unitary cognitive-emotional relational process not reducible to a mere comparative conceptual analysis of its contents considered in an absolute (non-relational), timeless,

¹⁵ Peirce detected four kinds of categorical confusions in James’ *Principles*: between Peirce’s first and second; second and third; third and first; and between different aspects of the same category and their hypostatization as different categories. (cf. Peirce 1891, R 1099).

and decontextualized way. From this perspective, the meaning of personal continuity is established as *a posteriori* within a continuity that is directional and, therefore, potentially implies an ultimate goal.

The contingency of lived situations is where novelty and the concrete possibility of driving complete gestures arise. Such gestures show potential for comprehension (generalization) by others best appreciated in a philosophy of gesture informed by Jamesian philosophical psychology. From an integrated perspective, how psychological difficulties can lead to misinterpretations or even preclude possible levels of understanding of situations can be better acknowledged. Psychological balance, or lack thereof, contributes to constructing meaning and directs the disambiguation of gestures. The way we try to disambiguate or flesh out subtle meanings occurs by privileging, in Maddalena's words, the iconic and indexical elements of gesture (tone of voice, conviction, etc.). Since psychological issues make most of the difference in these cases, many issues still need to be explored from this perspective to clarify the fact that at the phenomenological level, phenomena experience relations with themselves, with other phenomena (objects or subjects), and "with a relation that presides over any kind of generality" (Maddalena 2015, 71). Among these issues, we highlight the following: (1) the peculiar sensory/physiological aspects, which we have tried to rehabilitate through the Jamesian perspective on perception; (2) the role of significant others and meaningful relationships in recognition of personal identities—and how sensitively unique these relationships are; and (3) how sensory aspects are reshaped by meaningful relationships—the reciprocal feedback effect between concrete relationships and each person's sensibility. Relationships can develop into relational habits with significant others, and the psychological warp of these relationships significantly qualifies, or we would say with James, "colors" the gestures with a unique nuance. From this point of view, if relationships are the *sine qua non* of gesture completeness, psychologically significant relationships and their sensitive qualities can, in turn, contribute to the level of gesture completeness. Psychological relationships are the privileged locus where sensitive and relational qualities can be seen in action and recognized as influencing gestures. It suffices here to consider the therapeutic relationship: the psychologist does not judge the patient's universe of values. However, there must be common ground to allow a therapeutic relationship to start, and the relationship quality between patient and therapist inevitably influences the therapeutic process.¹⁶

¹⁶ Consider the therapeutic relationship and epistemologies that seek to privilege a complex qualitative rather than quantitative assessment of the treatment outcomes (George Kelly). Generalizability of meanings is what common sense considers the standard of mental health.

In Maddalena's Peircean paradigm, personal diachronic identity is not entirely given in life because it is a "dynamic object," and as such, it is only partially given as an "immediate (conventional) object." However, it can be prefigured by considering what we have been and what we will be in the future, our future gestures. The tendency toward stabilization of personal identity does not preclude, within certain limits, the possibility of sudden changes in habits—i.e., think of conversions—insofar as it remains that the gestures made influence future possibilities for change, at least regarding the qualities of change.

References

- Ambrosio, Chiara. 2016. "Composite Photographs and the Quest for Generality: Themes from Peirce and Galton." *Critical Inquiry* 42 (3): 547–579.
- Bauman, Zygmund. 2000. *Liquid Modernity*. Cambridge: Polity.
- Bella, Michela. 2019. *Ontology after Philosophical Psychology. The Continuity of Consciousness in William James's Philosophy of Mind*. Lanham: Lexington.
- Bellini, Pier Paolo. 2024. *The Creative Gesture*. London: Palgrave Macmillan.
- Bellucci, Francesco. 2015. "Logic, Psychology, and Apperception: Charles S. Peirce and Johann F. Herbart." *Journal of the History of Ideas* 76 (1): 69–91.
- Cadwallader, Thomas C. 1974. "Charles S. Peirce (1839–1914): The First American Experimental Psychologist." *Journal of the History of the Behavioral Sciences* 10 (3): 291–298.
- Calcaterra, Rosa M. 2019. *Contingency and Normativity. The Challenges of Richard Rorty*. Leiden: Brill-Rodopi.
- Colapietro, Vincent. 1989. *Peirce's Approach to the Self: A Semiotic Perspective on Human Subjectivity*. Albany: State University of New York Press.
- Cristalli, Claudia. 2020. *The Philosophical Psychology of Charles S. Peirce*. PhD Dissertation. London: University College London.
- Cristalli, Claudia. 2022. "Unconscious inferences in perception in early experimental psychology: From Wundt to Peirce." *Journal of the History of the Behavioral Sciences* 58: 432–448.
- Dépelteau, Francois (Ed.). 2018. *The Palgrave Handbook of Relational Sociology*. New York: Palgrave Macmillan.
- Donati, Pierpaolo. 2021. *Transcending Modernity with Relational Thinking*. London: Routledge.
- Dreon, Roberta. 2022. *Human Landscapes. Contributions to a Pragmatist Anthropology*. New York: State University of New York Press.
- Fisch, Max. 1987. "A Chronicle of Pragmatism, 1865–1879." In Ketner, Kenneth Laine and Christian J. W. Kloesel (Eds.). *Peirce, Semeiotic, and Pragmatism*. Bloomington: Indiana University Press.
- Girel, Mathias. 2003. "The metaphysics and logic of psychology: Peirce's reading of James's principles." *Transactions of the Charles S. Peirce Society* 39 (2): 163–203.
- Girel, Mathias. 2021. *L'esprit en acte. Psychologie, mythologies et pratique chez les pragmatistes*. Paris: Vrin.
- James, William. 1975. *The Meaning of Truth*. Cambridge and London: Harvard University Press.
- James, William. 1976. *Essays in Radical Empiricism*. Cambridge and London: Harvard University Press.
- James, William. 1979. *Some Problems of Philosophy*. Cambridge and London: Harvard University Press.

- James, William. 1981. *Principles of Psychology*. 3 Volumes. Cambridge and London: Harvard University Press.
- James, William. 1992–2004. *The Correspondence of William James*. 12 Volumes. Charlottesville: University Press of Virginia. [Abbreviated as CW.]
- Klein, Alexander. 2020. “The Death of Consciousness? James’s Case against Psychological Unobservables.” *Journal of the History of Philosophy* 58 (2): 293–323.
- Legg, Catherine. 2017. “Idealism Operationalized: How Peirce’s Pragmatism Can Help Explicate and Motivate the Possibly Surprising Idea of Reality as Representational.” In Hull, Kathleen A. and Richard Kenneth Atkins (Eds.). *Peirce on Perception and Reasoning. From Icons to Logic*. New York: Routledge.
- Maddalena, Giovanni. 2009. *Metafisica per assurdo*. Soveria Mannelli (CZ): Rubbettino.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatists’ Incomplete Revolution*. Montreal, Kingston, London, and Chicago: McGill-Queen’s University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Rome: Carocci.
- Madelrieux, Stéphane. 2008. *William James. L’attitude empiriste*. Paris: Presses Universitaires de France.
- Peirce, Charles S. 1891 [c.]. Questions on William James’s Principles of Psychology 1. MS [R] 1099.
- Peirce, Charles S. 1931–1935, 1958. *Collected Papers of C. S. Peirce*. 8 Volumes. Volumes I–VI, edited by Charles Hartshorne and Paul Weiss. Volumes VII–VIII, edited by Arthur W. Burks. Cambridge: Harvard University Press. [Abbreviated as CP.]
- Peirce, Charles S. 1998. *The Essential Peirce*. Volume II, edited by the Peirce Edition Project. Bloomington: Indiana University Press. [Abbreviated as EP.]
- Putnam, Hilary. 2017. “Pragmatism and Verificationism.” In Putnam, Hilary and Ruth Anna. *Pragmatism as a Way of Life*, edited by David Macarthur, 21–35. Cambridge and London: Harvard University Press.
- Wilson, Aaron B. 2016. *Peirce’s Empiricism. Its Roots and Its Originality*. Lanham: Lexington.
- Wilson, Aaron B. 2024. “Peirce, Perception, and Empiricism.” In De Waal, Cornelis (Ed.). *Oxford Handbook of C. S. Peirce*. Oxford and New York: Oxford University Press.

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Chapter 12

Psychoanalysis as a Science of Incomplete Gestures

Abstract: This chapter deals with the importance of gestures in psychoanalysis. To that end, I will adopt a pragmatic and semiotic approach to the philosophy of psychoanalysis, drawing theoretical resources from pragmatism, specifically from Giovanni Maddalena's theory of gesture. In this way, I will attempt to offer an alternative to an overly intellectualized understanding of psychoanalysis by highlighting the importance of incomplete gestures in psychoanalytic practice and theory. By leaning on Jonathan Lear's interpretation, I will highlight the pragmatic dimension of transference, understood as a complete mixture of complete and incomplete gestures. In the final part of the chapter, I will briefly speculate about the relation between completeness and vague gestures.

Keywords: philosophy of psychoanalysis, pragmatism, incomplete gesture, transference

1 Introduction

The problem of intellectualism has haunted philosophical discussions on psychoanalysis since the dawn of the discipline. Intellectualistic approaches¹ tend to reduce psychoanalytic therapeutical practice to interpretation, and in turn they see interpretation as the capacity of *getting what clients really meant* by a specific utterance, a particular gesture, a certain dream. The focus on interpretation is apparently justified by Freud's continuous references to interpretation as a key problem in psychoanalytical theory and practice. One characterizing feature of the psychoanalytical revolution clearly consists in its insistence at attributing meaning to elements that from a scientific standpoint were previously considered meaningless—e.g., slips of the tongue (Freud 1902)—or that were understood as the expression of an organic condition—e.g., hysterical behaviors. Before psychoanalysis, these events

1 For an overview and assessment of the epistemological basis for these intellectualistic interpretations, see Brigati (2001).

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were interpreted according to unreliable and non-scientific methods—e.g., folk interpretations of dreams.

However, Freud is equally adamant in suggesting that psychoanalysis is about more than merely finding the true interpretation. Such an overly mentalistic approach neglects the ritual and pragmatic aspects of therapy (Brigati 2015), the importance of transference (Lear 2015), and the ill-fated consequences of a truthful, and yet untimely interpretation, which could exacerbate defensive reactions, potentially leading to a premature interruption of treatment.

As an alternative to intellectualist approaches, one could highlight the importance of the gestural dimension of psychoanalysis. In a 1989 essay, Luce Irigaray wrote: “Gesture is very rarely discussed in psychoanalytic theory, except by Freud and the early analysts [. . .] Yet gesture is an essential part of the conventions of any psychoanalytic practice” (Irigaray 1989, 127).

Irigaray’s comments point to a blind spot of philosophical reflections on psychoanalysis. Both in contributions focusing on the epistemological level and in contributions belonging to the domain of moral and social philosophy, the gestural aspect of psychoanalysis is usually overlooked.

In this chapter, I will try to partially fill this gap by showing why and how an explicit discussion of gesture could contribute to a *non-intellectualistic philosophy of psychoanalysis*. I will do so by adopting a pragmatic and semiotic approach to psychoanalysis and to the unconscious. Such a semiotic approach could strike us as old fashioned and even obsolete.² As the golden age of the old-style semiotic approach likely ended some decades ago, a clarification needs to be made. In the wake of Lacan’s extremely influential approach, semiotic approaches to psychoanalysis have often been inspired by the structuralist semiotic tradition stemming from Saussure and Jakobson (Kristeva 1980). The importance of this tradition in history cannot be dismissed or denied. Yet I believe that another branch of semiotics may still provide an important contribution to the understanding of psychoanalysis; specifically, I am referring to the semiotic approach inspired by the work of Charles S. Peirce.

In the last decades, this path has been opened by the seminal work of Vincent Colapietro. In a series of essays, Colapietro creatively used some key concepts of Peirce’s semiotics and philosophy (e.g., habit and logical interpretant) to shed light on the functioning of the unconscious processes described by Freud. Colapietro’s main contribution consists in understanding pathological unconscious habits

² Something like ten years ago, when presenting my PhD research, a professor commented that the very idea of a semiotic approach to psychoanalysis brought him back to his youth in the seventies: good memories, good old music, a bit of nostalgia, but definitely outdated from a scientific standpoint.

in terms of quasi-logical interpretants.³ According to Peirce, logical interpretants establish a habit change by connecting sign and object through a thought. In the case of quasi-logical interpretants, this mediating thought is unconscious. Therefore, unconscious habits are quasi-logical interpretants in the sense that they are not routines in the trivial sense of the term, nor can they be reduced to a dyadic stimulus-response schema. They are the outcome of an unconscious reworking processes. These processes share the logical complexity of logical interpretants, but they are different insofar as they function in a way that eludes rational and reflective control.

Colapietro's semiotic reading of psychoanalysis is groundbreaking, as it points to an alternative to intellectualistic approaches to psychoanalysis. Specifically, the focus on semiotic processes acknowledges the importance of the intellectual dimension in psychoanalysis, but frames it as part of a wider pragmatic dimension. Consider the aforementioned concept of logical quasi-interpretants. The idea that neurotic symptoms are quasi-logical interpretants highlights how the complex array of behaviors, thoughts and feelings which constitute pathology is the outcome of an attempt to deal with a psychical conflict. This solution allows for the development of the Freudian idea that neurotic symptoms are twofold in nature: they are signs of something else, and at the same time they look like acts.⁴ It is impossible to get what these symptoms *mean*, without keeping these two facts in mind.

In this article, I will contribute to this thread of Peircean analyses of psychoanalysis by retrieving theoretical resources from a recent Peirce-inspired project, i.e., Maddalena's (2015) theory of *gestures*. Specifically, I will use the concept of incomplete gestures to understand some central phenomena within psychoanalytic practice and theory—in particular, the concepts of transference and repetition. The general idea, which can only be sketched here, is that an interpretation focused on incomplete gestures allows for a pragmatic interpretation of psychoanalysis that avoids slipping into intellectualism, without thereby dismissing the importance of interpretation and more generally speaking of intellectual processes in psychoanalytic theory and practice.

3 Colapietro (1995) uses the term “logical quasi-final interpretants.” While fully agreeing with Colapietro's idea, I prefer the label quasi-logical interpretants, because it is consonant with Peirce's emphasis on the aware and deliberate nature of habit changes produced by logical interpretants.

4 In recent years, a similar Peircean approach has been adopted in the analysis of Jung's analytic psychology (Maddalena 2017) and of psychology of attachment (Santarelli 2017).

2 A Peircean Account of Gestures

The first step of this project requires a definition of gesture. In his book *The Philosophy of Gesture*, Maddalena defines gesture as “any performed act with a beginning and an end that carries a meaning (from *gero* = I bear, I carry on)” (Maddalena 2015, 69–70). Let us focus more analytically on this definition. A gesture is: 1) a performed act; 2) it has a beginning and an end, so it can be somehow distinguished from the flux of actions, interactions and transactions, and experience; 3) it carries a meaning, whereas in accordance with Peirce’s pragmatic maxim, meaning is defined as “the cluster of conceivable effects of an experience” (Maddalena 2015, 70).

Gestures can be classified as complete and incomplete. Maddalena defines complete gestures both in a semiotic and in a phenomenological way. From a semiotic point of view, a complete gesture unites all three semiotic elements: icons—“signs that represent their objects by similarity”—indexes—“signs that represent their object by direct contiguity or brute force”—and symbols—“signs that represent their object by interpretation” (Maddalena 2015, 20).

From a phenomenological point of view, a complete gesture consists in the equal blending of Peirce’s phenomenological categories: firstness, secondness and thirdness. Peirce defines firstness as the quality “of feeling, or of mere appearance [. . .] the quality itself, independently of its being perceived or remembered, is an example” (CP 8.328). It is the “flavor *sui generis*” (CP 1.531) of experience, the qualitatively connotated novelty which cannot be temporarily labelled into a pre-existing schema. Secondness is “the element of struggle” (CP 1.322), “the experience of effort” which “cannot exist without the experience of resistance” (CP 8.330). It is the dimension of occurrence, of something actually occurring and therefore involving “forceful relations of action and reaction” (Short 2007, 78). Finally, thirdness is the element of generality: “The third element of the phenomenon [. . .] that we perceive it to be intelligible, that is, to be subject to a law, or capable of being represented by a general sign or Symbol” (CP 8.268). On account of its lawful nature, thirdness imparts “a quality to reactions in the future” (CP 1.343).

Conversely, incomplete gestures can be defined as those gestures in which at least one of the three categories is weak—even if they are seldom completely lacking. This opens the path to a classification of incomplete gestures, according to the different combinations of the three categories or elements that these gestures embody. For instance, a gesture provided with thirdness, but poor in firstness and secondness, is labeled as abstraction or generalization. Gestures scarce in firstness, but structured by a blending of secondness and thirdness, are called by Maddalena *schematizations*, or stereotypizations. This is the case of “a habit without novelty, a

habit in Wittgenstein's sense of the word (like driving a car when one has long ago learned how)" (Maddalena 2015, 75). In both cases, firstness and iconicity is almost lacking. This means that schematizations and abstractions somehow hinder the emergence of novelty, understood as something qualitatively characterized which cannot be immediately catalogued in the existing schema and concepts.

Based on this definition of gesture, I would like to begin my argument. The idea is that Freud's first move consists in understanding as a gesture something that was not understood as a gesture before. Since his early studies on hysteria, Freud's approach attributes a gestural dignity to something that was understood before as a kind of random and/or purely mechanical sequence of events. If we understand slips of the tongue, hysterical symptoms, and even dreams as gestures, then we will understand them as performed acts, which have a beginning and an end, and which have meaning in the aforementioned sense. The fact that they are bodily phenomena and that they not under our conscious control does not necessarily mean that *they are not gestures*.

In keeping with the definition of gestures here adopted, gestures bear a meaning.

Here comes an important divide in the history of psychoanalysis: how do we understand the *meaning* of these gestures? Should we refer to *unconscious reasons* motivating and producing these gestures? (see for instance Davidson's (1982) work on Freud or Lorenzer's (1975) linguistic interpretation of psychoanalysis). Or are these gestures simply produced by *unconscious causes*?—see, for instance, Grünbaum's (1984) interpretation of Freud, and Sulloway's (1979) biological reading of psychoanalysis. And of course, other authors—e.g., Ricoeur (1970)—have tried to account for both dimensions in their readings of psychoanalysis.⁵

For the sake of the present article, suffice to say that this reasons/causes divide is only a subsequent step, which presupposes the categorization of a specific set of phenomena as gestures. But what is the nature of these gestures, which represent the object of inquiry of psychoanalysis? In the following section, I will try to address this question. To do so, I will adopt Maddalena's concept of incomplete gestures to account for two crucial phenomena, i.e., repetition and transference.

3 Practicing Repetition

Apparently, psychoanalysis has a twofold hybrid nature. On the one hand, psychoanalysis can be understood as a kind of enlightenment project. From this per-

⁵ For a general account of the role of reasons and causes in psychoanalysis, see Brigati (2000).

spective, psychoanalysis can provide access to a hidden dimension of the self which previously fell outside the focus of consciousness. This idea resonates with Freud's own interpretation of psychoanalysis as instrumental to the emancipation and the autonomy of human beings. The famous quote from the final part of Lecture 31 of the *Introduction to Psychoanalysis* seems to go in this exact direction: "where Id was, there shall Ego be" (Freud 1933, 80).

On the other hand, many aspects of Freud's theory and practice overstep the boundaries of a rationalistic understanding of psychoanalysis. A significant example in this sense is provided by 1914 article "Remembering, repeating and working through"—which has been defined as Freud's most important article by Paul Ricoeur and Jonathan Lear, two of Freud's most important interpreters. At the beginning of the article, Freud briefly traces the steps that led him to overcome his initial assumption that the patient's healing came through a focus on the situation in which the symptom was formed. Such a focus allows for the reproduction of the mental processes involved in that situation, and guides the discharge of those processes through conscious activity. As Freud summarizes: "Remembering and abreacting, with the help of the hypnotic state, were what was at that time aimed at" (Freud 1914, 147). This initial hypnotic method leaves room for the mature psychoanalytic technique, one which involves a "division of labor": the doctor employs the "art of interpretation" to uncover the resistances unknown by the patient; in turn, the patient tries to connect freely present spontaneous thoughts to "forgotten situations and connections" (Freud 1914, 147).

Whereas the mature version of the psychoanalytic method prioritizes the intellectual act of interpretation, the pragmatic aspect remains central. In fact, in many significant cases, the patient "does not *remember* anything of what he has forgotten and repressed, but *acts* it out. He reproduces it not as a memory but as an action; he *repeats* it, without, of course, knowing that he is repeating it" (Freud 1914, 150). The patient who does not remember holding a certain attitude toward the parents enacts this attitude directly toward the therapist. This compulsion to repeat replaces the impulsion to remember, and it applies not only in the relation with the doctor, but also in significant ongoing relations with others in everyday life. This repetition has an ambiguous nature. On the one hand, it is in itself pathological—as it reenacts the very pathological patterns constituting neurosis. The stronger the resistance, the more memory is replaced by repetition. On the other hand, it provides access to the patient's psychological reality. Through repetition, the disease structure is no longer a matter of the past, but it appears as a force acting in the present. This step is crucial, since the pathological elements become accessible to the therapeutic process only when the patient experiences them as something immediate, real and present. But in keeping with his assertion of the

ambiguous nature of such repetition, Freud obviously does not believe that repetition in itself is a form of healing.

To explore this ambiguity further, it is necessary to clarify the meaning of *transference*. In Chapter 4 of his book on Freud, Jonathan Lear provided a detailed theoretical reconstruction of the concept of transference in Freud's work. As Lear points out, in the wake of his failure with "Dora" Freud adopts a more holistic understanding of transference. In this new understanding, transference is conceived of as process through which "a framework of experience" (Lear 2015, 136)—and not merely a single desire or feeling—is transferred from a specific domain—e.g., the relation with my father—onto the doctor. In this way a whole idiosyncratic world (Lear 2015, 126) comes into view during the therapy session.

Now, what is this relation between repetition and transference? Freud writes: "We soon perceive that the transference is itself only a piece of repetition, and that the repetition is a transference of the forgotten past not only on to the doctor but also on to all the other aspects of the current situation" (Freud 1937, 151). His idea is that the relation of transference between the patient and the doctor must be the frame into which repetition can be enacted and controlled. This control can be implemented through a therapeutical strategy consisting in withholding impulses in the psychic field, while enacting them in the motor field—i.e., actions such getting married, abandoning people, changing jobs. Freud here endorses a kind of mild paternalism: we must protect the patient from acting and carrying out his or her own plans during therapy—regardless of the contents of these plans. At the same time, one must safeguard personal freedom, to the extent that it is compatible with these limitations. To do so, and to transform repetition into a workable material for interpretation and analysis, therapy must focus on the intention to act in a specific way.

This strategy is capable of overcoming two problems: 1) the generation of uncontrolled repetitive actions, which cannot be worked through analysis and which can harm the patient, and 2) the tendency for therapy work to remain abstract and excessively theoretical, unable to reach or modify the actual neurotic elements manifesting in the patient's daily life. These two problems can be settled only if the therapist allows repetition free reign, but only within a defined scope. Transference is the playground in which repetition has absolute freedom, and within which it can present all the pathogenic elements. An "intermediate region between illness and real life" is thus created, an "artificial disease"—Freud calls it "transference neurosis"—which includes the characters of the previous disease (which is at any rate part of real life), but at the same time it is accessible to therapeutic work (Freud 1914, 154–155). The capacity of controlling the repetitions

which take place within the framework of transference⁶ requires “a form of interaction in which people come to recognize their own activity in creating structures that they have hitherto experienced as an independently existing world” (Lear 2015, 129). In this way, transference is an obstacle to therapy which “becomes its most powerful ally if its presence can be detected each time and explained to the patient” (Lear 2015, 136).

The ambiguous dynamic of transference as portrayed in Freud’s 1914 essay can be nicely accounted for by referring to the taxonomy of incomplete gestures. Madalena classifies repetitions as those gestures provided with indexicality and symbolicity, but lacking iconicity. From a phenomenological standpoint, they are schematizations. This emerges clearly in Freud’s account of the repetitions enacted within the framework of transference: If my loving attitude towards the therapist is the transference of a previous loving attitude towards my mother, my love for the therapist will be very poor in singularity, unicity and originality. It does not depend on the doctor’s irreplaceable and unique qualities (her firstness), but on the repetition of an established attitude and schema. But Freud tells us that the secondness of this repeating gesture is still a potentially fruitful object of therapeutical action. As he makes clear in his 1937 “Analysis Terminable and Interminable,” mere intellectual remarks by the analyst might be accepted by the patient on a rational level, but they will not alter anything in her, and will leave her cold (Freud 1937, 233). Psychoanalysis can work only in the heat of the moment, i.e., only when the conflict is actually present, such as in the case of repetition. While ambiguous and dangerous in nature, repetition is at least provided with actuality (secondness). This makes it dangerous, as it can be used to boycott therapy by means of a negative transfert (Freud 1937). And at the same time, in some specific situations repetitions can be the only way to get in touch with what is happening within the patient. As Freud points out, in some situations repetition is the only way the patient can remember something.

But how should the therapist act in order to control transference—i.e., to make it workable, while at the same time “taming” (Freud 1937, 220) its potential negative effects on therapy and on everyday life? Again, in his pivotal 1914 article, Freud proposes a technique which he defines in terms of psychological framing. The repetition should be controlled without repressing it. This control is achieved by fencing the growing action in the context of therapy and transference. Repetition has to be framed as a psychological event by analyzing the emerging repeti-

⁶ One might say that transference is the repetition of a framework which frames other repetitions that take place within this framework. I take this use of the vocabulary of frames from Ervin Goffman’s *Frame Analysis* (1971).

tion in terms of intentions. In this way the repetitive scheme is not repressed, and yet it becomes a psychological event, one which can be interpreted and reflected upon. This technique can be understood as a complex alternation of two kinds of incomplete gestures: repetitions/schematizations (provided with secondness and thirdness, but lacking firstness) and modeling/projections (provided with firstness and thirdness, but lacking secondness). In this context, “projection” of course should not be understood in the psychoanalytic sense (e.g., in Melanie Klein’s sense) but rather in the sense of projecting a possible action in the future, without necessarily realizing it; that is, as an intention. This process of loosening of secondness is exactly what Freud defines as psychological framing.

In this sense, moving temporarily from a first kind of incompleteness (repetition) to a second kind of incompleteness (projection) is a necessary step towards a gesture that we might define as complete. From a phenomenological standpoint, Maddalena defines complete gestures as those gestures consisting in an equal blending of firstness, secondness and thirdness. Complete gestures are creative and unique, yet their meaning can be publicly recognized by an external observer. By means of a complete gesture we can act, communicate, understand and learn at the same time.

This blending of different kinds of incomplete gestures is effectively summed up by Jonathan Lear. On the one hand, Freud’s technique treats the repeated emotion or behavior as something present, occurring in the here and now (secondness). On the other hand, the analyst treats repetitions “as though they were unfolding in a play space, an intermediate region. A *unique blend of reality and unreality* is accorded to the experience: and this allows the analysand to experience in a vibrant way *and to begin to play with it*” (Lear 2015, 140, emphasis added). After activating the repetition in its secondness, the analysand should be put in a position which will allow her “to experience a certain unreality of that experience” (Lear 2015, 141). This “unreality” of the patterns and feelings projected onto the analyst should not be merely expressed by a one-sided interpretation by the therapist—e.g., “this is not about me, this is about your father.” A judgment which might be true on a certain level, but which could prompt a defensive reaction in the patient, and the unrepairable breakdown of analysis.⁷ On the contrary, the analysand should be put in the position of directly experiencing the unreality of repetition by articulating transference, and not by a merely intellectual acknowledgement of its unreality. Complete awareness of the falsity and the unreality of this transference can be achieved only by direct, first-person experi-

⁷ According to Lear’s (2015, 122–145) interpretation, this is an important part of Freud’s failure with Dora.

ence. In this “special form of communication” (Lear 2015, 144) controlled incompleteness replaces fake completeness. The articulation of transference and of the contents it harbors in “conscious, verbal thought and communication” requires letting transference grow in a controlled way. This growth is made possible by the above-described complex blend of incomplete gestures.

4 Psychoanalysis and Complete Gestures

The example of transference and repetition shows how the theoretical tool of incomplete gestures can shed light on the kinds of gestures of greatest relevance for the field of psychoanalytical inquiry. These gestures share a general feature: they are semiotically and phenomenologically incomplete.

This remark raises an important issue about the nature of psychoanalysis and psychoanalytical treatment. If psychoanalysis deals with incomplete gestures, does it follow that *psychoanalysis aims to complete these incomplete gestures or to produce complete gestures*, i.e., gestures consisting in the equal blending of Peirce’s phenomenological categories: firstness, secondness and thirdness? And if this is case, does this oblige us to produce an updated version of the rationalistic understanding of gestures previously described?

To address this question, I would like to introduce the distinction between compromise and integration. The difference between compromise and negotiation was effectively expressed by American philosopher and psychologist Mary Parker Follett (2003). Compromise implies a purely quantitative redistribution of available economic, emotional or energy resources. A psychic compromise, for example, may involve foregoing the opportunity to satisfy a drive in order to guarantee a benefit to a third party or to avoid pain and displeasure for oneself. On the contrary, integration allows for a creative solution to conflict, introducing qualitative change that goes beyond zero-sum logic.

At first glance, there is much room in Freud’s work for compromise, and very little room for integration. The interpretation of Freud as a realistic author affirming compromise over integration is quite established in the scientific literature. This interpretation is supported by Freud’s skepticism about a revolutionary and creative reconstruction of society and of the relation between human drives and civilization in “Civilization and its discontents,” and his skepticism about a final resolved outcome of treatment expressed in his intellectual testament “Analysis Terminable and Interminable” (1937). In this article, Freud seems quite skeptical about the ability of psychoanalysis to produce an integrative outcome. The founder of

psychoanalysis apparently understood therapy as a matter of compromises and negotiation, rather than as a source of complete and integrative gestures.⁸

In this regard, things go very differently when we move from Freud to his friend/enemy/*Doppelgänger* Carl Gustav Jung. I will leave aside any ironic remarks about the fact that their relation was characterized by many significant gestures—e.g., Freud fainting in front of Jung. In contrast to Freud, Jung (1967) frequently highlighted the integrative function of psychotherapy. According to Jung, the only way to deal with uncontrolled mechanisms of projection is to integrate the disconnected parts of the self—in this case, *Anima*—into the self of the individual. And when it comes to singling out the mechanisms that play an integrative function, Jung does not limit his attention to therapy. Rather, he refers to real and concrete gestures. See his interest in mandalas. Mandalas are an excellent example of complete gestures. When drawing mandalas, people try to deal with the attractive and dangerous force of archetypes. However, rather than resisting them or achieving compromise with them, they try to integrate them into a picture they themselves have drawn. Mandalas thus represent a good blend of icon/index/symbol and of firstness/secondness/thirdness. They have a clear “quality of feeling, or of mere appearance” (CP 8.328), a “flavor sui generis” (CP 1.531)—that is, they have firstness; they occur in a singular way. When drawing mandalas, we can feel the resistance of the paper to our pencils—secondness; moreover, they embody a general meaning—mandalas are generally characterized by the attempt to re-establish a center and produce psychical integration. This suggests an interesting perspective on the Freud vs. Jung debate. While Jung used the term “analytical psychology” to distinguish his approach from Freudian psychoanalysis, one might say that what makes the difference between the two approaches should be rather found in Jung’s attention to synthetic processes, which does not find a comparable attention in Freudian psychoanalysis.⁹

And yet, despite Freud’s apparent preference for compromise, his works contain numerous references to processes of integration. The 1937 “Analysis Terminable and Interminable” again provides some interesting insights. In §3 of the article, Freud discusses the transformative nature of the ego-strengthening process. The ego’s ability to handle a given drive is defined in terms of taming, a process that seems clearly synthetic and integrative in nature: “The instinct is brought completely under the harmony of the ego, becomes accessible to all the influences of the other

⁸ This is one of the many significant points of contrast with Freud’s social theory, as well as that of Herbert Marcuse, who envisaged a potential new social and psychological transformation and integration.

⁹ On the connections between Jung and pragmatism, see Maddalena (2017), Shamdasani (2017), and Dadaian (2023).

trends in the ego and no longer seeks to go its independent way to satisfaction” (Freud 1937, 225). The psychoanalytic way of “disposing” (Freud 1937, 224) of the drives that exert their dominance over the patient’s psychic life does not operate by destroying or silencing such drives, but on the contrary relies on the ego’s synthetic capacity to enable the re-integration of such contents. Unfortunately, the relationships between such synthetic and integrative activity of the ego and the transformation of the self are never adequately and thoroughly articulated by Freud. This has contributed to the portrayal of Freud as a theorist of compromise with little interest in integration, an image that needs to be at least partially corrected and clarified, for it is evident that in Freud there is at least room for an idea of psychic integration—and therefore, for complete gestures.

5 Conclusion

In the previous sections, I tried to show how the vocabulary of gestures helps us effectively to develop an understanding of therapy which is neither intellectualistic, nor anti-intellectualistic. In the final section, I used the vocabulary of gesture to show how therapy has to do with completeness. This involves a partial restatement of the widespread idea that Freudian psychoanalysis aims at compromise, rather than at integration. Psychoanalysis aims to support the Ego in “taming” drives, and there is textual evidence in Freud’s work suggesting that this “taming” could be understood in terms of “integration.” Integration can be achieved through complete gestures, i.e., novel, singular and meaningful gestures, elements which can be understood and reflected upon by the agent. To achieve this goal, it is often necessary to pass through two different kinds of incomplete gestures: repetition (the only way some people have to “remember”); projection (a specific strategy consisting in “psychologizing” repetition, in order to avoid the consequences of actual dangerous behavior both during therapy sessions and in daily life, and in order to make repetition *workable*). The road to complete gestures is paved with incomplete gestures.

This focus on incomplete gestures has momentous consequences for the understanding of the semiotic dimension which concerns psychoanalytical inquiry. The therapist is not merely a “detective of the unconscious” (Lear 2015, 137) looking for clues (Ginzburg 1979) of unconscious processes in overt speech and behavior. While fruitful, the detective metaphor cannot effectively encompass the complex coexistence of different kinds of incomplete gestures characterizing successful therapy. An investigating gesture can be either fruitful and beneficial or intrusive and disruptive, depending on the specific situation and phase of treatment. Confining our view of possible gestures to the detective metaphor risks

overlooking a much broader spectrum of gestures and processes crucial to effective therapeutic practice. This interpretation has at least one important advantage: It helps account for the ambiguous status of Freud's theory and practice. Neither purely intellectualistic nor purely pragmatic terms can fully account for Freudian psychoanalysis *exactly because* therapy involves a complex sequence and entanglement of incomplete gestures, each involving a different level of cognitive content and of practical import. The kind of gesture required depends on the specific situation, and will change as therapy progresses. A highly intellectualistic remark can have disastrous consequences when offered at the wrong time. At the same time, "psychologization" can have beneficial effects in other very different phases of treatment. The perilous road to completeness and integration—i.e., to a kind of appropriation which allows for the conscious verbal articulation of an experience—passes necessarily through incomplete gestures.

References

- Brigati, Roberto. 2000. *Le ragioni e le cause. Wittgenstein e la filosofia della psicoanalisi*. Macerata: Quodlibet.
- Colapietro, Vincent. 1995. "Notes for a Sketch of a Peircean Theory of the Unconscious." *Transactions of the Charles S. Peirce Society* 31 (3): 482–506.
- Dadaian, Anna. 2023. "Jung and James." *European Journal of Pragmatism and American Philosophy* 15 (2).
- Davidson, Donald. 1982. "Paradoxes of irrationality." In Wollheim, Richard and James Hopkins (Eds.). *Philosophical Essays on Freud*, 289–305. Cambridge: Cambridge University Press.
- Follett, Mary P. 2003. *Dynamic Administration: The Collected Papers of Mary Parker Follett*. 1st ed., edited by Henry C. Metcalf and Lyndall Urwick. New York and London: Routledge.
- Freud, Sigmund. 1914. "Remembering, Repeating and Working-Through (Further Recommendations on the Technique of Psycho-Analysis II)." In Freud, Sigmund. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Volume XII, 145–156. London: Hogarth Press.
- Freud, Sigmund. 1915. "The unconscious." In Freud, Sigmund. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Volume XIV, 159–204. London: Hogarth Press.
- Freud, Sigmund. 1933. "New introductory lectures on psycho-analysis." In Freud, Sigmund. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Volume XXII, 1–182. London: Hogarth Press.
- Freud, Sigmund. 1937. "Analysis terminable and interminable." In Freud, Sigmund. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Volume XXIII, 209–253. London: Hogarth Press.
- Gavin, William J. 1992. *William James and the Reinstatement of the Vague*. Philadelphia: Temple University Press.
- Ginzburg, Carlo. 1979. "Clues: Roots of a Scientific Paradigm." *Theory and Society* 7 (3): 273–288.
- Goffman, Erving. 1974. *Frame Analysis*. New York: Harper Colophon Books.
- Grünbaum, Adolf. 1984. *The Foundations of Psychoanalysis. A Philosophical Critique*. Berkeley: University of California Press.

- Irigaray, Luce. 1989. "The Gesture in Psychoanalysis." In Brennan, Teresa (Ed.). *Between Feminism and Psychoanalysis*. 1st ed. New York: Routledge.
- Jung, Carl G. 1967. *Two Essays on Analytical Psychology*. In Jung, Carl G. *Collected Works of C. G. Jung*. Volume VII. Princeton: Princeton University Press.
- Kristeva, Julia. 1980 *Pouvoirs de l'horreur: essai sur l'abjection*. Paris: Éditions du Seuil. [English Translation: Kristeva, Julia. 1982. *Powers of Horror. An Essay on Abjection*. Translated by Leon S. Roudiez. New York: Columbia University Press.]
- Lacan, Jacques. 1958, 2001. "The Function and Field of Speech and Language in Psychoanalysis." In Lacan, Jacques. 2001. *Écrits: A Selection*. 1st ed. New York and London: Routledge.
- Lear, Jonathan. 2015. *Freud*. 2nd ed. New York and London: Routledge.
- Lorenzer, Alfred. 1970. *Sprachzerstörung und Rekonstruktion*. Frankfurt am Main: Suhrkamp.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture*. Montreal: McGill-Queen's University Press.
- Maddalena, Giovanni. 2017. "Jung and Peirce." *European Journal of Pragmatism and American Philosophy* 9 (1).
- Peirce, Charles S. 1931–1958. *The Collected Papers of Charles Sanders Peirce*. Volumes I–VI, edited by Charles Hartshorne and Paul Weiss. Volumes VII–VIII, edited by Arthur W. Burks. Cambridge: Harvard University Press, Belknap Press. [Abbreviated as CP.]
- Ricoeur, Paul. 1970. *Freud and Philosophy: An Essay on Interpretation*. New Haven: Yale University Press.
- Santarelli, Matteo. 2017. "Security as Completeness." *European Journal of Pragmatism and American Philosophy* 9 (1).
- Shamdasani, Sonu. 2017. "Questioning the unconscious." *Annals of the New York Academy of Sciences* 1406: 86–89.
- Short, Thomas L. 2007. *Peirce's Theory of Signs*. Cambridge: Cambridge University Press.
- Sulloway, Frank J. 1979. *Freud, Biologist of the Mind: Beyond the Psychoanalytic Legend*. New York: Burnett Books.

Guido Baggio

Chapter 13

Gesturing Language

Abstract: Among the different approaches that focus on language as enactive, i.e., as the extension of action, Di Paolo, Cuffari, and De Jaegher elaborate a thought-provoking proposal in *Linguistic Bodies. The Continuity between Life and Language* (2018). They rework Maturana's concept of *linguaging* in a new way by connecting it to their theory of Sensorimotor Enactivism (Di Paolo, Buhrmann, and Barandiaran 2017 and Di Paolo 2005) and the participatory sense-making process (Di Paolo, Buhrmann, and Barandiaran 2017). The term "linguaging," in fact, was coined by Maturana (1978, 1988, and 2002) to highlight a way of living together in a stream of recursive coordinations of consensual behaviors that arise in collaborative "doing things together." However, even if sensorimotor enactivists adopt the active role of our sociality to overcome the epistemological and methodological individualism inherited from Varela and Maturana's autopoietic theory of cognition, they still never really abandon their individualistic assumption. To face this individualistic methodological approach to language, I propose to look at George Herbert Mead's pragmatist theory of gesture. In this chapter, I will show that his gesture theory can offer helpful elements to confront some issues that arise with the enactivist linguaging proposal.

Keywords: linguaging, sensorimotor enactivism, pragmatism, George H. Mead's theory of gesture

1 Introduction

Among the different approaches that focus on language as enactive, i.e., as the extension of action,¹ Di Paolo, Cuffari, and De Jaegher elaborate a thought-provoking proposal in *Linguistic Bodies. The Continuity between Life and Language* (2018).

1 Some authors reinterpret Wittgenstein's reflections on language, remodeling it analytically (Hutto and Myin 2017) or offering a pragmatist reading of his investigations on practicing, rule-following, and language (Moyal-Sharrock 2021, 2003, and 2000). Another research direction takes steps from archeological cognition and Radical Enactivism to connect the semiotic dimension of a material sign with a non-representational approach to linguistic sign (Malafouris 2013). Other

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They rework Maturana's concept of *linguaging* in a new way by connecting it to their theory of Sensorimotor Enactivism (Di Paolo, Buhrmann, and Barandiaran 2017; Di Paolo 2005) and the participatory sense-making process (Di Paolo, Buhrmann, and Barandiaran 2017). The term "linguaging," in fact, was coined by Maturana (1978, 1988, and 2002) to highlight a way of living together in a stream of recursive coordinations of consensual behaviors that arise in collaborative "doing things together." Accordingly, from a phylogenetic perspective, language is "a system of generative consensual interactions," result of the evolutionary process of autopoietic organisms, with closed, structurally plastic nervous systems of "a selection realized through the behavior generated on the interacting organisms through their structural coupling in a domain of expanding ambient diversity" (Maturana 1978, 53–54).

As we will see, however, even if sensorimotor enactivists adopt the active role of our sociality to overcome the epistemological and methodological individualism inherited from Varela and Maturana's autopoietic theory of cognition, they still never really abandon their individualistic assumption. In particular, in their theory of linguaging, individuals are logically prior to the social process in which they are involved so that language would emerge only through the intentional acts of autonomous agents interacting.

To face this individualistic methodological approach to language, I propose to look at George Herbert Mead's pragmatist theory of gesture. As I argued in a previous work (Baggio 2021), Mead is an influential interlocutor for Di Paolo and colleagues. In what follows, I will show that his gesture theory can offer helpful elements to confront some issues that arise with the enactivist linguaging proposal. In particular, I will refer to Mead to support the hypothesis of the phylogenesis of linguaging from gestural conversations based on bio-social processes. Mead's theory seems particularly useful to mediate between recognizing an essential biological process that could generate linguaging and the more recent enactivist conception of the linguistic sense-making process. Furthermore, by referring to gestures as the practical involvement with the environment as interwoven with the rise of behavioral-based (i.e., non-propositional) semiotics, Mead provides the basis for developing propositional-based intentionality. As communicative devices, gestures give rise to cooperative acts rooted in primitive social instincts.

authors link enactivism to biosemiotics (De Jesus 2016, Heras-Escribano and De Jesus 2018, and Fonseca Fanaya 2021).

2 Sensorimotor Theory of Languageing

According to De Jaegher, Di Paolo, and Cuffari’s enactivist perspective (De Jaegher and Di Paolo 2007; Cuffari, Di Paolo, and De Jaegher 2015; and Di Paolo, De Jaegher, and Cuffari 2018), the organisms, be they basic-minded or contentful-minded, are autonomous living systems that cast a “web of *significance* on their world” aiming at self-generating their identities. The living systems actively participate in the generation of sense-making processes. Sense-making processes are relational and affect-laden processes grounded in a biological organization and expressing the capacity of autonomous systems to adaptively regulate their relation to the environment depending on the virtual consequences for their viability as forms of life. Meaning, sense, and signifier are thus attributable to basic minds (see Di Paolo, De Jaegher, and Cuffari 2018, 34).

The sense-making processes are therefore characterized by intention and teleology as “naturalized properties of active systems in interaction” (Di Paolo, De Jaegher, and Cuffari 2018, 35). Furthermore, an organism’s perspective can be directly affected by the intentional coordination of movements in interaction with others, so that new domains of *participatory sense-making* can be generated that were not available to each individual on her own, “whereby individual sense-making processes are affected” (De Jaegher and Di Paolo 2007, 497). The active participation of organisms in sense-making processes relies on their intentional and expressive perspectives on the world.

Two features are needed for social interaction to take place allowing participatory sense-making to emerge: 1) a coupling among at least two agents—the orienter and the orientee—which is regulated to generate and maintain an identity in the relational domain; 2) and the autonomy of the agents involved. As De Jaegher and Di Paolo put it:

it is through a process of coordination and modulation of sense-making activities that the orientee is directly affected by the orienter’s intentions and sense-making, and therefore he does not need to figure out what these intentions are in order to respond accordingly. A coordinated response already embodies a practical understanding [. . .] the orientee cannot be totally passive. He is a sense-maker himself. In her turn, the orienter must not only grasp the other’s sense-making but must skilfully act so that the right modulation comes about. (De Jaegher and Di Paolo 2007, 499–500)

Participatory sense-making also includes languageing, i.e., linguistic sense-making processes. More specifically, referring to Maturana’s autopoietic theory of natural language, sensorimotor enactivists argue that languageing is a socially enacted form of whole-body sense-making, focusing on the dynamics of the construction of real-time behavioral events by co-acting agents. Languageing is the activity of a

signifying agent who “copes, acts, lives and has its being in a domain constituted by wordings, histories, rules, authorities, articulations, interactions, other people, and the work of other people.” A socially enacted form of whole-body behavior, focusing on “the dynamics of real-time behavioral events that are coconstructed by coacting agents” (Thibault 2011, 211; see also Di Paolo, De Jaegher, and Cuffari 2018, 250–253).

However attractive the theory of languaging as participatory sense-making is, it presents two critical points—one epistemological and methodological, the other conceptual—that obscure its value. Even if sensorimotor enactivists adopt the active role of our sociality to overcome the epistemological and methodological individualism inherited from Varela and Maturana’s autopoietic theory of cognition, they still never really abandon their individualistic assumption. They explicitly define participatory sense-making as a coordination of the intentional activity of individual subjects in interaction to generate new domains of social sense-making (De Jaegher and Di Paolo 2007, 497).² The individual sense-making activities are presupposed to their adjustment through interaction, which relies on appropriate coordination with other individuals. This means that individuals are logically prior to the social process in which they are involved, so participatory sense-making processes emerge only through the intentional acts of the interaction of autonomous agents. This also implies that languaging as “*a special kind of social agency*” (Cuffari, Di Paolo, and De Jaegher 2015, 1096) only emerges through the intentional acts of agents.

2 Together with sense-making, there are three core ideas behind sensorimotor enactivism: 1) The autonomy of systems involved in interactions. An autonomous system is a closed system composed of several processes that actively generate and sustain an identity under precarious conditions. Behind this idea is Maturana’s autopoietic system as “a closed dynamic system in which all phenomena are subordinated to its autopoiesis, and all its states are states in autopoiesis” (Maturana 1978, 37). In line with this view, De Jaegher and Di Paolo argue that the view of autonomous cognitive systems allows rejecting, on the one hand, the view of passive cognizers just responding to environmental stimuli; on the other hand, the view of autonomous systems satisfying internal demands. Both views fail “to give the autonomous agent its proper ontological status and subordinate it to a passive role of obedience” (De Jaegher and Di Paolo 2007, 487). 2) “The relation of emergence between novel forms of identity (e.g., integrated sensorimotor engagements as emerging from neural, bodily and environmental dynamics)” as one “whereby the coupling between the emergent process and its context leads to constraints and modulation of the operation of the underlying levels” (De Jaegher and Di Paolo 2007, 487). 3) Experience is intertwined with being alive and enacting a meaningful world: “As part of the enactive method, experience goes beyond being data to be explained. It becomes a guiding force in a dialogue between phenomenology and science, resulting in an ongoing pragmatic circulation and mutual illumination between the two” (De Jaegher and Di Paolo 2007, 488).

The conceptual issue concerns precisely the notion of intention. As Di Paolo and colleagues argue, intentionality is, together with teleology, a naturalized property of the material systems, i.e., a kind of sensorimotor involvement in the process of “shaping the dynamics that lead to the engagement and control of particular sensorimotor schemes” (Di Paolo, Buhrmann, and Barandiaran 2017, 183). Their definition suggests a natural, primitive kind of intentionality that appeals to biological and evolutionary norms for determining the objects of intentional attitudes. In this sense, intentionality can be regarded as basic contentless intentional directedness rooted on the intertwining of natural instincts and habits. However, Di Paolo and his colleagues assume that conscious experience is a fundamental part of sense-making (Di Paolo, De Jaegher, and Cuffari 2018, 35). By doing so, they bring the cognitive gap down to a basic level of cognition. As a result, intentionality becomes so intrinsic, widespread, and natural that the term “intentionality” becomes almost redundant and misleading.³ In other words, basic intentional directedness seems to be extremely vague and does not easily allow bridging the gap between the individual contentless “sensorimotor engagement” and linguistic contentful and participatory sense-making processes. This is also due to the epistemological issue, according to which organisms’ autonomous organization and adaptivity are the primary explanatory resources of intentionality.

I argue that Mead’s behavioral theory of meaning rooted in gestural interaction as the basis for the emergence of human language can present an interesting remedy to these issues. In particular, Mead’s theory of gesture and cognition allows the transition from gestural interaction to participatory sense-making and symbolic language.

3 Mead’s Theory of Gesture

Language has, according to Mead, a bio-social origin (Mead 2015, 236). The close intertwining of the biological and social dimensions is grafted onto an evolutionary perspective that points to unreflective social conduct as the expression of biological mechanisms underlying the development of reflexive conduct, thus rooting the capacity for communication in the process of biological-relational evolution (Mead 1895 and 2001). More specifically, the elements of coordination of social behavior and communication are already present in the evolution of the initial phases of instinctive acts and their physiological correlates, characterized by emotional content and expression:

³ Jean-Michel Roy (2015) moves a similar critique to Hutto and Myin’s ur-intentionality.

Before conscious communication by symbols arises in gestures, signs, and articulate sounds there exists in these earliest stages of acts and their physiological fringes, the means of coordinating social conduct, the means of unconscious communication. And conscious communication has made use of these very expressions of the emotion to build up its signs. They were already signs. They had been already naturally selected and preserved as signs in unreflective social conduct before they were specialized as symbols. (Mead 2001, 3)

What Mead calls “unconscious communication” is obviously not to be understood in psychoanalytic terms. It must instead be considered in terms of a “preconscious” (and thus pre-linguistic) communication that uses emotional attitudes and their physiological fringes to construct its signs. Unconscious communication refers to a pre-reflective process as a prerequisite for the emotional transposition that characterizes the possibility of interpreting others’ behavioral attitudes. It precedes conscious, intentional communication, being present in the early stages of the acts and their physical correlates in the coordinating elements of social conduct and communication.⁴

In this framework, gestures are seen as the earlier stages of social acts, which mediate the appropriate responses of other individuals in the same groups. In other words, gestures are preparations for the act, i.e., the inhibited behaviors that became expressive.

There exists thus a field of conduct even among animals below man, which in its nature may be classed as gesture. It consists of the beginnings of those actions which call out instinctive responses from other forms. And these beginnings of acts call out responses which lead to readjustments of acts which have been commenced, and these readjustments lead to still other beginnings of response which again call out still other readjustments. Thus there is a conversation of gesture, a field of palaver within the social conduct of animals. Again the movements which constitute this field of conduct are themselves not the complete acts which they start out to become. They are the glance of the eye that is the beginning of the spring or the flight, the attitude of body with which the spring or flight commences, the growl, or cry, or snarl with which the respiration adjusts itself to oncoming struggle, and

4 This means that emotion turns out to be immediately communicative. The “physiological fringes” involved in “unconscious communication,” can be seen as the neuronal systems engaged in the genesis of acting emotional sequences in the performance of specific acts. More recently, Panksepp (1998) listed seven neuronal systems in which the interpersonal emotional systems of attachment, caretaking, competitive interaction, and peer cooperation, among others, are expressed. These systems reflect the innate social dimension of organisms and prove to be the basis for the more evolved forms of human social interaction. Baldwin (1992) pointed out that many of Mead’s works anticipated modern social behaviorist analyses of emotions. In particular, many aspects of Mead’s writings were empirically confirmed during the second half of the 20th century. For a discussion of the communicative dimension of emotions in Dewey and Mead, see Franks (1991), Ward and Robert Throop (1989), and Dreon (2019).

they all change with the answering attitudes, glances of the eye, growls and snarls which are the beginnings of the actions which they themselves arouse. (Mead 1964, 124)

These early stages of animal reactions are stimuli for forms whose life is conditioned by others' behavioral attitudes. So, the early stages of the social acts "must become in the evolutionary process particularly effective as stimuli or, on the contrary, social forms must become particularly sensitive to these early manifest stages of social acts" (Mead 1964, 123–124). This also explains how certain gestures that originally constituted the beginning of an act persisted in the evolutionary process by modifying their original function. In other words, they experienced a process of what we could refer to, on the suggestion of Gould and Vrba (1982), as an "exaptation" that led them to become stimuli for a given response in another form of life.

This interplay of preliminary and preparatory processes, even in the conduct of animal forms lower than human beings, places the animals *en rapport* with each other and leads, in wooing, quarreling, and animal-play, to relatively independent activities that answer to human intercourse.

Although gesture first reveals an emotion, its primary function is to promote "the mutual adjustment of changing social response to changing social stimulation, when stimulation and response are to be found in the first overt phases of the social acts" (Mead 1964, 125). The emotional attitudes expressed in inhibited acts are the first phases of the rise of meaning from the gestural interaction between organism and environment and the mutual adaptation between social stimulus, individual response, and activities at which these processes eventually arrive. The mere reference to the original social interaction situation would not otherwise have allowed bodily and vocal gestures to become meaningful. It was firstly the reference to the change in the expression of other individuals involved in the act from a mere outcome of the nervous excitement in meaning, which allowed the development of communication, shared understanding, and mutual recognition within the field of social interaction.

Therefore, the emergence of social consciousness and the development of human communication is rooted in interactive coordination. In other words, only within a theory of social stimulus and response and of the social situations that create these stimuli and responses could meaning and language arise. As Mead writes:

The likeness of the actions is of minimal importance compared with the fact that the actions of one form have the implicit meaning of a certain response to another form. The probable beginning of human communication was in cooperation, not in imitation, where conduct differed and yet where the act of the one answered to and called out the act of the other. The conception of imitation as it has functioned in social psychology needs to be developed

into a theory of social stimulation and response and of the social situations which these stimulations and responses create. Here we have the matter and the form of the social object, and here we have also the medium of communication and reflection. (Mead 1964, 101)

Mead uses the term “cooperation” to refer to the reciprocal responses to others’ gestures, whether collaborative or hostile (indeed, he often gives examples of both forms of interaction in his writings). However, it might be better to call such reciprocal responses “ coordinations.” Gestural coordination, behind which there is the emotional attitude as a relational property that co-constitutes the interactions, makes organisms evolve towards competitive or cooperative interactions. Without such coordination, situations cannot determine the type of interaction they constitute.

4 Maturana’s Theory of Languaging

In this regard, Mead’s theory shows some similarities with Maturana and Varela’s theory of natural language (Maturana and Varela 1980 and Maturana 1978, 1988, and 2002), at the basis of Di Paolo and colleagues’ theory of languaging as linguistic sense-making.

Maturana and Varela developed a theory of natural language as a new domain of interaction that becomes embodied in states of activity of organisms’ nervous systems, subjecting their evolution to their interactions in the domains of observation and self-consciousness. Natural language is the outcome of the recursive application of the same neurophysiological process, whereby “new sequences of orienting interactions (new sentences) within the consensual domain are necessarily understandable by the interlocutor (orient him), because each one of their components has definite orienting functions” (Maturana and Varela 1980, 35). Language is, therefore, a manner of living together in a flow of coordinations of consensual behaviors or doings that arises in a history of living in the collaboration of doing things together.⁵ Accordingly, symbolic language is secondary to the existence of languaging behavior as the expression of “the flow in living together in recursive coordinations of behaviors or doings” (Maturana 2002, 27). As he puts it:

⁵ See also Maturana and Varela (1987, 234–235). On recent revivals and re-developments of Maturana’s “languaging” see, among others, Linell (2009), Cowley (2011), and Demuro and Gurney (2020).

[. . .] what takes place in the interactions within a consensual domain is strictly structure-determined, interlocked concatenations of behavior. In fact, each element of the behavior of one organism operating in a consensual domain acts as a triggering perturbation for another. Thus, the behavior of organism A perturbs organism B triggering in it an internal change of state that establishes in it a new structural background for its further interactions and generates a behavior that, in turn, perturbs organism A, which . . . perturbs organism B, which . . . , and so on in a recursive manner until the process stops—either because, as a result of the structural changes of A and B some behavior is triggered that does not belong to the consensual domain, or because some independent intercurrent interaction occurs that leads them out of the consensual domain. What happens in a linguistic interaction, therefore, depends strictly on the structural state of the organism undergoing the interaction. [. . .] Therefore, the context on which the outcome of a linguistic interaction depends is completely determined in the structure of the interacting organisms. (Maturana 1978, 52–53)

Maturana explicitly affirms that to “understand the evolutionary origin of natural language requires the recognition of a basic biological process that could generate it” (Maturana 1978, 53). In this regard, Maturana and Varela are in line with Mead’s claim (Mead 2015, 237, note) that all that is inherited about the human mind is the physiological mechanism of the human central nervous system, thanks to which the genesis of minds from the human matrix of relationships and social interactions is made biologically possible in human individuals. On the other hand, similarly to Maturana and Varela’s theory of autopoiesis, Mead maintains that natural selection and the development into reflective thought gave us “the tools we need [. . .] to keep up our process of living in the largest sense” (Mead 1936, 351).

Unlike Maturana, however, according to Mead, it is not possible to view organisms as isolated autopoietic systems. Social interaction is complementary to the biological complex of organisms, which is the precondition for physical consciousness (Mead 1964, 103). Nevertheless, the central nervous system develops not only in the co-ordinations of neural cells but also in the stimulation of co-ordinations between basic co-ordinations, which, as the basis for the possibility of higher cognitive capacities, must, in turn, be stimulated. The development of human higher cognitive capabilities is thus possible through the social stimulation of potentials that are only present in embryo in the organism (cf. Mead 2001, 78 ff.).

Maturana’s and Mead’s theories on the emergence of meaning and symbolic language also present complementarities. On the one hand, Maturana argues that language is “the necessary evolutionary outcome, in the recursive interactions of organisms having closed, structurally plastic nervous systems, of a selection realized through the behavior generated on the interacting organisms through their structural coupling in a domain of expanding ambient diversity.” This means that

language is “a system of generative consensual interactions,” so that denotation, i.e., the act of indicating something to someone, is merely a recursive consensual operation “which operates only in a domain of consensus and not in the processes through which linguistic interactions take place” (Maturana 1978, 53). On the other hand, Mead considers language as part of social behavior, so that the “early stages of social acts precede the symbol proper, and deliberate communication” (Mead 2015, 14–15), and language “simply lifts out of the social process a situation which is logically or implicitly there already” (Mead 2015, 79–80). This means that the connotation of a word, i.e., what a word suggests, is involved in the attitudes employed in the social act, and the interpretation of gestures is “an external, overt, physical, or physiological process going on in the actual field of social experience” (Mead 2015, 80).

Maturana’s idea of “generative consensual interactions” is, in this sense, remarkably akin to what Mead refers to as the *cooperation*—i.e., what we call *coordination*—underlying the possibility of developing the consciousness of meaning that precedes the symbolic language. Mead does not regard meaning in semantic terms as a mere representation of an object. He instead argues that meaning is the functional, i.e., organic response to some social and natural stimuli. In other words, meaning has a *bio-social* nature expressed in gestures that show a *functional identity* of the responses of individuals to the same stimulus. This identity is rooted in the *cooperative* behavioral attitude of individuals as the manifestation of the social character of natural instincts:

The important character of social organization of conduct or behavior through instincts is not that one form in a social group does what the others do, but that the conduct of one form is a stimulus to another to a certain act, and that this act again becomes a stimulus to first to a certain reaction, and so on in ceaseless interaction. The likeness of the actions is of minimal importance compared with the fact that the actions of one form have the implicit meaning of a certain response to another form. The probable beginning of human communication was in cooperation, not in imitation, where conduct differed and yet where the act of the one answered to and called out the act of the other. (Mead 1964, 101)

Therefore, the interpretation of gestures involved in the social act is a process that is fully implemented in the field of social experience. The articulated sounds—the vocal gestures—that the body emits are heard by the individual in the same way they are heard by the recipients of them, revealing themselves to her in the same way they reveal to others.

5 Sense of Meaning, the Consciousness of Meaning, and Language

Gestures are, first of all, a communication system. From the gestural coordination, the meaning emerges: “a statement of the relation between the characteristics in the sensuous stimulation and the responses which they call out” (Mead 1964, 129).

Mead then distinguishes between a “sense of meaning” and a “consciousness of meaning.” This latter is the ability to associate a stimulus to mental content based on the ability to clearly distinguish the different elements in the contents of consciousness. The *sense of meaning* is a more basic “feeling of attitude” which “represents the coordination between the process of stimulation and that of response when this is properly mediated” (Mead 1964, 125). The *sense of meaning* is, in other words, the readiness to respond to different natural and social stimulations. As Mead maintains, when reacting to stimulations involved in an ongoing act it is difficult to detect the contents of the response, “either in terms of the attitude of body, the position of the limbs, feel of contracting muscles, or in terms of the memory of past responses” (Mead 1964, 126). This difficulty is related to the fact that as immediate conduct is “controlled by recognized differences in the field of stimulation,” the analyzed elements of content are of negligible importance (Mead 1964, 126–127).

This means that organisms mostly do not interact with the world through abstracting and analyzing elements of the environment. They instead enact it, i.e., they organically interact with the natural and social environment that stimulates their responses. In this regard, Mead’s “sense of meaning” can be equated with the sensorimotor enactivists’ *sense-making* processes “at the core of every form of action, perception, emotion, and cognition” (Di Paolo, De Jaegher, and Cuffari 2018, 33). However, differently from Di Paolo, De Jaegher, and Cuffari, who refer to intentionality to describe the attribution of meaning, Mead does not refer to intention to explain the organism’s directness to something. According to Mead, there is a basic instinctual cognitive ability to select and discriminate among stimuli which has to be regarded as:

a development of the selective attitude of an organism toward its environment and the re-adjustment that follows upon such a selection. This selection we ordinarily connect with what we call “discrimination,” the pointing-out of things and the analysis in this pointing. This is a process of labeling the elements so that you can refer to each under its proper tag, whether that tag is a pointing of the finger, a vocal gesture, or a written word. [. . .] Knowledge is a process of getting the tools, the instruments. (Mead 1936, 350–351)

Discrimination is an attitude rooted in a biological preconscious function arising from the interaction between neural signals and social and natural environmental stimuli, and it is the counterpart to the inhibition related to “motor imagery,” which is a property of a particular field of interacting events, and of the physiological mechanisms of the agent which also make biologically possible the purposeful, skillful and unreflective bodily activities, as opposed to conscious intentionality which involves a propositional content (see Baggio 2021). This capacity is enactively identical to gestures and behavioral attitudes in interactions with others. Gestures are the embodied tools for cooperative interaction in a social act, giving rise to a triadic relationship between organisms themselves and between organisms and the environment.

It follows that interaction is primarily socially instinctual, contrary to the view that participatory sense-making derives from individuals’ intentional sense-making. The social character of instincts precedes individual interactions by contributing to the formation of the individuals’ selective capacity and hence to the direction of attention.

Differently from sensorimotor enactivists, according to which linguistic meaning derives from intentionality, Mead helps us to consider intentionality as the evolutionary result of a transition from a behavioral-based semiotics to a linguistic semantics embedded in the inner space of individuals.

Gestures are, therefore, natural signs that respond to natural signs in the natural and social environment through selection. Mead’s notion of gesture is an element of continuity between sense-making, or the sense of meaning, and the emergence of the “consciousness of meaning” at the basis of human language.

As from the sense of meaning, the consciousness of meaning arises at the moment when an act is interrupted, that is, when a conflictual space arises that requires attention to the stimuli around us. However, there are situations where attention calls for discrimination of the different elements as contents of consciousness belonging to the field of stimulation and imagery. This applies to gesture, where initially, the sense of meaning—i.e., the contentless character of sensorimotor cognition involved in interaction—is predominant (Mead 1964, 130).

Yet, as Mead notes, there is an underlying difference in that, as human beings,

we are conscious of interpreting the gestures of others by our own responses or tendencies to respond. We awaken to the hostility of our neighbors’ attitudes by the arising tendency to attack or assume the attitude of defense. We become aware of the direction of another’s line of march by our tendencies to step one side or the other. During the whole process of interaction with others, we are analyzing their oncoming acts by our instinctive responses to their changes of posture and other indications of developing social acts. [. . .] Thus our adjustments to their changing reactions take place, by a process of analysis of our own re-

sponses to their stimulations. In these social situations appear not only conflicting acts with the increased definition of elements in the stimulation, but also a *consciousness of one's own attitude as an interpretation of the meaning of the social stimulus*. We are conscious of our attitudes because they are responsible for the changes in the conduct of other individuals. A man's reaction toward weather conditions has no influence upon the weather itself. It is of importance for the success of his conduct that he should be conscious not of his own attitudes, of his own habits of response, but of the signs of rain or fair weather. Successful social conduct brings one into a field within which a consciousness of one's own attitudes helps toward the control of the conduct of others. (Mead 1964, 130–131, emphasis added)

In social interaction, the construction of the coordinated act is closely intertwined with the consciousness of meaning, i.e., the ability to anticipate others' responses to our gestures. To anticipate the reactions of others to our behavioral attitudes is the discriminating element that stimulates the capacity for abstraction. However, abstraction is still rooted in the acting dimension, involving an enactive non-representational element. In this case, the capacity to be aware of one's action is combined with the ability to affect others' behavior and thus to seek to respond to social stimuli intentionally.

Indeed, Mead implicitly combines the consciousness of meaning with the presence of intentionality. Accordingly, “consciousness” is regarded as an intentional capacity that arises in social interaction. This means that the consciousness of meaning can be described, explained, or defined in terms of symbolic language only in its highest and most complex phase of development, the phase it reaches in the human experience. That is, the phenomena of language are those that appear within a set of social interactions (Mead 2015, 184).

Symbolic language is merely a significant or conscious gesture, “a highly specialized form” of gesture (Mead 1964, 132). Through the awareness of meanings and responses to stimuli made possible by the emergence of symbolic language, the individual acquires self-control to defer her responses, thus opening the way for the exercise of greater freedom of choice and design of her conduct—that is, of *embedded intentionality*. Symbolic language allows for the emergence of a kind of collective intentionality at the basis of consensual behaviors arising from “innate” social stimuli. However, it is crucial to remember that the idea of collective intentionality found in Mead is different from that which Di Paolo, Cuffari and De Jaegher (2018) have in mind. According to Mead, participatory sense-making arises from social practices based on inherited and acquired practical habits, namely, behavioral habits.

On the contrary, individual sense-making processes are a further step in this emerging process, connatural with the social process of the emergence of language. More specifically, intentionality is primarily practical in so far as it is part of interactions in a social context. Its more developed form in human beings is proposi-

tional and self-conscious. Mead often blurs the line between phylogenesis and ontogenesis. This allows him to work at an abstract level and simplify ontogenetic development. Accordingly, language “is not an affair of the individual soul, and its laws are frequently generalizations which would not have the slightest meaning if read into terms of the experience of the individual soul.” The individual may be responsible for “the changes and the growth and development of language, but the product lies outside of the experience of the souls whose mechanisms are responsible for it” (Mead 2015, 377–378).

6 Conclusion

Mead’s theory of gestures mediates between recognizing a basic biological process that could generate language and the enactivist conception of basic individual intentional directedness as prior to participatory sense-making processes. We can therefore consider the functional identity of gestures as the basis of the genesis of propositional language through the conditioning of bio-social canons and structures that have their roots in pre-linguistic behavioral attitudes, i.e., gestures. Mead’s gestures, particularly vocal gestures (Mead 1964, 243), are individuals’ practical involvement with the environment as interwoven with the evolution of the propositional-based individual intentionality from a behavioral-based sense of meaning rooted in the organisms’ capacity to discriminate and respond to social stimuli. Gestures are, in this frame, the embodied tool for coordinative interactions in a social act, which in turn gives rise to a triadic relation between organisms themselves and between organisms and the environment. They are communicative devices, the sum of which gives rise to social acts which have roots in a set of primitive social instincts.

Mead’s sense of meaning paves the way for a comparison with the sensorimotor sense-making theory. It also allows for the emergence of sensorimotor intentionality to be included within a naturalized framework of evolutionary continuity.

Mead further elaborates his behavioral theory of meaning behind his idea of the evolution of symbolic language from gestural communication (see also Baggio 2019 and 2020), taking as his starting point the difference between the sense of meaning and consciousness of meaning. Furthermore, Mead’s “unexplored social organization” at the basis of interpretation and differentiation through reciprocal conditioning can be regarded as what De Jaegher and Di Paolo indicate as the biological counterpart of the sense-making process as a “relational and affect-laden process” (De Jaegher and Di Paolo 2007, 488). However, unlike De Jaegher and Di Paolo’s notion of “participatory sense-making,” for Mead, this process does not ex-

press the capacity of autonomous systems to “actively participate in the generation of meaning in what matters to them” (De Jaegher and Di Paolo 2007, 488). On the contrary, the relational and affect-laden process is a bio-social process through which the genesis of selves, i.e., “autonomous” individuals, is made possible. Autonomous individuals can actively value what matters to them only as a result of this process.

References

- Baggio, Guido. 2019. “Language, Behaviour, and Empathy. G. H. Mead’s and W. V. O. Quine’s Naturalized Theories of Meaning.” *International Journal of Philosophical Studies* 27 (2): 180–200.
- Baggio, Guido. 2020. “Pragmatism and Verbal Behaviourism. Mead’s and Sellars’ Theories of Meaning and Introspection.” *Contemporary Pragmatism* 17 (4): 243–267.
- Baggio, Guido. 2021. “Imagery in action. G. H. Mead’s contribution to sensorimotor enactivism.” *Phenomenology and the Cognitive Sciences* 20: 935–955.
- Baldwin, John D. 1992. “Social Behaviorism on Emotions: Mead and Modern Behaviorism Compared.” In Hamilton, Peter (Ed.): *George Herbert Mead. Critical Assessments*. Volume III, 237–263. New York: Routledge.
- Cowley, Stephen J. (Ed.). 2011. *Distributed Language*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Cuffari, Elena C., Ezequiel A. Di Paolo, and Hanne De Jaegher. 2015. “From participatory sense-making to language: There and back again.” *Phenomenology and the Cognitive Sciences* 14: 1089–1125.
- De Jaegher, Hanne and Ezequiel A. Di Paolo. 2007. “Participatory sense-making: An enactive approach to social cognition.” *Phenomenology and the Cognitive Sciences* 6 (4): 485–507.
- De Jesus, Paulo. 2016. “From enactive phenomenology to biosemiotic enactivism.” *Adaptive Behavior* 24 (2): 130–146.
- Demuro, Eugenia and Laura Gurney. 2020. “Languages/language as world-making: The ontological bases of language.” *Language Sciences* 83: 101307.
- Di Paolo, Ezequiel A. 2005. “Autopoiesis, adaptivity, teleology, agency.” *Phenomenology and the Cognitive Sciences* 4 (4): 429–452.
- Di Paolo, Ezequiel A., Thomas Buhrmann, and Xabier E. Barandiaran. 2017. *Sensorimotor life. An Enactive Proposal*. Oxford: Oxford University Press.
- Di Paolo, Ezequiel A., Hanne De Jaegher, and Elena C. Cuffari. 2018. *Linguistic Bodies. The Continuity between Life and Language*. Cambridge: MIT Press.
- Dreon, Roberta. 2019. “Gesti emotivi e gesti verbali. L’eredità di G.H. Mead sulla genesi del linguaggio umano.” *Sistemi intelligenti* 1: 19–138.
- Fonseca Fanaya P. 2021. “Autopoietic enactivism: Action and representation re-examined under Peirce’s light.” *Synthese* 198 (Supplement 1): S461–S483.
- Franks, David D. 1991. “Mead’s and Dewey’s Theory of Emotion and Contemporary Constructionism.” *Journal of Mental Imagery* 15: 119–137.
- Gould, Stephen J. and Elisabeth S. Vrba. 1982. “Exaptation—A Missing Term in the Science of Form.” *Paleobiology* 8 (1): 4–15.

- Heras Escribano, Manuel and Paulo De Jesus. 2018. "Biosemiotics, the Extended Synthesis, and Ecological Information: Making Sense of the Organism-Environment Relation at the Cognitive Level." *Biosemiotics* 11: 245–262.
- Hutto, Daniel D. and Erik Myin. 2017. *Evolving enactivism: Basic minds meet content*. Cambridge: MIT Press.
- Linell, Per. 2009. *Rethinking Language, Mind, and World Dialogically. Interactional and Contextual Theories of Human Sense-Making*. Charlotte: Information Age Publishing, Inc.
- Malafouris, Lambros. 2013. *How Things Shape the Mind: A Theory of Material Engagement*. Cambridge: MIT Press.
- Maturana, Humberto R. 1978. "Biology of Language: The Epistemology of Reality." In Miller, George A. and Elizabeth Lenneberg (Eds.). *Psychology and Biology of Language and Thought*, 27–63. New York: Academic Press.
- Maturana, Humberto R. 1988. "Reality: The Search for Objectivity or the Quest for a Compelling Argument." *The Irish Journal of Psychology* 9 (1): 25–82.
- Maturana, Humberto R. 2002. "Autopoiesis, Structural Coupling and Cognition: A history of these and other notions in the biology of cognition." *Cybernetics & Human Knowing* 9 (3–4): 5–34.
- Maturana, Humberto R. and Francisco Varela. 1980. *Autopoiesis and Cognition. The Realization of the Living*. Dordrecht: Reidel Publishing Company.
- Maturana, Humberto R. and Francisco Varela. 1987. *The Three of Knowledge. The Biological Roots of Human Understanding*. Boston and London: New Science Library.
- Mead, George H. 1895. "A Theory of Emotions from the Physiological Standpoint (Abstract of a paper read to the third annual meeting of the American Psychological Association, 1894)." *Psychological Review* 2: 162–164.
- Mead, George H. 1936. *Movements of Thought in the Nineteenth Century*, edited by Merritt H. Moore. Chicago: University of Chicago Press.
- Mead, George H. 1938. *The Philosophy of the Act*, edited by Charles W. Morris, John M. Brewster, Albert M. Dunham, and David Miller. Chicago: University of Chicago Press.
- Mead, George H. 1964. *Selected Writings*, edited by Andrew J. Reck. Chicago: University of Chicago Press.
- Mead, George H. 2001. *Essays in Social Psychology*, edited by Mary Jo Deegan. New Brunswick and London: Transaction Publishers.
- Mead, George H. 2015. *Mind, Self and Society. The Definitive Edition*, edited by Charles W. Morris. Annotated edition by Daniel R. Hubner and Hans Joas. Chicago: University of Chicago Press.
- Moyal-Sharrock, Danièle. 2000. "'Words as Deeds': Wittgenstein's 'Spontaneous Utterances' and the Dissolution of the Explanatory Gap." *Philosophical Psychology* 13 (3): 355–372.
- Moyal-Sharrock, Danièle. 2003. "Logic in Action: Wittgenstein's Logical Pragmatism and the Impotence of Scepticism." *Philosophical Investigations* 26 (2): 125–148.
- Moyal-Sharrock, Danièle. 2021. "From deed to word: Gapless and kink-free enactivism. In memoriam John V. Canfield (1934–2017)." *Synthese* 198 (Supplement 1): S405–S425.
- Panksepp, Jaak. 1998. *Affective Neuroscience: The Foundation of Human and Animal Emotions*. Oxford: Oxford University Press.
- Roy, Jean-Michel. 2015. "Anti-Cartesianism and anti-Brentanism: the problem of anti-representationalist intentionalism." *Southern Journal of Philosophy* 53 (Spindel Supplement): 90–125.
- Thibault, Paul J. 2011. "First-order languaging dynamics and second-order language: The distributed language view." *Ecological Psychology* 23 (3): 210–245.
- Ward, Lloyd and Robert Throop. 1989. "The Dewey-Mead analysis of emotions." *Social Science Journal* 26: 465–479.

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Chapter 14

Two Kinds of Perspectival Representations and the Role of Gestures in Perceptually Anchoring Inner Speech

Abstract: It has long been observed that gestures do not occur only in communication with others; people also gesture when alone. A common explanation of this phenomenon consists in arguing that verbal thoughts and gestures are better suited to encode and process information, respectively, in propositional and sensorimotor/visuospatial formats. While this is correct, research on inner speech or verbal thought suggests that it provides much more than a format to encode information. Here, I address this issue by suggesting that inner speech and gestures may be concomitantly employed for other reasons than providing complementary ways of processing different kinds of information. More specifically, the focus is on how multimodal self-directed communication involving both gestures and (inner) speech can be used to represent and manipulate different kinds of perspectives: linguistic-attitudinal and sensorimotor. Language in the service of reasoning, taking the form of dialogic inner speech, can be used to recruit alternative and possibly conflicting perspectives on a certain matter, whereas gestures being tightly connected to the activation of sensorimotor mental simulations can be used to express and manipulate iconic and imagistic perspectives. I conclude by suggesting that taking into consideration this form of synergy between gestures and inner speech based on different kinds of perspectives may help to illuminate the role of gestures in perceptually anchoring inner speech.

Keywords: representation, gestures, perspective, inner speech

1 Introduction

Whereas inner speech is increasingly attracting interest across disciplines, it is rarely considered in relation to other forms of self-directed communication. And, while the debate on the functions of inner speech is a lively one, it is taken for

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granted that whatever inner speech does, it does that alone. At the same time, studies on the use of gestures accompanying inner speech often downplay the many different functions attributed to inner speech, and focus solely on its role in encoding information in a propositional format. However, both these approaches run the risk of ignoring important insights into the complementary use of inner speech and gestures.

In surveying the relation between verbal thoughts and gestures, various studies have focused on the role of gesturing in representing spatial and visual information. It has been argued that verbal thought and gestures complement each other by providing different conceptualization formats (Kita, Alibali, and Chu 2017); thus, better performances can be achieved by—for example—expanding the problem-solving space (Kita 2000; Kita, Alibali, and Chu 2017). However, recently, various studies on inner speech have shown that it does much more than encoding thought-content: inner speech also affords to engage in a wide range of activities, from decision-making to self-reflection, from problem-solving to self-motivating (Morin and Racy 2022 and Martinez-Manrique and Vicente 2015).

A richer understanding of the functions of verbal thoughts could broaden our understanding of the relation between gestures and inner speech and provide novel experimental hypotheses. By considering inner speech in the form of an inner dialogue, this chapter aims to propose a new hypothesis on why we may engage in multimodal self-directed communication, that is, the combined use of inner speech and co-thought gestures, beyond the benefits provided by combining different formats to encode information.

In the following, I will, in a first step, argue that the research on the synergy of inner speech and gestures for cognitive purposes may benefit from a richer understanding of what inner speech is used for; and then in a second step, I will illustrate this idea by claiming that multimodal self-directed communication can facilitate the recruitment of different kinds (i.e., linguistic and perceptual) of perspectival representations.

To this end, I briefly expound on the functions discussed in relation to inner speech, focusing particularly on Neo-Vygotskian approaches. Successively, I explore two views regarding how gestures are generated: the speech production hypothesis (Chu and Kita 2016 and McNeil 2005) and the Gestures as Simulated Action framework (Hostetter and Alibali 2018), and I consider how they account for the combined use of inner speech and gestures. I conclude by arguing that the synergistic use of gestures and inner speech may be useful to represent different kinds of perspectives and I conjecture some of the cognitive benefits that such collaboration may offer.

2 What Do We Do with Inner Speech?

What do we use inner speech for? The question is strictly related to the cognitive functions of language. Indeed, language is not only used for communication but can be employed for cognitive purposes. Empirical results have shown that inner speech plays a role in several cognitive functions: improving short-term memory through inner rehearsal (Baddeley and Hitch 1974), reinforcing executive functions and self-control (Cragg and Nation 2010 and Kompa and Mueller 2020), scaffolding problem-solving (Damianova, Lucas, and Sullivan 2012). Moreover, inner speech may be involved in making thoughts conscious (Carruthers 2015 and Skipper 2022). Carruthers (2015) for example argues that by providing a sensory format that can be targeted by attentional resources, the content of inner speech episodes can enter the working memory system and be consciously accessed.

Inner speech also provides a supplementary set of self-generated stimuli which can override environmental influences. This capacity of inner speech to keep working memory busy, thus overshadowing environmental stimuli, is observable in self-control tasks. During the classic marshmallow experiment (Mischel and Ebbesen 1970), children who succeeded in waiting to eat the treat in order to receive a double quantity later engaged in all kinds of linguistic-based attention-diverting strategies, such as singing and repeating the experiment's instructions. The use of mantras may also be a case in point. In this respect, inner speech has been framed as a form of autostimulation (Dennett 1991 and Clowes 2006), which can be used to direct attention (Clark 2008) and can also prompt us to achieve the desired goal. For example, the linguistic rehearsal of a set of instructional nudges (Sutton 2007) can guide attention, leading to a smoother completion of the task. A former alcoholic at a party may say to themselves, "Whatever happens stick to soft drinks" and when the time comes for toasts, facing the temptation, they may whisper to themselves: "I said no alcohol."

This example shows that the uses of inner speech may not be different from those of social speech. Indeed, according to Neo-Vygotskian approaches, the functions of inner speech are continuous with those of social speech. There is not a single proper function of linguistic thinking for cognitive processes, there are many. The reason for this is to be found in the developmental approach adopted by Neo-Vygotskians and by Vygotsky himself. Inner speech is the result of the process of interiorization of language which begins with social communication. Shortly after having started to engage in linguistic interactions, children begin to use outer speech in a self-directed manner. They overtly talk to themselves as if they were talking to someone else, they give themselves directions, describe their actions, or engage in self-appraisal. Private or egocentric speech has plausibly the same functions as inner speech, with the single downside of being hearable by others. Between the age of 3–5 years old, there is a reduction in private self-talk, supplemented plausi-

bly by inner speaking, although some instances of whispers/muttering are still observable. In this view, inner speech is the result of the completion of the process of internalization of self-directed speech, even though private speech does not disappear during adulthood (Diaz and Berk 1992 and Winsler and Naglieri 2003; for a critical view, see Gregory 2022).

According to this picture, through the process of internalization, children do not simply learn to generate linguistic mental imagery, but to talk to themselves as interlocutors and establish a dialogic relation with themselves. They can give themselves instructions on how to reach some cookies (Vygotsky 1934/2012), ask themselves why they are in a bad mood, motivate themselves and so on. Inner speech is flexible enough to range from the repetition of strings of words, to open-ended quasi-conversations.

Authors adhering to the Vygotskian framework depict the cognitive use of language not as a specialization of some of its functions, but as the internalization of communicative practices which are repurposed to serve various cognitive demands. In the Vygotskian terminology, inner speech is one among many psychological tools that scaffold the process of semiotic mediation, in which socially shared and culturally inherited sign systems (such as verbal language or gestures) are recruited for cognitive purposes.

Tomasello (2019) for example has explicitly adopted a Neo-Vygotskian framework to account for the development of humans' cognitive abilities. In his proposal, a central step in the development of mature cognitive functions is represented by the acquisition and internalization of language. Tomasello claims the process of self-directing language involves role reversal imitation. Children learn to guide their own behaviors by assuming the perspective of sapient instructors and by simulating some directives they would expect to receive from them. In the case of language, they learn to talk to themselves to appropriate the cognitive benefits provided by linguistic interactions. Role reversal imitation scaffolds self-regulation, and language, in the form of private or inner speech, provides a suitable platform for this process to be realized (see Vygotsky 1930/1978).

Tomasello's argument shows that inner speech is not merely a format to encode information, but it also scaffolds important cognitive achievements. Other Neo-Vygotskian works on inner speech have similarly suggested that through inner speech it is possible to engage in simulated linguistic interactions, such as asking questions and then answering them (Clowes 2006), debating, engaging in decision-making processes and so on. Such dialogue-like verbal thinking (also known as dialogic inner speech; Fernyhough 2008) requires the temporary recruitment of alternative and possibly conflicting perspectives ultimately producing less biased and one-sided cognitive results. In writing an academic paper, for example, it is helpful to try as much as possible to anticipate, accommodate and answer eventual

criticisms. Clearly, this process requires to adopting others' viewpoints, background beliefs and assumptions and using them to anticipate potential criticisms.

Similarly, recent works on dialogic inner speech have claimed that it may be used for cognitive functions such as self-knowledge, hypothetical reasoning, and narrative thinking (Morin 2018). In these cases, an exploratory role is attributed to inner dialogue and to its capacity to recruit different perspectives (Fernyhough 2008 and Kompa and Mueller 2022).

However, many scholars who discuss the complementarity of gestures and inner speech (or verbal thought) seem to attribute to the latter a much narrower range of functions, describing it mainly as a means for encoding information (e.g., Kita, Alibali, and Chu 2017). Encoding information in a propositional format is clearly afforded by linguistic thinking, but, at least from a Neo-Vygotskian perspective, it is far from being the only important cognitive function of inner speech.

3 Co-Speech and Co-Thought Gestures

In the scientific literature on gestures, a common distinction is that between co-speech and co-thought gestures. Generally speaking, the former is employed for communicative purposes and to accompany verbal communication, while the latter is used to serve cognitive goals and accompany thoughts.

As for co-speech gestures, the focus is on how they may be used to convey meaning and facilitate conversation. Far from being a mere add-on to verbal communication, gestures may have been all our far ancestors had to communicate at first. The proponents of the gesture-first hypothesis argue that gesturing may be at the origin of the evolution of language. There is indeed some important empirical evidence that shows how easily humans can communicate using only gestures, as shown by the quick emergence and conventionalization of gestures into a sign language observed in modern times, among both deaf and hearing people.¹ Others, who oppose the gesture-first hypothesis, argue for the unity of gestures and speech since their origins (McNeil 2005). The concomitant use of gestures and speech would have to be traced back to the origin of language itself. Whatever the origin of language would prove to be, there is little doubt regarding the complementary of

¹ See Kegl, Senghas, and Coppola (1999) on how Nicaraguan Sign Language formed spontaneously among deaf schoolchildren. As for hearing people, secondary sign languages develop when communication is necessary, but speaking is not effective or allowed. Some instances can be found among workers in sawmills, in which noises are too loud to allow vocal exchanges, or in monastic orders which follow the precept of silence (Goldin-Meadow and Brentari 2015).

language and gestures in their capacity for conveying meaning, in that they are: “co-expressive of the same idea yet are opposite semiotically; this is dual semiosis: the gesture is global, synthetic and non-combinatoric; the speech bits are analytic and combinatoric” (McNeil 2017, 80). Thus, gestures and speech are often concomitantly co-opted to convey the same information in different and complementary ways.

Assuming that gestures and speech are co-expressive of the same idea we may then ask whether we need to conceive of it as the content of a pre-existing mental state awaiting to be conveyed and gestures and speech serve as communication channels, or whether they themselves are ways of thinking and creating meaning, while, in social contexts, simultaneously transmitting it. In support of this second interpretation, some researchers, adopting an embodied and extended framework (see Pouw, Nooijer, van Gog, Zwaan, and Paas 2014 for a discussion), have shown that gestures also allow the externalization and subsequent manipulation of spatial representation. Accordingly, instead of mentally imagining the rotation of a cube and using gestures to simulate it, we can depict the rotation with gestures while using the position of the hands to keep track of the rotational phases, thus freeing working memory capacity and offloading the task to the movement of the hands.

If this is the case, at least in some instances, the difference between co-thought gestures and co-speech gestures becomes blurry. Co-speech gestures are also co-thought gestures insofar as communicating becomes an opportunity for thinking through gestures and speech, and co-thought gestures are co-speech gestures insofar as they accompany inner speech. This reading is in line with the Vygotskian framework discussed above: co-thought gestures, just like inner speech, are the result of the re-functionalization of a socially shared and culturally inherited communicative sign system to serve cognitive purposes: gesturing, originally a form of communication, can also be a form of reasoning, rather the expression of something happening in the mind.

Moreover, the Vygotskian framework adopted so far could be extended and radicalized by adopting the suggestion of one of his contemporaries: George Herbert Mead (1934/1972). Mead opposed Wundt’s understanding of gestures as the expression of underlying mental states and understood them as functional in constituting the mental state itself. This approach is more radical than Vygotsky’s insofar as it assumes communication and sociality as constitutive of cognition and consciousness (Morin 2009, 400, proposes a Meadian approach to inner speech). Whereas for Vygotsky and Neo-Vygotskians socially shared sign systems are tools that transform pre-existing cognitive capacities and allow for communication, according to Streeck, Mead’s approach to gestures goes one step further: “Communication is not a product of individual psyches or minds; rather, psyches and minds are epiphenomena of the social process of communication” (2009, 14). However, what matters to present discussion is that for both approaches, these two modes of communication, speech and

gestures, become, by being self-directed, forms of thinking rather than mere modalities for expressing pre-formulated thoughts.

At this point we may summarize the theoretical options described so far regarding theories of gestures into two gestures are either 1) expression of or 2) constitutive of cognitive processes, and, assuming 2), whether the cognitive benefits of combining them with inner speech depend a) only on the combination of different encodings, or b) also on something else. Having argued for 2), the rest of this chapter is devoted to arguing for b), identifying the “something else” as the capacity of multimodal self-directed communication of scaffolding different kinds (perceptual and linguistic) of perspectives. However, to better understand how this is the case, it is first necessary to consider briefly how gestures are generated.

4 How Are Gestures Generated?

Assuming that the distinction between co-speech and co-thought gestures has in some cases a heuristic value (co-thought gestures can be self-directed co-speech gestures), these two kinds of gestures plausibly rely on similar cognitive resources. Indeed, it has been argued that the many similarities between co-speech and co-thought gestures imply that they are generated by common mechanisms. For example, the rate of both co-speech and co-thought gestures is positively correlated to the difficulty of the task—either cognitive or communicative—and it drops when the task is completed. Moreover, people using co-speech gestures more frequently than others also generate co-thought gestures more often (Chu and Kita 2016). These elements suggest a common origin for both kinds of gestures, but there is no consensus on the cognitive processes producing them. Two frameworks are relevant in this regard: theories that embed gesture generation within speech production processes and theories that embed gesture generation within action planning.

According to the speech production hypothesis, gestures and speech have a common origin in the speech production process (McNeil 2005). The idea is that gestures do not partake in communication as extrinsic and accompanying components, rather they are fundamental elements and are generated by the same cognitive mechanisms that originate speech. Whereas in the case of co-speech gestures the speech production process would produce overt vocalization, in the case of co-thought gestures speech remains covert (i.e., inner speech).

The evidence that gestures are sometimes recruited for lexical retrieval (Morsella and Krauss 2004) as well as the evidence for non-verbal semantic processing

in co-speech gestures support the speech production hypothesis. Nonetheless, the speech production hypothesis faces some challenges. For it to be correct, we would expect that overloading the speech production mechanisms by disrupting inner speech would affect the execution of gestures, which does not appear to be the case (Chu and Kita 2016). Moreover, while this hypothesis may explain gestures generated concomitantly with speech, either overt or covert, it may be in an awkward position to explain co-thought gestures when thought is not verbal, such as the use of gestures to facilitate mental rotations of a figure.

An example of the competing paradigm according to which gestures generation is to be found in the cognitive mechanisms supporting action planning is the Gesture as Simulated Action (GSA) framework. According to it, gestures arise from embodied sensorimotor mental simulation (Hostetter and Alibali 2018). By simulations, the two authors refer to “the activation of motor and perceptual systems in the absence of external input” (Hostetter and Alibali 2018, 722). Thus intended, these simulations “are predictive, in that they activate the corresponding sensory experiences that result from particular actions” (Hostetter and Alibali 2018, 722), but it is not specified whether they can be consciously accessed and how they relate to the similar notion of mental imagery. Hostetter and Alibali resort to recent studies on embodied representations to argue that simulations of actions during speaking and thinking “involve motor plans that are the building blocks of gestures” (2018, 722) and thus the “form of gesture presumably depends on the nature of the underlying imagery” (2018, 728).

This framework is grounded on the idea that information can be represented either in a propositional or in an imagistic format. When information is represented verbally or propositionally no action simulation is activated and thus the probability of gesture execution is lower. Conversely, when information is represented in a visuospatial or imagistic format, the motor and perceptual systems are activated and—assuming other criteria are met—some of the features of the simulated action are expressed through gestures.

At first glance, the GSA framework seems to contradict the idea—presented in the section above—that gestures are themselves constitutive of cognitive processes rather than expressing internal mental states. This is not necessarily the case. Indeed, while the authors suggest, based on vast empirical evidence, that gestures are the expression of sensorimotor mental simulation, this does not exclude that gestures in turn can influence mental states, an idea for which there is also considerable empirical evidence (Goldin-Meadow 2016 and Goldin-Meadow, Nusbaum, Kelly, and Wagner 2001).

Of interest for our present discussion is one of the findings discussed in support of the GSA framework. How iconic (or representational) gestures—that is, gestures resembling the denoted object—are executed depends on the perspective

assumed (i.e., the perspective represented in the mental simulation) by the person performing them. The perspective assumed in gesturing an action can be that of the person undertaking the action, but it can also be that of an observer. For example, gesturing of throwing a ball from a first-person perspective (or character-viewpoint) involves simulating the act of throwing, while gesturing the same event from an observer perspective involves tracing the trajectory of the ball with the hands. Unsurprisingly, being perspectival is one key property of iconic gestures (Hassamer and Winter 2018).

5 Different Kinds of Perspectives in Multimodal Inner Speech

So far, I have focused on how self-directed communication, whether through inner speech, gestures or both, can represent different kinds of perspectives or viewpoints. But how do they differ? The hypothesis I intend to suggest here is that gestures represent iconic or imagistic perspectives, while inner speech represents perspectives expressed linguistically. As a first broad characterization of the notion of perspective, we can follow Camp, who describes them as “modes of interpretation: open-ended ways of thinking, feeling, and more generally engaging with the world and certain parts thereof” (Camp 2013, 335–336).

According to the GSA framework, the perspectival nature of iconic gestures is a direct manifestation of the sensorimotor mental simulation from which the gestures are generated. Perspectives expressed by gestures involve sensorimotor information, they represent the perceptual viewpoints from which a scene or the action is imagined; more difficult is to define linguistic perspectives.

At first sight, a clear difference is that linguistic perspectives, as discussed by Neo-Vygotskians, pertain to what one would say, rather than feel, and to what one believes, desires, hopes rather than perceives.² This can be clearly seen if we turn to the discussion above: perspectival representation enacted by gesturing rely on the underlying mental simulation, so that one can infer the perceptual perspective taken by observing the iconic gestures produced. Conversely, by engaging in dialogic inner speech, e.g., in the decision-making process, we may assume other perspectives in order to evaluate whether the decision is sound, asking ourselves for example: “What would my parent/partner/friend do?”

² Studies on cognitive penetrability of perception show that the line is not always easily drawn. I will leave these considerations on the side.

Here, I endorse an attitudinal definition of linguistic perspective: a linguistic perspective consists in the linguistic expression of one or more attitude in relation to one or more proposition (see also Fernyhough 2009, Gregory 2017). Thus, perspectival representations supported by inner speech act as virtual placeholders for sets of attitudes (e.g., beliefs, assumptions, desires, etc.) and they do not necessarily involve perceptual representation.

Once we have clarified the difference between perspective as expressed linguistically and gestural perspectives, the question is: how do they interact? One preliminary suggestion in this regard comes from a recent study on gestures by Kita, Alibali, and Chu:

Because thinking in terms of action has different properties from propositional or verbal thinking, gesture offers possibilities and perspectives that propositional or verbal thinking cannot, and therefore, gesture affects thinking in particular ways. (Kita, Alibali, and Chu 2017, 246)

While this claim is far from new in the literature on gestures, relevant to our discussion is the remark that through different formats, different kinds of perspectives can be recruited and influence thinking. A further step forward is warranted by studies on the cognitive effects of representing perceptual perspectives either with gestures or with speech. One of these studies investigated whether children at the age of five who produced character-viewpoint gestures became better narrators at the age of six, seven, and eight compared to children who did not produce such gestures, either by producing only observer-viewpoint gestures or no gestures at all (Demir, Levine, and Goldin-Meadow 2015). Other independent variables (syntax comprehension scores, initial narrative structure scores) were excluded as confounding factors. The authors found that “perspective-taking in gesture predicted subsequent narrative structure whereas perspective-taking in speech did not” (Demir, Levine, and Goldin-Meadow 2015, 676), suggesting that even though it may be possible in principle to represent perceptual perspectives in speech, they may not be cognitively efficacious.

While this study does not tell us whether character-viewpoint gestures have a causal role to play in developing more refined narrative structures later on or rather are the effects of some other mental ability which is causally implicated in such development, it shows functional differences between linguistic perspectives and perspectives in gestures. One difference discussed in the study is that compared to gestures, it is more difficult to infer from speech whether the perceptual perspective taken, if any, is that of the character-viewpoint or the observer-viewpoint, which—I suggest—may be due to the more abstract nature of linguistic perspective-taking, based on attitudes rather than perceptual perspective.

Recall that according to the GSA framework, iconic gestures are generated on the basis of the visual mental imagery of the scene depicted, while inner speech does not require to actively visualize what is said. This may suggest that in simply telling a story, the narrator may be agnostic regarding the perceptual representation involved, or, in other terms, speech underdetermines the visuospatial perspective involved in narrating the scene. On the contrary, by producing iconic gestures—which depend on the activation of a mental simulation—the narrator *necessarily* represents a determined perceptual viewpoint.

From this, we may conjecture that, while through the sole use of inner speech it is possible to recruit linguistic or attitudinal perspectives, gesturing may help to anchor what is being said, by providing a perceptual viewpoint. Thus, engaging in iconic gesturing while inner speaking presumably forces the subject to assume a perceptual perspective on what is said. This may be perhaps less useful in epistemic tasks, such as in refining an argument by evaluating various theoretical positions, but it may prove crucial in others, such as in perceptually anchoring a past episode or a narrative and assuming the perspectives of its characters as well as shifting between them, with all the cognitive benefits that may result from it.

6 Combining Perspectives: The Case of Imagined Interactions and the De-Semanticization of Memory

A task for which multimodal self-directed communication (i.e., the synergistic activation of inner speech and gestures) may be fruitfully recruited is that of imagining interactions. Imagined interactions are a form of “social cognition where individuals imagine anticipated or prior communication encounters with others” (Bodie, Honeycutt, and Vickery 2013, 157). Some of the functions attributed to imagined interactions encompass relationship maintenance, conflict management, rehearsing messages, self-knowledge, emotional release, and compensation for lack of actual social interactions.

In many cases, imagined interactions involve the interplay of different linguistic perspectives. In fact, they could be categorized as instances of dialogic inner speech (Morin 2019). Imagining a conversation with a loved one or anticipating how the question-and-answer session of a future talk will unfold both require engaging in linguistic perspective-taking. At the same time, imagined interactions can be multimodal, in that they can include visuospatial imagery and the perceptual

details of the imagined scene. While imagining a past interaction or anticipating a future encounter I can also visually imagine features of the environment, of myself or the other persons. Therefore, producing iconic gestures while engaging in inner speech in these cases may serve to activate a multimodal mental simulation, in which various kinds of perspective, linguistic-attitudinal and visuospatial, interact.

In the case of remembering past interactions, the synergistic recruitment of both linguistic and perceptual perspectives in multimodal self-directed communication may be functional in reversing the process of semanticization of episodic memory. It is argued that, with time, autobiographical memory tends to shift from episodic memory (memory of a lived, subjective experience endowed with perceptual details) to semantic memory (memory of a fact, encoded semantically), the process is also known as “semanticization” of episodic memories (Cermak 1984 and Eustache and Desgranges 2008). This means that, as time passes, memory regarding how something felt becomes knowledge that something happened. The memory of a beautiful sunset on the ocean, the perceptual recollection of the various shades of red, orange and pink, the sounds of the waves and seagulls, etc., becomes knowledge of having experienced a beautiful sunset. Through the process of semanticization of episodic memory, the episode cannot be mentally re-lived anymore, it becomes a remembered fact.

As previously discussed, since iconic gestures depend on the activation of visuospatial mental representation, engaging in iconic gestures when remembering a past event may force the recruitment of a mental simulation of that event. Gesturing while thinking linguistically may help to recreate the moment as experienced first-personally by activating a visuospatial mental representation of the scene remembered which would be left out in speech alone, thus contrasting the process of semanticization of memory.

Clearly, the content of the mental simulation involved in the execution of gestures may not be accurate to how the events unfolded. Whether the combined use of gestures and inner speech to represent a past episode can help to make the memory of it more perceptually vivid, and the degree of reliability of perceptual details added to memories by recruiting gestural perspectives are matters that require further empirical investigation.

7 Conclusion

I have presented a hypothesis on how inner speech and gestures may be concomitantly co-opted in multimodal self-directed communication to represent different kinds of perspectives. I have argued that, following Vygotsky and Neo-Vygotskians in considering how communication can be self-directed to serve cognitive purposes, inner speech and gestures are in themselves forms of thinking, rather than the mere expression of underlying mental states. Moreover, I have argued that previous research on the use of gestures and inner speech focuses on how the combination of the different encodings of thought-content or information, propositional and visuospatial, enhance cognitive performances, and I have suggested an alternative form of synergy between the two based on the different kinds of perspectives, involving propositional attitudes and visuospatial perceptual details, they represent.

The hypothesis presented requires further empirical corroboration in order to better understand whether and how gestures may perceptually anchor inner speech as well as to better understand the cognitive benefits their synergistic use may provide.

References

- Baddeley, Alan D. and Graham Hitch. 1974. "Working Memory." In Bower, Gordon H. (Ed.). *Psychology of Learning and Motivation*. Volume VIII, 47–89. Cambridge: Academic Press.
- Bodie, Graham D., James M. Honeycutt, and Andrea J. Vickery. 2013. "An Analysis of the Correspondence Between Imagined Interaction Attributes and Functions." *Human Communication Research* 39 (2): 157–183.
- Camp, Elisabeth. 2013. "Slurring Perspectives." *Analytic Philosophy* 54 (3): 330–349.
- Carruthers, Peter. 2015. *The Centered Mind*. Oxford: Oxford University Press.
- Cermak, Laird S. 1984. "The episodic-semantic distinction in amnesia." In Squire, Larry R. and Nelson Butters (Eds.). *Neuropsychology of Memory*, 55–62. New York: Guilford Press.
- Chu, Mingyuan and Sotaro Kita. 2016. "Co-thought and co-speech gestures are generated by the same action generation process." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 42 (2): 257–270. <https://doi.org/10.1037/xlm0000168>.
- Clark, Andy. 2008. *Supersizing the Mind, Embodiment, Action and Cognitive Extension*. Oxford: Oxford University Press.
- Clowes, Robert. 2006. *Beyond situated action: A neo-Vygotskian theory of thinking and language internalisation*. Dissertation. Brighton: University of Sussex.
- Cragg, Lucy and Kate Nation. 2010. "Language and the Development of Cognitive Control." *Topics in Cognitive Science* 2: 631–642.
- Damianova, Maria, Marilyn Lucas, and Gavin Sullivan. 2012. "Verbal Mediation of Problem Solving in Pre-Primary and Junior Primary School Children." *South African Journal of Psychology* 42: 445–455.

- Demir, Özlem E., Susan C. Levine, and Susan Goldin-Meadow. 2015. "A tale of two hands: Children's early gesture use in narrative predicts later narrative structure in speech." *Journal of Child Language* 42: 662–681.
- Dennett, Daniel. 1991. *Consciousness explained*. New York: Back Bay Books.
- Diaz, Rafael M. and Laura E. Berk. 1992. *Private speech: From social interaction to self regulation*. Hillsdale: Erlbaum.
- Eustache, Francis and Béatrice Desgranges. 2008. "MNESIS: Towards the integration of current multisystem models of memory." *Neuropsychological Review* 18 (1): 53–69.
- Fernyhough, Charles. 2008. "Getting Vygotskian about theory of mind: Mediation, dialogue, and the development of social understanding." *Developmental Review* 28 (2): 225–262.
- Fernyhough, Charles. 2009. "Dialogic thinking." In Adam Winsler, Charles Fernyhough, . & Ignacio Montero (Eds.). *Private Speech, Executive Functioning, and the Development of Verbal Self-Regulation*, New York: Cambridge University Press.
- Frankish, Keith. 2018. "Inner Speech and Outer Thought." In Langland-Hassan, Peter and Agustín Vicente (Eds.). *Inner Speech: New Voices*. Oxford: Oxford University Press.
- Goldin-Meadow, Susan. 2016. "Using our hands to change our minds." *Wiley Interdisciplinary Reviews: Cognitive Science* 8 (1–2): e1368. <https://doi.org/10.1002/wcs.1368>.
- Goldin-Meadow, Susan and Diane Brentari. 2015. "Gesture, sign, and language: The coming of age of sign language and gesture studies." *Behavioral and Brain Sciences* 40: e46. <https://doi.org/10.1017%2F50140525X15001247>.
- Goldin-Meadow, Susan, Howard Nusbaum, Spencer D. Kelly, and Susan Wagner. 2001. "Explaining math: Gesture lightens the load." *Psychological Science* 12: 516–522.
- Gregory, Daniel. 2017. Is Inner Speech Dialogic? *Journal of Consciousness Studies*, Volume 24, Numbers 1–2, 2017, pp. 111–137(27)
- Gregory, Daniel. 2022. "How not to decide whether inner speech is speech: Two common mistakes." *Phenomenology and the Cognitive Sciences* 23: 231–252. <https://doi.org/10.1007/s11097-022-09814-w>.
- Hassamer, Julius and Bodo Winter. 2018. "Decoding Gestural Iconicity." *Cognitive Science* 42 (8): 3034–3049. <https://doi.org/10.1111/cogs.12680>.
- Hitch, Graham J., Michael E. Woodin, and Sally Baker. 1989. "Visual and phonological components of working memory in children." *Memory & Cognition* 17: 175–185.
- Hostetter, Autumn B. and Martha W. Alibali. 2018. "Gesture as simulated action: Revisiting the framework." *Psychonomic Bulletin & Review* 26: 721–752.
- Kegl, Judy, Ann Senghas, and Marie Coppola. 1999. "Creation through Contact: Sign Language Emergence and Sign Language Change in Nicaragua." In DeGraff, Michel (Ed.). *Language Creation and Language Change: Creolization, Diachrony, and Development*, 179–237. Cambridge: MIT Press, Bradford Books.
- Kendon, Adam. 2014. "Semiotic diversity in utterance production and the concept of 'language'." *Philosophical Transactions of the Royal Society B* 369: 20130293. <https://doi.org/10.1098/rstb.2013.0293>.
- Kita, Sotaro. 2000. "How representational gestures help speaking." In McNeill, David (Ed.). *Language and gesture*, 162–185. Cambridge: Cambridge University Press.
- Kita, Sotaro, Martha W. Alibali, and Mingyuan Chu. 2017. "How do gestures influence thinking and speaking? The Gesture-for-Conceptualization hypothesis." *Psychological Review* 124: 245–266.
- Kompa, Nikola and Jutta L. Mueller. 2020. "How Abstract (Non-embodied) Linguistic Representations Augment Cognitive Control." *Frontiers in Psychology* 11: 1597.

- Kompa, Nikola and Jutta L. Mueller. 2022. "Inner speech as a cognitive tool—or what is the point of talking to oneself?" *Philosophical Psychology*. <https://doi.org/10.1080/09515089.2022.2112164>.
- Martínez-Manrique, Fernando and Agustín Vicente. 2015. "The activity view of inner speech." *Frontiers in Psychology* 6: 232.
- McNeill, David. 2005. *Gesture and thought*. Chicago: University of Chicago Press.
- McNeill, David. 2017. "Gesture-speech unity, what it is, where it came from." In Church, Ruth B., Martha W. Alibali, and Spencer D. Kelly (Eds.). *Why Gesture? How the hands function in speaking, thinking and communicating*, 77–102. Amsterdam: John Benjamins.
- Mead, George H. 1934, 1972. *Mind, self, and society from the standpoint of a social behaviorist*, edited by Charles W. Morris. Chicago: University of Chicago Press.
- Mischel, Walter and Ebbe B. Ebbesen. 1970. "Attention in Delay of Gratification." *Journal of Personality and Social Psychology* 16 (2): 329–337.
- Morin, Alain. 2009. "Inner speech and consciousness." In Banks, William P. (Ed.). *Encyclopedia of consciousness*, 389–402. Amsterdam: Elsevier.
- Morin, Alain. 2018. "The self-reflective functions of inner speech: Thirteen years later." In Langland-Hassan, Peter and Agustín Vicente (Eds.). *Inner speech: New voices*, 276–298. Oxford: Oxford University Press.
- Morin, Alain. 2019. "When Inner Speech and Imagined Interactions Meet." *Imagination, Cognition and Personality* 39 (4): 374–385. <https://doi.org/10.1177/0276236619864276>.
- Morin, Alain and Famira Racy. 2022. "Frequency, Content, and Functions of Self-Reported Inner Speech in Young Adults: A Synthesis." In Fossa, Pablo (Ed.). *Inner Speech, Culture & Education*, 147–170. Berlin: Springer.
- Morsella, Ezequiel and Robert Krauss. 2004. "The Role of Gestures in Spatial Working Memory and Speech." *The American Journal of Psychology* 117: 411–424.
- Pouw, Wim T. J. L., Jacqueline A. de Nooijer, Tamara van Gog, Rolf A. Zwaan, and Fred Paas. 2014. "Toward a more embedded/extended perspective on the cognitive function of gestures." *Frontiers in Psychology* 5: Art. 359. <https://doi.org/10.3389/fpsyg.2014.00359>.
- Skipper, Jeremy I. 2022. "A voice without a mouth no more: The neurobiology of language and consciousness." *Neuroscience & Biobehavioral Reviews* 140: 104772. <https://doi.org/10.1016/j.neubiorev.2022.104772>.
- Streeck, Jürgen. 2009. *Gesturecraft: The manu-facture of meaning*. Amsterdam: John Benjamins.
- Sutton, John. 2007. "Batting, Habit and Memory: The Embodied Mind and the Nature of Skill." *Sport in Society* 10 (5): 763–786.
- Tomasello, Michael. 2019. *Becoming Human: A Theory of Ontogeny*. Cambridge: Harvard University Press.
- Vygotsky, Lev S. 1930–1935, 1978. *Mind in society: Development of higher psychological processes*. Cambridge: Harvard University Press.
- Vygotsky, Lev S. 1934, 2012. *Thought and language*, edited by Alex Kozulin. Translated by Eugenia Hanfmann, Gertrude Vakar, and Alex Kozulin. Cambridge: MIT Press.
- Winsler, Adam and Jack Naglieri. 2003. "Overt and covert verbal problem-solving strategies: Developmental trends in use, awareness, and relations with task performance in children aged 5 to 27." *Child Development* 74: 659–678.

Laura Sparaci and Shaun Gallagher

Chapter 15

Continuity through Change: How Gestures Inform Current Debates on the Ontogeny of Embodied Narrative

Abstract: Embodied approaches to cognitive development underscore the relevance of narrative in lieu of mentalistic explanations of social cognition. In particular, embodied cognition revises the concept of narrative as an abstract fictional exercise and considers it instead an embodied practice, anchored in early social experiences, perceptions, and emotions, providing children the means to understand how others act according to reasons. Relevance given to embodied narrative in developing social cognition has led researchers to explore its ontogeny, often resulting in contrasting theories. Some studies take a nativist approach and define narrative as an invariant generative process. This view argues for the continuity of narrative structure from fetal and neonatal movement, through infant pre-verbal communication, and into linguistic meaning-making in childhood and adulthood. Other studies, while upholding that narrative is anchored in pre-verbal actions, suggest that it must be kept distinct from actions to avoid pan-narrativism and the overlooking of a significant status change in the nature of content (from non-representational to representational). These contrasting views on embodied narrative raise relevant questions about the relation between actions and language: the former suggesting an identity in structure, the latter suggesting a developmental derivation from action structure to narrative structure. In this chapter, we will offer an analysis of the pivotal role of gestures as communicative forms that join action to language. Close analyses of the emergence of communicative gestures in childhood as well as of the recent literature on proprioception in adults, will allow us to map the path from actions to narrative through gestures. This path shows structural continuity, but a consistent shift from non-representational to representational processes, moving from functional or instrumental acts to communicative ones, suggesting continuity through change in the passage from action to narrative.

Note: Shaun Gallagher's research for this chapter was supported by a National Science Foundation grant (#2117009), Language Across Cultures.

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Keywords: gestures, development, childhood, embodied narratives, enactivism

1 Embodied Narrative as an Alternative to Theory of Mind

Cognitivist approaches consider others' observed behaviors as mere clues to a mental life enclosed within skin and skull, and social understanding as the product of high-level or meta-cognitive abilities aimed at interpreting others. These approaches search for intellectual processes that could explain *how* we ascribe or infer reasons, intentions, and desires to others, and attempt to corroborate the existence of a set of folk-psychological laws regulating such inferential processes. These approaches contend that we understand others by relying on a Theory of Mind (ToM), involving a modular structure that computes second-order or meta-representational understanding (Baron-Cohen 1995, and Gopnik and Meltzoff 1998). In this view, ToM allows us to mindread, i.e., to ascribe mental states (intentions, belief, desires) to others in order to explain and predict their actions, so that the impairment of ToM mechanisms leads to important impairments in social cognition, such as observed in children with autism (Baron-Cohen, Leslie, and Frith 1985 and Baron-Cohen 2000).

Embodied approaches have challenged this view in an attempt to de-intellectualize explanations of how we understand others' behaviors as guided by reasons (Gallagher 2005). In contrast to the cognitivist stance, embodied approaches hold that explaining others' behaviors through explicit meta-cognitive, observational or spectatorial, theorizing does not capture the true nature of our daily encounters with others (Hutto 2004; Gallagher 2001 and 2004; Sparaci 2008). If ever we resort to such intellectual knowledge, this happens rarely and mostly when things do not go as expected. According to this view, others are not foreign objects calling for theoretical interpretation; moreover, as living organisms immersed in social contexts, we are not self-enclosed or theoretically removed from others. To the contrary the self-other relation starts *in utero*, and the other is, from the start, a necessary counterpart, which stands out among a multitude of inanimate objects (Zahavi and Parnas 2003; Ammaniti and Ferrari 2020). From neonatal life throughout development children learn through social practices and embodied skills to interact with others and to understand their behaviors (Gallagher and Hutto 2008). Among these practices and skills narrative plays an important role in building social understanding.

Jerome Bruner was one of the first authors to highlight how human narrative focuses for the most part on people as acting in specific settings (Bruner 1991).

Even when animals or objects are cast as protagonists they are endowed with intentional states. Therefore, in such narratives agency is always present and what narrative accounts supply is the basis for *interpreting* why other people act as they do, rather than simply descriptions of the physical world (Bruner 1991, 7). The importance of narratives in building interpretations concerned with reasons for things happening also suggests that origins of impairments in intentional understanding (such as observed, for example, in children with autism), should be traced back to inabilities to engage in appropriate transactional (intersubjective) processes early in life, which have cascading effects on narrative skills, rather than to the ability or lack of ability to build an efficient ToM (Bruner and Feldman 1993; Loveland, McEvoy and Tunali 1990; Losh and Capps 2003).

Kerstin Dautenhahn, building on this peculiar capacity of human narrative to focus on people and intentions, proposed the Narrative Intelligence Hypothesis (NIH), suggesting that the ability to communicate in stories co-evolved with increased social dynamics in our human ancestors (Dautenhahn 1999 and 2002). According to the NIH, narrative, with its focus on people and, in particular, third-party relationships, is well suited to encode and transmit meaningful and socially relevant information, which allows agents to deal with large and complex social groups, supporting social-bonding (Dautenhahn 2002). This ability is rooted in preverbal precursors of narrative in the developing child and is importantly based on dynamic formats of early interactions such as imitative games (Dautenhahn 2002).

Daniel Hutto, supporting an embodied-enactive approach, in contrast to ToM accounts, described how narrative plays a pivotal role in learning to understand others' behaviors as guided by reasons, intentions and desires. In his Narrative Practice Hypothesis (NPH) Hutto states that folk-psychological narratives and daily encounters with stories about reasons for acting, are essential for the construction of the ability to interact socially in an effective way (Gallagher and Hutto 2006; Hutto 2008). Folk-psychological narratives in this view are accounts that explain, expose or articulate the reason *why* a person acted on a particular occasion. In other words, they are explanations of actions in terms of *reasons* (Hutto 2008, 4). According to the NPH, encounters with folk psychological narrative in childhood and throughout life, rather than ToM modules, are at the basis of our intentional understanding.

Richard Menary (2008) helps to clarify the connection between actions and narrative by distinguishing "embodied narrative" from more traditional abstract narrative accounts. He underscores how our everyday embodied experiences (bodily actions, experiences and perceptions) are ready to be exploited in a narra-

tive form. Such sensorimotor experiences allow for the emergence of a subject of experiences, which involves a “minimal, embodied, feeling and perceiving of self,” different from an abstract narrator (a bare linguistic “I”), such that narrative is anchored in the unfolding embodied flow of experiences (Menary 2008, 76).

Such views suggest that embodied narrative provides a way to explain social understanding without appealing to theory-laden, mentalistic approaches. This motivates many authors to ask how narrative competencies first appear or how they are first acquired in human development. The ontogeny of narrative has often been entangled with questions on phylogeny of narrative (Cobley 2013, 21–28). However, for the purpose of the present study, we will focus on the ontogeny of narrative and its psychological roots. In this respect, we find that two recent contrasting approaches have surfaced in the literature on ontogeny of embodied narrative. In the following section, we will start out by outlining these two contrasting theories, before proceeding to consider some pivotal studies on gestures which may provide a new perspective on this debate.

2 Ontogeny of Embodied Narrative: Two Contrasting Views

Bruner suggested that there may be an innate human propensity towards narrative, upholding the existence of “a ‘protolinguistic’ readiness for narrative organization and discourse” (Bruner 1990, 80). He suggested that narrative structure is inherent in the praxis of social interaction even before this achieves linguistic expression and that the *push* towards constructing narratives determines the order in which grammatical forms are mastered in childhood (Bruner 1990, 77). In Bruner, this *push* consists of and depends on some core features that define what a narrative *is*. These include: (a) agentivity, or a means for emphasizing human agency or action; (b) linearization, the idea that a sequential order of some sort be established and maintained; (c) canonicity and breach, i.e., an understanding of what is canonical, traditional or permitted in human interaction as well as a sensitivity to what violates canonicity; and (d) a narrator’s perspective, as a narrative cannot be “voiceless” (Bruner 1990, 77).¹

¹ In a subsequent work, Bruner provides a broader list of the main characteristics of narratives, including 10 items, but the four aspects listed in this first work are contained in the broader list (see Bruner 1991).

In Bruner's view structured caregiver-child transactions may be referred to as "formats" the shape of which is narrativial in nature following a specific four-phase structure: a canonical steady state is followed by some precipitating event, followed by a restoration, followed by a coda ending (Bruner and Feldman 1993, 272). Such transactional formats progress from simple pre-verbal joint attention interaction, to mutual imitation and games such as peekaboo (Bruner and Feldman 1993, 271). For example, in a simple peek-a-boo game between infant and caregiver the four-phase transactional structure may be thus described: (1) mutual gaze sharing is established between child and caregiver (canonical steady state); (2) the caretaker hides her face behind her hands (precipitating event); (3) hands are removed revealing the face (restoration); and (4) "Boo" marks the end of the game (coda ending) (Dautenhahn 2002, 110).

The presence of a human *propensity* towards narrative as well as the idea that narrative is the "appropriate folk description of human action" (Nelson 2006, 76) has led multiple authors to investigate the grounding of human narrative capacities in pre-verbal transactions in infancy (Dautenhahn 2002). However, an important distinction needs to be made. It is one thing to claim the existence of a human *propensity* or *push* towards narrative formats and to suggest that these formats may be *rooted in* early pre-verbal infant communication. It is a completely different argument to consider early pre-verbal forms *as* forms of narrative. Let us clarify the importance of these contrasting views and their implications.

Delafield-Butt and Trevarthen, in their 2015 paper on the pre-verbal ontogeny of narrative, underscore how proto-conversations and baby songs in many different languages and cultures show a four-phase organization in verses or stanzas. These verses are usually between 20 and 50 seconds in length and display a modulation of bodily, vocal or hand movements that compose an introduction, development, climax and resolution (Delafield-Butt and Trevarthen 2015, 7). This four-phase organization corresponds, for the authors, to a narrative structure that characterizes human social communication within communities, and shapes how caregivers interact dynamically with their newborns. For Delafield-Butt and Trevarthen the four-phase structure is grounded on an "innate micro-kinesis of communication" which is acquired even before birth while the child is *in utero* through the exercise of structured movements (Delafield-Butt and Trevarthen 2015, 4).

This is an example of how some authors, taking up Bruner's perspective, have traced the four-phase narrative structures back to the earliest action sequences, suggesting an innate ability for narrative in humans. However, this view, which we will call the *innate narrative approach* (INA), also contains a subtle theoretical shift. For Bruner, what really mattered was to show that this narrativization of early social interactions allowed the child to build canonical representations of how "the

world of people-and-things works or should work” (Bruner and Feldman 1993, 272). In other terms, narrative, according to this view, is essential as a way of learning to interpret others’ actions in terms of reasons. Whether narrative structuring in infancy was driven by some innate *push* to narrativity, by an innate recognition of others as intentional agents, or by a universal cultural form of narrativizing, remained an open question (Bruner and Feldman 1993, 272). On the other hand, according to the INA, early pre-verbal actions and interactions are not simply the testimony of a *push* towards narrative, or a pre-figuring of narrative, they are, *per se*, embodied narratives themselves (Delafield-Butt and Trevarthen 2015). This has important implications for the definition of narrative.

First of all, for the INA narrative does not have to be linguistic, even while its essentially pre-verbal origin is considered “fundamental for understanding human cognition and culture, and demands multidisciplinary investigation” (Delafield-Butt and Trevarthen 2015, 9). Secondly, for the INA, detection of the four-phase structure, which proponents of INA consider to be a narrative structure, is a sufficient condition for the ascription of narrative content. We observe narrative when we are able to detect in the earliest interactions of infant-caregiver a sequence of acts that express an exchange of awareness and feelings through actions, gestures and vocalizations. These early structures are *per se* described as semiotic events structured around the four-phase structure which supports proto-conversation and meaning making. Thirdly, while Delafield-Butt and Trevarthen’s account includes a sequential structure organized in time, *contra* Bruner it does not seem to include a narrator. For the INA, narrative structures emerge through shared infant-caregiver experiences heavily grounded on emotional engagement and turn taking between infant and caregiver, but there is no need of a narrator for a narrative to take place.

Some authors have cautioned that these changes in the definition of narrative endorsed by the INA can easily lead to pan-narrativism (Gallagher and Hutto 2019; Gallagher 2020). Galen Strawson first suggested that if every sequence of actions, such as the simple acts involved in making coffee in the morning, are labelled narrative, the notion becomes trivial (Strawson 2004). Similarly, Menary suggested that although some actions have a structure that is ripe for narrative, some actions constitute a rather fluid experience that does not conform to “a detailed description of a sequence of actions” (Menary 2008, 70). For example, in the act of driving a car,

I enact the skills without thinking about them, the fluid and flexible sequence of perceptions, actions and manipulations of steering wheel, gear stick, pedals, etc. is open ended and not easily captured as a narrative sequence. (Menary 2008, 70)

According to this view narrative “requires the capacity for language use and, therefore, the capacity to narrate is based on more fundamental linguistic capacities such as the capacity to converse” (Menary 2008, 65). One important question is how precisely narrative structure is generated. Menary’s (2008) definition of embodied narrative stresses the importance of a sequential structure with a discursive organization, but also, similarly to what we have seen above in Bruner, the need for a narrator, who recounts, or gives shape, to what would otherwise be only sequences of actions (Menary 2008). On this view, and in contrast to INA, narrative structure is imposed on action. Similarly, Paul Copley states that the ability of narrative to “give shape” to events also entails the need for *selective* arrangement and ordering (Copley 2013). Accordingly, the narrator plays an active role in selecting, structuring and recounting the narrative, suggesting a sort of narrator stance.

Some may argue that a narrative may not need to be narrated, but may exist *per se* as an emergent phenomenon whether in thought or in social interaction. For example, Peter Goldie’s narrative thinking does not involve text or discourse, but is purely thought-based (Goldie 2012). But even Goldie stresses that a narrative must be kept distinct from *what* it is a narrative *of*, drawing a line between narrative and actions, and most importantly between structure and content. Similarly, Hutto, in his formulation, suggests that folk-psychological narratives may vary greatly among cultures. As testified by differences in storytelling practices around the world, different ways of conveying content can lead to important cultural differences in ways of dealing with reasons or their relevance in childrearing (Hutto 2008, 189). By outlining these cultural differences, Hutto indicates that the distinction between *what* is being told and *how* it is being told is an important aspect when speaking of narrative.

Accordingly, multiple authors suggest that a distinction should be made between narrative structure and narrative content. For example, Bruner refers to how the Russian formalists distinguished the narrative plot (or *fabula*) from its mode of telling (or *syuzhet*) (Bruner 1991). On one interpretation, if the content consists, primarily, of the actions that are narrated, the structure is bestowed on those actions by the narrative (linguistic) process. The latter requires, if not a full-blown narrator, some descriptive or selective process, involving, perhaps, Menary’s concept of a minimal subject, that allows one to distinguish or parse out specific aspects of everyday experiences from their continuous flow, and organize them according to a structure with a beginning and an end.

On an alternative interpretation, Gallagher and Hutto (2019) suggest that embodied narratives emerge from interactions with others and are shaped by the structures of actions and events which they recount. That is, actions themselves may have the intrinsic structure that Delafield-Butt and Trevarthen describe, but,

in contrast to INA, this is *action* structure rather than narrative structure. Rather than action having a structure that is intrinsically narrational, or taking on a structure imposed by narrative, narrative derives its structure from action structure (Gallagher and Hutto 2019; Gallagher 2020). Delafield-Butt and Trevarthen take early movements, actions, and interactions to be forms of narrative because “the contours of our narratives usually conform to the structures of actions and events they narrate” (Gallagher and Hutto 2019).

Narrative may well present the four-phase structure derived from action, or from early infant-caregiver interactions (games of peek-a-boo, etc.), but its semantic status is different. To better explain this difference, Gallagher and Hutto report the following interaction:

The mother takes the toy car and says “Zoom, zoom, zoom.” She is not providing a narrative about the car, she is playing with the car. The child then takes a turn. The vocalization, and gradually the words, become part of the narrative structure that captures the pretend action. The mother says, “The car goes zoom.” She is now on the way to giving a narrative about the car. Later she says, addressing the child, “You played so nicely with the car this afternoon, didn’t you?” The mother is leading the child into a kind of narrative. Later the child says, “I play with car.” The child is beginning to narrate his action. (Gallagher and Hutto 2019, 31)

As we can see in this sample of caregiver-child interaction the mother shifts from a performative vocalization, which accompanies ostensive acts, to a narrative structure which may integrate these acts (Gallagher 2020). In this sense the narrative is *anchored* in a pre-narrational event or action structure. While the mother’s initial acts are purely performative, the later narrative implies selecting this content from the continuous flow of everyday interactions, parsing it out and structuring it in time and space.

Summing up, we find two contrasting views on the ontogeny of narrative. The INA, which considers embodied narrative an innate human skill, defined by its structure and present in pre-linguistic action-based interactions. The second view, which we may call the *narrative anchoring approach* (NAA), while still accepting a continuity between action (and pre-verbal communicative events) and narrative, suggests that narrative generates a change in semantics, specifically, the introduction of representational content where there was none. To put it succinctly, although perhaps too broadly, narrative represents action; action does not represent itself. In particular, even if narrative structure derives from action structure, narrative requires more than a performative act; it requires a selective process.

3 Clarifying Contrasts: Some Considerations on Embodied Language and Gesture

By considering the notion of embodied language we want to suggest that while the INA and NAA seem to contrast on whether narrative requires language or not, this contrast hides a subtler distinction. The INA clearly states that narrative does not need language but is already present within pre-verbal social practices. On the other hand, we have seen how some authors upholding the NAA approach suggest the need for some linguistic exchange for narrative to emerge. However, these same authors also champion an embodied approach to language. In fact, the first step in speaking of embodied narrative, is to accept that human expression possesses a multi-modal structure that includes not only speech and vocal outputs, but also gestures, that is, body postures and hand, arm and head movements, which emerge well before words (speech) and display communicative contents (Volterra, Capirci, Caselli, Rinaldi, and Sparaci 2017). As humans we are equipped with a language-ready brain, but the acquisition and development of language relies heavily on sensory-motor skills (Arbib 2016 and 2018). This has led to multiple theories of how and to what extent language may be considered embodied (Arbib, Gasser, and Barres 2014; Meteyard, Cuadrado, Bahrami, and Vigliocco 2012). A full explanation of why and how language is embodied extends well beyond the purpose of the present chapter, but it is relevant to underscore that authors upholding the NAA agree on the fact that human language extends well beyond speech. This means that while the INA states that pre-verbal social practices such as actions *are* narratives, the NAA suggests that although early actions may be ripe for narrative, narrative as it emerges in communicative acts, is *anchored*, not just in speech, but also in non-verbal bodily movements.

This preliminary consideration leads us to focus on the boundary between functional movements and expressive and communicative ones, a boundary consistently inhabited by gestures, both in childhood and in adulthood as we shall see in the following sections. In the next sections, we will attempt to envision how, by considering gestures as transitional forms between action and language, we may allow for a continuity in structure but also shed some light on distinguishing action from narrative in terms of the latter's representational function. In particular, we will outline how considering the emergence and the underlying mechanisms of gestures in development as well as in a case of adult proprioception may help us to better understand the complex relation between embodied actions and language, which is at the core of the debate on the ontogeny of narrative.

4 Continuity through Change: Gestures in Development

If we wish to conduct an adequate analysis of the ontogeny of narrative in infancy our focus must not be limited to verbal skill alone. Esther Thelen and Linda Smith (1994) once suggested that the grand sweep of development may seem neatly rule-driven; in detail, however, development is messy and narrative development is no exception. If we broaden our perspective, we soon find that narrative development is not the product of domain-specific processes and abilities, but rather stretches into neighboring skills. This complexity is given by “multiple, parallel, and continuously dynamic interplay of perception and action, and a system that, by its thermodynamic nature, seeks certain stable solutions” which emerge from relations between skills, not from design (Thelen and Smith 1994, xix).

We have seen above that both the INA and the NAA can agree on searching for the ontogeny of narrative before the emergence of speech. Therefore, to trace the origins of narrative we can once again follow Bruner’s footprints and move beyond grammar to begin “well before language begins,” concentrating on sensory, motor, conceptual and social prerequisites that make language possible (Bruner 1975, 257). The same year in which Bruner made this proposal, Elizabeth Bates and colleagues (1975) began analyzing prerequisites to spoken language in a longitudinal study of three infant girls observed at two-week intervals over an eight-month period (Bates, Camaioni, and Volterra 1975). This study led to distinguishing three “pre-speech” stages of behavior, respectively named the perlocutionary, illocutionary and locutionary stages. In the first, perlocutionary stage (2- to 9-months) infants’ actions were characterized by active object exploration (handling, mouthing, banging, etc.), often interpreted by caregivers alongside emotional displays (smiling, crying, etc.) as early means-end relationships, even if they lacked the structure of intentional communication. As Bates clearly stated in the subsequent theoretical elaboration of these data:

The infant cries, or reaches towards his goal, and the adult interprets the child’s desires and intervenes to meet them. But does the child realize as he emits his signal that they will serve a communicative purpose? Are the cries and reaches aimed at the adult listener, or the goal itself? Obviously from a phylogenetic perspective the infant’s cry was selected for its communicative value. Ask any parent who has tried to ignore that cry at 3 o’clock in the morning. But we have reason to believe that in the first 9 months of life this behavior, is from the infant’s point of view, merely a built-in reaction to a particular internal state. In other words, prior to 9 months we suggest that communication is efficiently caused, but not finally caused. (Bates 1979, 34)

In the second illocutionary stage (10- to 13-months) Bates and colleagues observed the emergence of what they later termed “performative structures,” as concrete actions originally aimed at a goal (orienting, reaching, grasping) gradually became separated from the concrete attempts to reach objects, and became instead signals which may then be modulated in accordance with adult behavior (Bates, Camaioni, and Volterra 1975, 219). For example, after 9 months, the child may augment, add, or substitute signals contingent upon changes in adult behavior towards the goal, as in the following example:

Marta is unable to open a small purse, and places it in front of her father’s hand (which is resting on the floor). F does nothing, so M puts the purse in his hand and utters a series of small sounds, looking at F. F still does not react, and M insists, pointing to the purse, looks at F, and makes a series of small sounds. Finally, F touches the purse clasp and simultaneously says: “Should I open it?” Marta nods sharply. (Bates, Camaioni, and Volterra 1975, 219)

Marta’s behavior shows a case of multimodal communication (involving actions, vocalizations and even head gestures) at a developmental stage in which actions and embodied language interlace and often overlap. Marta’s action of placing the purse close to her father or the later action of putting the purse on the father’s hand are occurrences of what Bates and colleagues defined as “performative structures,” in which an action (placing, putting, etc.) is used by the child not only with its original function of moving an object, but to further *show* to the adult a state of affairs (in this case the fact that the purse is closed). It is important to note that this state of affairs is imbued for the child with meaning (in this case the intention to open the purse). However, the same cannot be said for the adult. In fact, unless the caregiver has observed (as in this case) the object-placing act as part of a structured sequence of actions (the child’s previous attempts at opening the purse) or has a general knowledge of the child’s interests (for example, knowledge that M likes to open the purse or things in general), it would be hard to disambiguate the meaning of the child’s action. In other words, the ability of performative acts to convey meaning requires the presence of contextual or contingent background knowledge. The father’s question at the end of the interaction is also evidence of this. In fact, caregivers often use these kinds of statements not only when a child’s performative behavior is overtly hard to interpret, but also when they are clearly understandable, often to suggest or probe further communicative acts from the child (in this case Martha’s head nod).

At this stage while we can say that some communicative or performative structure is being enacted between child and caregiver and even if in this basic exchange, we could trace the four-phase structure suggested above, we cannot imply presence of a narrative content. The act of placing is *selected* among other acts as able to convey meaning, but it has not been organized or re-structured by

either the child or the parent so as to be understood in the absence of context and/or background knowledge. In other words: the soon-to-be-narrating child is learning *how* meaning can be conveyed, but she still does not behave in a way that distinguishes between this structure and *what* is being communicated.

Bates and colleagues provide a list of performative structures and describe their progression in time, from early forms of showing off, to showing, to pointing to self, to giving, to pointing to others (see Sparaci and Volterra 2017, Table 1, 39 for a full summary and description). Performatives, in this sense, stand at the crossroads between action sequences and gestures as early communicative forms. Gradually and through repeated social interactions with caregivers, infants learn that specific acts (e.g., showing) may have an effect on others and when they display, in their behavior, knowledge of this effect, for example by persisting in a specific behavior until that effect is obtained, intentional communication is born and preverbal language starts. But in order to state appropriately that an action has become communicative, we must also observe some change in the form of the action, for example an abbreviated or exaggerated pattern that is appropriate *only* for achieving a communicative goal (Bates 1979, 36). In other terms performatives are a good way of showing that while the pattern may stay the same, its content and the intentions behind its production have radically changed. For example, the original placing action in Marta's example above, and a showing performative may have the same kinematic characteristics and structure, but while placing is a functional act, showing sets the emergence of intentional communication. However, this type of communication is not *yet* symbolic. For symbols to emerge we need something else to happen: in this case, Marta must realize that a specific act, which is already within her repertoire, with functional purposes (e.g., placing), may also achieve a communicative function (e.g., showing). Furthermore, she must realize that the communicative act of showing, contrary to the functional act of placing, works well in multiple contexts extending beyond the immediate here and now. A similar process is observed for vocal gestures or words:

Carlotta used the word *bam* while knocking over toys, but in no other context [. . .] Carlotta's *bam* [. . .] existed for weeks only as a procedure during a game, at fixed points of occurrence. These word-like sounds were not used to describe ongoing sequences by other participants, to demand the initiation of a *bam* [. . .] game. [. . .] to the extent that these uses are context-bound, they seem to belong to the context as a whole rather than to the referent in the peculiar way the names can be said to "belong to" or identify referents. In Carlotta, a subtle change took place in *bam* around 12–13 months of age. In one observation, she sat among her toys unoccupied for a brief moment, said the word *bam*, and then turned to bang her toy piano. The temporal separation of the vocal gesture from its proper point in the activity with which it was linked gives the first clue that *bam* signifies or stands for the act of banging [. . .] such behavior is truly symbolic activity, wherein the vehicle is different

from its referent though simultaneously standing for, suggesting, or evoking its referent. (Bates 1979, 39–40)

In other words, symbols emerge only through a slow process of decontextualization (spatial and/or temporal), in which a gesture or a word is used not in a single multifaceted game, but in a variety of contexts linked by the presence or involvement of a particular referent for that gesture or word (Bates 1979, 40). In this process, children gradually learn to detach specific acts from their immediate surroundings and then to reshape them for the benefit of communication, distinguishing content or plot from the way in which it is conveyed. For example, two-year-olds have been shown to rely on different representational techniques in producing their gestures depending on the communicative context (Marentette, Pettenati, Bello, and Volterra 2016). For example, producing more representational gestures using a hand-as-hand technique (i.e., in which the hands portray how an object is held or manipulated) for large objects or actions (e.g., driving), and a hand-as-object technique (i.e., gestures in which the hands are used to represent an object's salient features) for small objects (e.g., comb) (Marentette, Pettenati, Bello, and Volterra 2016).

This brief description of the emergence of symbols in infancy shows that while repeated interactions with caregivers are essential to the formation of preverbal communication, they are not linguistic in themselves in regard to their *content* or representational function. A significant *change* occurs in the way in which infants use actions, transitioning from performative structures to symbolic ones. We have seen above that for a narrative to occur we may not need to assume a strong narrator-stance, but we still need to be able to distinguish the narrative from *what* it is about. This requires a transition that is well exemplified in the passage from performatives to full-blown gestures.

If we take a closer look at this passage from action to language in development, we find that multiple authors have highlighted a continuity in the underlying structures or patterns. For example, language onset in reduplicative babbling (i.e., vocalizations in which well-formed syllables are organized into a regularly timed, rhythmically organized sequence, e.g., bababa) is related to onset and production of repetitive and rhythmic arm and hand banging movements which accompany and entrain the production of early vocalizations (Iverson, Hall, Nickel, and Wozniak 2007; Locke, Bekken, McMinn-Larson, and Wein 1995).

Continuity in structure stretches far beyond infancy and allows us not only to observe the four-phase structure of actions in narratives (as described above), but also to analyze actions using structures usually applied to the analysis of gestures. For example, in a recent study by Sparaci and colleagues (Sparaci, Formica, Lasorsa, Raiano, Venuti, and Capirci 2022) demonstrated, for the first time, that features and kinematics of functional actions with objects may be analyzed using

the same three-phase structure commonly used to analyze representational gestures. Gestures are usually parsed into three-phases: preparation, stroke and return (McNeill, Pedelty, and Levy 1990; McNeill 1992).² The stroke is part of the child's movement which conveys meaning (e.g., for the gesture "brushing hair": child's hand moves repeatedly downwards and upwards next to the head with a closed fist), while the preparation and the return phases are used respectively to achieve a starting position for the stroke and to return to a resting position (see also Sparaci, Formica, Lasorsa, Raiano, Venuti, and Capirci 2022 for a more detailed description). This study shows that a similar three-phase structure as the one detected in representational gestures may be traced also in actions with objects, but, more importantly, it also highlights some significant differences in relation to content. In fact, the stroke phase in the case of actions conveys the functional part of the act, rather than its communicative content expressed as representational significance. Furthermore, fine-grained analysis of action vs. gesture stroke kinematics shows some significant differences as the presence of objects in the action condition affects continuous variables, such as speed (Sparaci, Formica, Lasorsa, Raiano, Venuti, and Capirci 2022).

Summing up, considering the passage from actions to performative structure and finally to gestures in early infancy, we are able to detect significant changes in contentful processes (changes from non-representational to representational processes) that highlight the need to distinguish actions from narrative as suggested by the NAA. However, if we observe action and gesture structure we can more easily understand the continuity that runs from action to gestures to narrative.

5 Continuity through Change: Gesture in Aproprioception

The relation between action and language as modulated by bodily gestures in adults has been explored in a series of studies considering the important and unusual case of a patient (IW) with aproprioception below the neckline (Cole, Gallagher, and McNeill 2002). After suffering an acute sensory neuropathy at the age of nineteen, IW lost proprioception of his self-relative body position in space and touch below the neck (Cole and Katifi 1991). Possibly this was due to an auto-

² We suggest that this three-phase structure combines the dynamics of two phases of the four-phase structure previously discussed. "Preparation" is equivalent to "introduction"; "stroke" includes both "development" and "climax"; and "resolution" is equivalent to "return."

destructive immune reaction, resulting in damage to myelination of sensory fibers, specifically the destruction of fast-conducting highly myelinated fibers dedicated to proprioception and spatial position, in contrast to unaffected slow-conducting low myelinated sensory fibers concerned with pain, temperature and muscle fatigue as well as motor nerve fibers. IW was not paralyzed but lost all motor control that involved proprioception, while speech and other cognitive functions were left intact (McNeill 2005). With time and intensive therapy, IW learned to move using cognition and visual feedback as substitutes for proprioception and kinaesthesia. This means that IW is now able to walk and grasp things, he is unable to control his movements without vision and cognitive effort. In other words,

He has to think through every move. When he reaches to lift a glass, he has to consider the shape made by his fingers, the strength of his grip, and the movement of his arm, and he has to keep the target in sight until he grasps it. No matter how many times he practices a movement, it never becomes completely automatic for him, although, with practice his movements can become smoother and easier to make—but always in need of conscious effort, and almost always in need of visual guidance. (Cole, Gallagher, and McNeill 2002, 52)

If gestures were equivalent to instrumental action, we should find that IW's gestures also require visual feedback and therefore that IW would be unable to gesture when visual feedback is absent. Surprisingly, this is not the case.

In 1998, the BBC Horizon Series produced a short film entitled *The Man Who Lost His Body* dedicated to IW's case. On this and other occasions, researchers from different fields (medicine, philosophy, and gesture studies) were brought together to devise a variety of experiments and observe IW's behavior. Jonathan Cole, Shaun Gallagher, and David McNeill filmed IW in 1998 and in 2002 at age 46 and 50 as he was narrating (retelling), in conversation, different animated Tweety and Sylvester cartoons. The narrative retelling was done by IW in a seated position in two different conditions: one in which he could see his hands (with visual feedback, VF) and another in which a tray-like blind pulled down in front of him blocked his vision of his hands (no visual feedback, NVF) (McNeill 2005). The two conditions surprisingly showed that IW produced co-speech gestures in both situations (VF and NVF). In other words, while IW needs visual feedback to control his actions, he is able to produce some gestures without visual feedback. Researchers interpreted this as evidence of differences in the mechanisms used for action and gesture control.

IW's gestures while retelling the Sylvester stories were mostly beats (co-speech gestures usually employed to "beat" time along with the rhythm of speech or to highlight contents of relevance within the speech flow) and representational gestures (gestures representing an object or an event occurring in the world).

Computer assisted analysis of the videos, based on McNeill's gesture phases (described above), allowed the experimenters to analyze gesture timing (gesture-speech synchrony) as well as specific gesture features. The latter included: (A) gesture morphokinesis, i.e., the shape of hand movements used in communicating meaning (e.g., a bowling ball is represented by a spherical movement of hands); (B) gesture topokinesis, or location of the hands relative to each other and to one's body in space; (C) presence/absence of character view-point gestures (gestures in which the speaker is enacting the point of view of the character, CVPT); and (D) presence/absence of observer-view point gestures (gestures in which the speaker acts as a narrator or observer, OVPT) (McNeill 2005; Cole, Gallagher, and McNeill 2002; Quaegebeur, Duncan, Gallagher, Cole, and McNeill 2014).

Results showed that IW's gestures in the VF condition were appropriate for both timing and gesture features, with the main differences being that IW produced fewer gestures compared to controls with typical proprioception intact; that he looked at his hands during strokes; and that his gestures tended to be discrete rather than showing a flowing rhythm (McNeill 2005). In the NVF condition, timing was maintained and differences in gesture features were limited to loss of control of topokinetic aspects and reduced production of CVPT gestures. CVPT gestures are closely tied to movements that replicate aspects of instrumental actions that are being represented in gesture. These data were initially interpreted as supporting a communicative theory of gestures rather than a motor one.

On the communicative theory of gesture the reason gesture can be re-established with such proficiency is that gesture, as a movement concerned with the construction of *significance* rather than with *doing* something, is organized primarily by the linguistic-communicative context. (Cole, Gallagher, and McNeill 2002, 61)

According to this view, gesture and speech entertain a close relationship that originates in early development and hand-mouth sensorimotor linkages which are later maintained and strengthened (Iverson and Thelen 1999). In other terms, overall, for IW, the gesture data demonstrated some difference between the know-how of gesture and the know-how of instrumental movement (McNeill 2005 Cole, Gallagher, and McNeill 2002). In particular, the fact that morphokinetic gesture features were spared in the NVF condition, while topokinetic features were impaired, was taken to indicate that while gestures are still constrained at the mechanical end by motor programs responsible for controlled movement, the semantic and communicative (pragmatic) aspects of gesture extend beyond pure motor acts. In this sense "gesture is never a mere motor phenomenon; it draws the body into a communicative order defined by its own pragmatic rules" (Cole, Gallagher, and McNeill 2002, 65).

More recently, collaboration between researchers in the USA and Netherlands has led to a re-analysis of IW's gesture data originally collected in 1998 and 2002. By using time-linked gesture annotation software (ELAN), 2D videography motion-tracking (OpenPose) for motion analysis and dedicated software for acoustic analysis (PRAAT), a group of researchers produced finer-grained analyses of gesture-speech synchrony (Pouw, Harrison, and Dixon 2022). Use of this new technology showed that, while IW's gesture timing in the NVF condition may appear unaltered on a macro-scale level, some differences emerge on a micro-scale. First, gesture timing is tightly coupled to peak gesture speed in the VF condition, but not in the NVF condition (2 times greater variability was found in the NVF condition). Furthermore, in the NVF condition IW's gestures were more forceful (as shown by higher deceleration peaks) than in the VF (as shown by the recruitment of more peaks in speed) (Pouw, Harrison, and Dixon 2022, 12).

These data are interpreted as evidence of a change in the way in which IW obtains gesture-speech synchrony in the two conditions: when vision is present it appears to support speed timing with prosodic markers, but when it is absent prosodic markers are timed with physical impulses through the mechanical loading of high-impulse gestures onto the upper trunk musculo-skeletal system which increases lung pressure (Pouw, Harrison, Esteve-Gibert, and Dixon 2020). In other words, in the NVF condition, the patient may be relying on body biomechanics and sensorimotor loops that involve multiple bodily processes (head placements, muscle perturbations in the upper trunk musculo-skeletal system and lung tension). Given that the upper body is perturbed by gesturing, these perturbations may "provide a resource for IW given intact vestibular sensations and proprioception above the neck" (Pouw, Harrison, and Dixon 2022, 13). These data suggest that gestures are even more embodied than previously thought (Pouw, De Nooijer, Van Gog, Zwaan, and Paas 2014).

Overall, this recent data analysis of IW's case shows that bodily resources for a type of motor control completely different from the one commonly enrolled by object-directed actions may play a role in the timing of gesture execution. However, given that the authors were considering only continuous variables (gesture-speech timing) and not gesture features (including morphokinesis, which is closely tied to the meaning being expressed), there is still some structural overlap between motor actions and gestures, while consistent differences remain in terms of what action accomplishes and how its meaning comes to be represented.

We mentioned above that analyses of gesture vs. action kinematics in young children have shown significant differences in continuous variables (speed) due to the presence of objects, but also that both gestures and actions may be analyzed using a three-phase structure (Sparaci et al. 2022). Taken together, data from child studies as well as data on gesture timing in adult proprioception sug-

gest that gestures can really be considered as standing between actions and language. On one side, we find consistent structural similarities in gestures and actions, but on the other, we have also highlighted how there is a consistent shift towards representational content when communicative gestures emerge as compared to functional acts.

6 Conclusions and Implications for Embodied Narrative Competency

Considering the role of narrative competency in childhood has allowed us to move beyond traditional ToM accounts of social understanding. Furthermore, the theoretical shift towards embodied narrative suggests that narrative may not require speech but is rather grounded in non-verbal bodily communicative acts. Gestures are only one example of such communicative acts, future studies may consider, for example, the role of sign language in disentangling issues concerning embodied narrative.

Current views on the ontogeny of embodied narrative present a contrast between the INA and the NAA approaches. The former suggesting that early actions are narrative, the latter holding the need for communicative acts to be in place for narrative to emerge. This contrast is just a reflection of broader questions on the relation between actions and language and by considering gestures as communicative acts standing between the two we have attempted to gain better insight on this topic.

In particular, an analysis of gestures allowed us to show that similarity in structure is not sufficient for narrative events to take place. What is needed is the presence of specific representational processes that involve, if not a narrator stance (OVPT in gestures), at least the selection and organization of action elements that shape the meaning (in gestures, for example, the specific morphokinetic aspects) and that allow for an extension of semantic content beyond the here and now. If there is a shared structure between action, gesture and narrative, gesture and narrative share something else: a type of expressive and communicative function that requires representational processes that are missing in action.

References

- Ammaniti, Massimo and Pier F. Ferrari. 2020. *Il corpo non dimentica: l'io motorio e lo sviluppo della relazionalità*. Milan: Raffaello Cortina.
- Arbib, Michael A. 2016. "Towards a computational comparative neuroprimateology: Framing the language-ready brain." *Physics of Life Reviews* 16: 1–54.
- Arbib, Michael A. 2018. "Computational Challenges of evolving the language-ready brain: 2. Building towards neurolinguistics." *Interaction Studies* 19 (1–2): 22–37.
- Arbib, Michael A., Brad Gasser, and Victor Barrès. 2014. "Language is handy but is it embodied?" *Neuropsychologia* 55: 57–70.
- Baron-Cohen, Simon. 1995. *Mindblindness: An essay on autism and theory of mind*. Cambridge: MIT Press.
- Baron-Cohen, Simon. 2000. "The cognitive neuroscience of autism: Evolutionary approaches." In Gazzaniga, Michael S. (Ed.). *The New Cognitive Neurosciences*. 2nd ed., 1249–1257. Cambridge: MIT Press.
- Baron-Cohen, Simon, Alan Leslie, and Uta Frith. 1985. "Does the autistic child have a 'theory of mind.'" *Cognition* 21: 37–46.
- Bates, Elizabeth. 1979. *The Emergence of Symbols: Cognition and Communication in Infancy*. New York: Wiley.
- Bates, Elizabeth, Luigia Camaioni, and Virginia Volterra. 1975. "The acquisition of performatives prior to speech." *Merrill-Palmer Quarterly of Behavior and Development* 21 (3): 205–226.
- BBC Horizon Series. 1997. *The man who lost his body*. Documentary. NHK BS1.
- Bruner, Jerome S. 1975. "From communication to language—A psychological perspective." *Cognition* 3 (3): 255–287.
- Bruner, Jerome S. 1990. *Acts of meaning*. Cambridge: Harvard University Press.
- Bruner, Jerome S. 1991. "The narrative construction of reality." *Critical Inquiry* 18 (1): 1–21.
- Bruner, Jerome S. and Carol Feldman. 1993. "Theories of mind and the problem of autism." In Baron-Cohen, Simon, Helen Tager-Flusberg, and Donald J. Cohen (Eds.). *Understanding other Minds: Perspectives from Autism*. Oxford: Oxford University Press.
- Clark, Andy and David Chalmers. 1998. "The extended mind." *Analysis* 58: 7–19.
- Cobley, Paul. 2013. *Narrative*. London: Routledge.
- Cole, Jonathan, Shaun Gallagher, and David McNeill. 2002. "Gesture following deafferentation: A phenomenologically informed experimental study." *Phenomenology and the Cognitive Sciences* 1 (1): 49–67.
- Cole, Jonathan and Haider A. Katifi. 1991. "Evoked potentials in a man with a complete large myelinated fibre sensory neuropathy below the neck." *Electroencephalography and Clinical Neurophysiology/Evoked Potentials Section* 80 (2): 103–107.
- Dautenhahn, Kerstin. 1999. "The lemur's tale—Story-telling in primates and other socially intelligent agents." In Mateas, Michael and Phoebe Sengers (Eds.). *Proceedings of the AAAI Symposium on Narrative Intelligence*, 59–66. Menlo Park: AAAI Press.
- Dautenhahn, Kerstin. 2002. "The origins of narrative: In search of the transactional format of narratives in humans and other social animals." *International Journal of Cognition and Technology* 1 (1): 97–123.
- Delafield-Butt, Jonathan T., and Colwyn Trevarthen. 2015. "The ontogenesis of narrative: from moving to meaning." *Frontiers in Psychology* 6: 1157.

- Frak, Victor, Tatjana Nazir, Michel Goyette, Henri Cohen, and Marc Jeannerod. 2010. "Grip force is part of the semantic representation of manual action verbs." *PLoS ONE* 5 (3): e9728.
- Gallagher, Shaun. 2001. "The practice of mind: Theory, simulation, or primary interaction." *Journal of Consciousness Studies* 8, 83–108.
- Gallagher, Shaun. 2004. "Understanding interpersonal problems in autism: Interaction theory as an alternative to theory of mind." *Philosophy, Psychiatry, and Psychology* 11 (3): 199–217.
- Gallagher, Shaun. 2005. *How the Body Shapes the Mind*. Oxford: Oxford University Press and Clarendon Press.
- Gallagher, Shaun. 2006. "The narrative alternative to theory of mind." In Menary, Richard (Ed.). *Radical Enactivism: Intentionality, Phenomenology, and Narrative*, 223–229. Amsterdam: John Benjamins.
- Gallagher, Shaun. 2020. "How moving is sometimes thinking." *Idea Journal* 17 (2): 58–68.
- Gallagher, Shaun and Daniel D. Hutto. 2008. "Understanding others through primary interaction and narrative practice." In Zlatev, Jordan, Timothy P. Racine, Chris Sinha, and Esa Itkonen (Eds.). *The Shared Mind: Perspectives on Intersubjectivity*, 17–38. Amsterdam: John Benjamins.
- Gallagher, Shaun and Daniel D. Hutto. 2019. "Narratives in embodied therapeutic practice: Getting the story straight." In Payne, Helen, Sabine Koch, and Jennifer Tantia (Eds.). *The Routledge International Handbook of Embodied Perspectives in Psychotherapy*, 28–39. New York and London: Routledge.
- Goldie, Peter. 2012. *The Mess Inside: Narrative, emotion and the mind*. Oxford: Oxford University Press.
- Gopnik, Alison and Andrew N. Meltzoff. 1998. *Words, thoughts, and theories*. Cambridge: MIT Press.
- Hutto, Daniel D. 2004. "The limits of spectatorial folk-psychology." *Mind and Language* 19: 548–573.
- Hutto, Daniel D. 2008. *Folk psychological narratives: The sociocultural basis of understanding reasons*. Cambridge: MIT Press.
- Iverson, Jana M. 2010. "Developing language in a developing body: The relationship between motor development and language development." *Journal of Child Language* 37 (2): 229–261.
- Iverson, Jana M., Amanda J. Hall, Lindsay Nickel, and Robert H. Wozniak. 2007. "The relationship between reduplicated babble onset and laterality biases in infant rhythmic arm movements." *Brain and Language* 101 (3): 198–207.
- Iverson, Jana M. and Esther Thelen. 1999. "Hand, mouth and brain. The dynamic emergence of speech and gesture." *Journal of Consciousness Studies* 6 (11–12): 19–40.
- Locke, John L., Kaaren E. Bekken, Laura McMinn-Larson, and Delbra Wein. 1995. "Emergent control of manual and vocal-motor activity in relation to the development of speech." *Brain and Language* 51 (3): 498–508.
- Losh, Molly and Lisa Capps. 2003. "Narrative ability in high-functioning children with autism or Asperger's syndrome." *Journal of Autism and Developmental Disorders* 33: 239–251.
- Loveland, Katherine A., Robin E. McEvoy, and Belgin Tunali. 1990. "Narrative story telling in autism and Down's syndrome." *British Journal of Developmental Psychology* 8: 9–23.
- Marentette, Paula, Paola Pettenati, Arianna Bello, and Virginia Volterra. (2016). "Gesture and symbolic representation in Italian and English-speaking Canadian 2-year-olds." *Child Development* 87 (3): 944–961.
- McNeill, David. 1992. *Hand and mind. What the hands reveal about thought*. Chicago: University of Chicago Press.
- McNeill, David. 2005. *Gesture and Thought*. Chicago: University of Chicago Press.
- McNeill, David, Laura L. Pedelty, and Elena T. Levy. 1990. "Speech and gesture." *Advances in Psychology* 70: 203–256.
- Menary, Richard. 2008. "Embodied narratives." *Journal of Consciousness Studies* 15 (6).

- Meteyard, Lotte, Sara R. Cuadrado, Bahador Bahrami, and Gabriella Vigliocco. 2012. “Coming of age: A review of embodiment and the neuroscience of semantics.” *Cortex* 48 (7): 788–804.
- Nelson, Katherine (Ed.). 2006. *Narratives from the Crib*. Harvard University Press.
- Pouw, Wim T., Jacqueline A. De Nooijer, Tamara Van Gog, Rolf A. Zwaan, and Fred Paas. 2014. “Toward a more embedded/extended perspective on the cognitive function of gestures.” *Frontiers in Psychology* 5: 359.
- Pouw, Wim, Steven J. Harrison, and James A. Dixon. 2022. “The importance of visual control and biomechanics in the regulation of gesture-speech synchrony for an individual deprived of proprioceptive feedback of body position.” *Scientific Reports* 12 (1): 1–16.
- Pouw, Wim, Steven J. Harrison, Núria Esteve-Gibert, and James A. Dixon. 2020. “Energy flows in gesture-speech physics: The respiratory-vocal system and its coupling with hand gestures.” *The Journal of the Acoustical Society of America* 148 (3): 1231–1247.
- Pulvermüller, Friedemann. 2005. “Brain mechanisms linking language and action.” *Nature Reviews Neuroscience* 6 (7): 576–582.
- Pulvermüller, Friedemann and Luciano Fadiga. 2010. “Active perception: Sensorimotor circuits as a cortical basis for language.” *Nature Reviews Neuroscience* 11 (5): 351–360.
- Quaeghebeur, Liesbet, Susan Duncan, Shaun Gallagher, Jonathan Cole and David McNeill. 2014. “Aproprioception and gesture.” In Cornelia Müller, Ellen Fricke, Alan Cienki, Silva H. Ladewig, and David McNeill (Eds.). *Handbook on Body—Language—Communication*, 2026–2048. The Hague: De Gruyter-Mouton.
- Sparaci, Laura. 2008. “Embodiment Gestures. The Social Orienting Model and the study of early gestures in autism.” *Phenomenology and the Cognitive Sciences* 7: 203–223.
- Sparaci, Laura, Domenico Formica, Francesca R. Lasorsa, Luigi Raiano, Paola Venuti, and Olga Capirci. 2022. “New Methods for Unraveling Imitation Accuracy Differences Between Children with Autism and Typically Developing Peers.” *Perceptual and Motor Skills* 129 (6).
- Sparaci, Laura and Virginia Volterra. 2017. “Hands shaping communication: From gestures to signs.” In Bertolaso, Marta and Nicola Di Stefano (Eds.). *The Hand and Human Identity: Perception, Cognition, Action*. Cham: Springer.
- Strawson Galen. 2004. “Against narrativity.” *Ratio (New Series)* 17 (4): 428–452.
- Thelen, Esther. 1979. “Rhythmical stereotypies in normal human infants.” *Animal Behaviour* 27: 699–715.
- Thelen, Esther and Linda B. Smith. 1994. *A Dynamic Systems Approach to the Development of Cognition and Action*. Cambridge: MIT Press.
- Volterra, Virginia, Olga Capirci, Maria C. Caselli, Pasquale Rinaldi, and Laura Sparaci. 2017. “Developmental evidence for continuity from action to gesture/sign.” *Language Interaction and Acquisition* 8 (1): 13–42.
- Wilson, Margaret. 2002. “Six views of embodied cognition.” *Psychonomic Bulletin & Review* 9 (4): 625–636.
- Zahavi, Dan and Josef Parnas. 2003. “Conceptual problems in infantile autism research. Why cognitive science needs phenomenology.” *Journal of Consciousness Studies* 10 (9–10): 53–71.

Part IV: **Gestures in Anthropology, Aesthetics,
and Arts**

Antonis Iliopoulos

Chapter 16

Gesture and Things: A Working Definition and Material Engagement

Abstract: Gesture is usually seen as a movement of the body that represents abstract meaning and accompanies speech. Yet we cannot help but wonder whether there may be another way of conceiving it, an approach not steeped in an “embodied” sort of cognitivism. *Could gesture be defined as a performative movement that supports meaning? Can it be directed towards objects, like in cases of creative practice? And if it can indeed be found in contexts of creative material engagement, how does it participate in the emergence of mind, signification, and agency?* These are some fundamental questions that we attempt to address in this chapter by drawing upon the theoretical insights of scholars from different but not incompatible schools of thought. Setting off at the etymological root of the word *gesture*, we first seek to enunciate the freedom of will and the endurance of matter that characterize it by resorting to the writings of Flusser, Dewey, and Agamben. In view of this working definition, we then attempt to sketch an ecologically sensitive picture that includes gestures directed towards objects, focusing in particular on the *gestures of work* that drive creative practice. Building on Malafouris’ *theory of material engagement*, we specifically try to frame these gestures along the lines of *enactive prosthesis*, *enactive sign*, and *enactive intention*—always in the context of mind-matter interaction. Considering the existential implications of gesturing, we are ultimately obliged to conceive this kind of body movement as *creative* in the most fundamental of ways and the gesturer as *Homo faber* in the most autopoietic of senses.

Keywords: gesture, definition, work, material engagement, enactivism, creativity

Note: Thanks are due to Lambros Malafouris for his advice and comments on an earlier draft of this chapter. He must also be thanked for bringing Paolucci’s (2019) conference presentation to my attention as well as for providing the funding for this research through the ERC Consolidator Grant “HANDMADE” (No 771997 European Union Horizon 2020). Special thanks to Liana Theodoratou for her philological insight. And of course, gratitude must be extended to Michela Bella, Matteo Santarelli, and Giovanni Maddalena for their kind invitation to include this work in the conference and the edited book alike.

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1 Introduction

At first glance, gestures are among those “things” that we can all identify if presented with the opportunity but without knowing exactly why or how. Their transparency is such that arriving at a clear-cut definition is seldom considered a matter of concern in everyday life. In the field of gesture studies though, defining them is not considered as trivial an issue, with representationalism usually being the position favored. Kendon (2000, 50), for instance, regards “gesture as a mode of symbolic representation, just as spoken language is.” Along similar lines, McNeill (1992, 78) argues that self-touching movements and object-manipulations do not fall under the umbrella of gestures. While object-directed actions seek to accomplish a goal with an object, gesture seeks to represent and perhaps communicate information (Novack and Goldin-Meadow 2017, 654). Novack and Goldin-Meadow (2017, 654) also add that object-directed actions need not be produced along with speech, whereas gestures routinely co-occur with speech, with which they are synchronized (Kendon 1980 and McNeill 1992). Evidently, then, gestures are usually conceived as body movements that function as abstract representations when a person is speaking. Goldin-Meadow and Brentari (2017) capture the spirit of this stance when noting that, while language and gesture may function differently (in that categorical and imagistic representations are respectively underlying their expression), they do work together as an integrated system.

Co-verbal gestures can be classified in various ways, but McNeill’s (1992, 78–80) distinction is one of the better known and accepted systems. As he points out, gestures may be *iconic* when depicting concrete events (e.g., a hand rising when referring to an upward motion in speech); they can be *metaphoric* when presenting abstract concepts and relations (e.g., a cupped hand when invoking the concept of a question); and they can be *deictic* when a pointing movement is executed in order to orient and reorient. Yet besides being imagistic, gestures may present no discernible meaning, as is the case with non-imagistic *beats*, the biphasic flicks of the fingers or hands synchronized with the rhythm of speech. With the exception of the last, these varieties of gesture share a common purpose: they help the gesturer externalize their private thoughts. Much like spoken words, gestures appear to be born from the understanding that particular movements are tied to particular referents. From a representational point of view, then, speech and gesture come together for the purpose of better communicating a pre-existing idea.

While there is certainly no reservation on our part about the fact that gesture can be representational, it would still be wise to consider what a cognitivist definition leaves unaccounted for, before hastily accepting these two functions as the defining characteristics of all gestures. According to a recent literature review on the ecology of gesture, there is a small but growing corpus of literature that goes

beyond the representational function of gesture into the territory of the ecological (Iliopoulos and Malafouris 2024). Though there is definitely no question that gestures select and modify features of the world *for* someone (self or other), it is also imperative to recognize that they are primarily directed towards objects in the world. And while the objects may well be imaginary, as are the ones we often engage with when speaking, they can also be real-world objects. To put it in Goodwin's (2003) terms, gestures can of course be *iconic* when not invoking the environmental surround, but they can also be *symbiotic* when they incorporate external structures in acts of representation, or *inscriptive* when they actually effect changes upon the things being represented. Musical gestures, for instance, constitute one such case of symbiosis, wherein sonic profiles are quite literally shaped by the physicality of a performer's engagement with the instrument. As for inscription, handmaking is a clear example of a gestural process through which materials are actually molded. But what concerns the archaeology of mind even more so than inscription is how the process of effecting changes in the material world affects the minds of gesturers. Or to be more precise, if we take into account that the arrow of causality actually goes both ways, what interests us the most is how mind and matter shape each other in contexts of gesture-driven engagement.

In moving towards an ecology of gesture that recognizes its active and constitutive role in the emergence of form and meaning, we will start by attempting to define gesture. §2 sets out to sketch a working definition of *gesture* that is closer to the spirit of its etymology. The Latin root of the word provides a good starting point for dispelling the cognitivist connotations of the term. We will specifically work towards defining gesture as a performed act, in light of acute observations by Flusser, Dewey, and Agamben. In making the performative element of gesturing sufficiently clear, we aim to set the backdrop against which gestures towards objects can be conceived, especially when they are of the creative variety. As we shall be proposing in §3, artefacts are but the product of work that involves fixing gestures in a material. We will therefore have to shift our attention from the end product to the creative process driven by praxis. This is why we shall be eventually focusing on material engagement and framing the *prosthetic*, *significative*, and *intentional* aspects of gesture according to enactivism. We will finally close this chapter in §4 by summarizing the key points touched upon before portraying the gesture of making as *creative* in the most fundamental of ways and the gesturer as *Homo faber* in the most auto-poietic of senses.

2 A Working Definition of Gesture

There is perhaps no better place to start defining gesture than the etymological root of the word. *Gesture* comes from the Latin verb *gerō*, which means “to conduct.” Not surprisingly, then, Maddalena (2015) provides a *performative* account of this body movement in a recent monograph on *The Philosophy of Gesture*. We could thus start moving away from the cognitivist approach to gesture by delving deeper into this very aspect. We do recognize, of course, that broadening our scope too much may come with a loss of analytical specificity to the extent that all body movements are seen as gestures on the basis that they are performed by the body. A question is therefore raised: *How can we differentiate gesture from other kinds of movement? Is it simply a bodily act or something more than that?*

Referring to Flusser’s (2014) writings might help us confront these questions, seeing how, in working towards a general theory of gestures, he made a useful distinction between three kinds of movement. The first kind of movement pertains to that which can be adequately explained by considering the effects that “external” forces have on moving bodies, as is for instance the case with a free-falling object. The second kind concerns movements that can be adequately explained by accounting for the effects of forces exerted “within” a moving body, as is for example the case with a swimming amoeba. And the third kind involves movements that *cannot* be adequately explained, even when the effects of all the aforementioned forces are taken into account, as when a hand decides to embark on the act of writing (Flusser 2014, 162). It is this third kind of movement that we associate with gesture. As Flusser defines it, “gesture is a movement of the body or of a tool connected to the body for which there is no satisfactory causal explanation” (Flusser 2014, 2).

Admittedly, this negative way of defining gestures might not bode all that well with someone looking for the “essential” characteristic of gestural movements. To close in on the main motivator of gestures, it might help to consider what *really* differentiates them from other body movements. What differentiates, for instance, clenching one’s fist in pain from using one’s hand in writing? Following the distinction made above, we could say that the former kind of movement can be explained sufficiently by accounting for the external and internal forces that caused it, whereas the latter makes sense only if we see the lifting of an arm over a paper as a willful act on the part of the writer. As Flusser (2014, 56) makes sure to point out: “It is not effectiveness that separates gestures from other movements but the fact that they express decisions, that they are phenomena at the ethical level of reality, expressions of being—in short, that they are ‘motivated’.” The bodily movements we call gestures come to life precisely because the gesturer has the freedom to decide whether or not to perform them, and how: “To this extent, the concept of ‘gesture’ may be defined as a movement that expresses a freedom” (Flusser 2014, 163). What Flusser calls free-

dom is essentially the expression of a situated subjectivity, an active being-in-the-world, which is precisely why he says that “[g]estures are movements of the body that express being” (Flusser 2014, 55). He aptly points out that “[t]he gesticulating person’s way of being in the world can be read in them” (Flusser 2014, 55). Of course, as Edgar Wind (1963, 40) aptly notes, “our inadvertent little gestures reveal our character far more authentically than any formal posture that we may carefully prepare.” Regardless, however, of whether deliberate or not, gestures disclose a freedom exercised when expressing our being in ways that “speak” to our personal motivations and desires. Some say that the Greek word for *freedom*, *ἐλευθερία*, stems from the ancient “παρά τό ἐλεύθειν ὅπου ἐρᾷ τίς,” which translates to “coming by that which one loves/desires.” To the extent, then, that a particular gesture can bring us closer to the object of our desire, it would certainly make sense to frame it as a desire- or potentially will-driven performance.

But our attempt to define gesture is still far from over, for a proper definition should also account for the fact that, whether consciously or subconsciously, gestures are primed by desires *and* are geared towards satisfying purposes or ends-in-view.¹ It is important, if we are to remain in the spirit of our performance-oriented definition, that we avoid taking needs, ends, and satisfactions as mental states of a solipsistic agent trapped within the human brain. Dewey (1939) is keen to point out that interests and desires are not independent of the actual conditions they emerge in; and ends, aims, and purposes are likewise not independent of the biological and physical means through which they are achieved. Desires emerge from the need to change a lacking state of affairs into an empirically satisfying situation; while ends-in-view are set up on the basis of whether they can fill the existing need, if acted upon through particular means. According to Dewey’s *theory of valuation*, what is valued in problem situations is the ability of things (acts or materials) to provide the conditions required for actualizing and thus satisfying an end-in-view. In this regard, “value” is neither an a priori state

1 According to Bergson (1944, 45–50), *finality* does not have to be an internal property of an organism whose parts work together in order to accomplish its own idiosyncratic goals. For one, these parts can be reasonably said to have an internal finality of their own, seeing how they live their own independent lives to the point, for instance, of phagocytes attacking the very organism that nourishes them. Moreover, to understand the organism itself in terms of internal finality would be problematic considering that the organism is itself part of a collective whole and is, by extension, involved in the attainment a greater good. Bergson (1944, 50) actually believed that “[i]f there is finality in the world of life, it includes the whole of life in a single indivisible embrace.” Receptive to his idea of *external finality*, we would like to make clear that the ends associated here with gestures could be justly treated as “external” since the acts performed subordinate themselves to a greater cause, essentially sacrificing part of their own freedom to the necessity established by the broader conditions of world.

of a brain-bound homunculus nor an inherent property of external objects—it is a feeling of nothing but itself, which emerges through direct experience of a particular relation between one’s motor attitude and the conditions of the physical environment. What we want to suggest here is that these intra-personal and extra-personal domains are weaved together by way of gestures. Primed by the desire to achieve a particular purpose, gestures embark on a process of active valuation through their involvement in both action and production. When gestures are involved in the performance of an action, we value our body movements as the means to achieve our goal; whereas when they are involved in acts of production, we end up placing greater value on the end product itself. Regardless of this difference though, both cases share the fact that the involved gesture is a value-laden performance of specific proportions.

Of course, taking our definition only this far would mean conceiving gesture in terms of the gesturer alone. There is no doubt, as our reading of the literature suggests, that gesturing is a communicative phenomenon and, as such, calls us to take into account the gesture recipient as well. In fact, Flusser (2014, 161) maintains that “the communicative aspect of a gesture overshadows all else.” It goes without saying that a gesture means something to someone, either self or other. In doing so, a gesture has the freedom to communicate honest information, but it can also seek to deceive the recipient. According to Flusser, gauging the driving force of a gesture is not that straightforward because gesture has the capacity to lie. He thus reformulates the definition yet again: “gesture is a movement through which a freedom is expressed, a freedom to hide from or reveal to others the one who gesticulates” (Flusser 2014, 164). As one would in turn expect, the capacity to lie means that gesticulation is also closely tied to a method of discovering the lie. For Flusser, then, gesture is a phenomenon that is not only expressive, but also communicative and interpretive—a position that has much in common with some of the recent research in gesture studies. Cuffari and Streeck (2017), for instance, complement Merleau-Ponty’s position that gesture is the broadest category of expressive action with an emphasis on intercorporeality and interpretive effort. As they see it, gestures are the primary way through which meaning is mediated from body to body, an intersubjective process inherently grounded on skilled interpretation by both the gesturer and the gesture recipient. We can, on this basis, conceive gesture as an expressive and communicative movement of the body through which a person can, if she wishes, signify meaning to other such bodies.

It is important to note here that, strictly speaking, the meaning of a gesture is neither exactly *enacted* nor *constructed*. It is *endured* and *supported*. Curiously, the verb *gerō* also means “to bear, to carry on” (besides of course having performative connotations). Maddalena (2015, 69–70) is therefore right to define gesture as “any performed act with a beginning and an end that carries a meaning (from

gero = I bear, I carry on).” To gain a better understanding of how gestures *carry* a meaning, it might help to first consider why the words “produce” (on the one hand) and “enact” (on the other) are not exactly suitable for our purposes, at least in the beginning, when the definition of gesture needs to be disambiguated. To this end, we can turn to some notes on gesture by Agamben (2000), where he draws upon the writings of the ancient Roman scholar Varro. In building on a distinction made by Aristotle between acting (*agere*) and making (*facere*), Varro managed to identify and distinguish a third kind of action, gesturing (*gerere*). Drawing upon his writings, Agamben (2000, 57, emphasis original) claims that “if producing is a means in view of an end and praxis is an end without means, the gesture then breaks with the false alternative between ends and means that paralyzes morality and presents instead means that, *as such*, evade the orbit of mediality without becoming, for this reason, ends.” To put it simply, gesture is neither an act directed towards a certain goal, nor an end in itself. Take dance, for instance, which is an act that clearly involves more than moving in order to go from point A to point B. That said, it would be equally wrong to say that body movements are nothing more than ends in and of themselves, as this would mean appreciating dance on an aesthetic level alone. Agamben characteristically indicates that the reason dance is a gesture is because it consists of enduring and exhibiting the medial character of corporal movements. In fact, he makes sure to emphasize that “[t]he gesture is the exhibition of a mediality: it is the process of making a means visible as such” (Agamben 2000, 58). It should then follow from this that gesture is primarily characterized by endurance and support, rather than action or production.

This is not of course to imply the presence of clear boundaries between acting, gesturing, and producing. It would be unreasonable to question the fact that gesturing implicates (to some degree) acting. All that is posited, here, is that acting is not a characteristic or even a sufficient condition for defining gesture because action is not always the result of freedom. There should likewise be no doubt that gesturing plays a fundamental role in the process of production, although production goes further in also involving something else being made. Considering that archaeologists have no direct access to long-gone gestures, and that the artefacts left behind are all they have available for making some inferences about the past, it should come to no surprise that production tends to draw much of their attention. This is even more so the case when the creative gestures driving the process of production had led to the manufacture of something entirely new—that is, when they would have led to the production of a prototype (instead of having merely been involved in the reproduction of a stereotype). Yet, as we have already seen, the creative material engagement that most concerns us tends to fall beyond the cognitivist scope of gesture studies, wherein gestures are usually conceived as co-verbal body movements. Perhaps, though, gesture can be defined

more broadly. As we shall see in what follows, it might make more sense to see gesture as a necessary condition of creative production, while conceiving the production of novel forms and meanings as a process essentially founded on gestural expression and communication through different materials.

3 Gesture of Material Engagement

The term Flusser (2014, 166) uses to refer to gestures directed toward a material is *gestures of work*. And yet he also recognizes that describing gestures through a theory of work would be missing a crucial point: that gestures express a freedom. As he puts it: “Work is a gesture whose motive lies in the decision to make something different from what it is, because it is not as it should be” (Flusser 2014, 56). It is these “free” gestures that Flusser (2014, 168) calls “genuine” gestures of work. Yet, right after saying that, he is quick to admit that there is no way of making a rigorous distinction between “true” and disingenuous gestures because the former can present themselves in contexts within which the latter are usually encountered, and vice versa. Keeping the limits of our descriptive power in mind, we can nonetheless proceed to examine the dialectic between the gesture of work and the material towards which it is directed. This means attending to the ways in which various materials change, while also remaining sensitive to the ways in which gestures accommodate their changes. Flusser thus urges us to consider all kinds of workable materials, from reinforced concrete, to musical sounds, and mathematical equations, if not for any purpose other than gauging their malleability. In this light, the end product of our dialectic engagement with different things should be seen as nothing other than “a gesture fixed in material” (Flusser 2014, 168). As Flusser (2014, 168) characteristically put it, a product of work is “a gesture that, despite being shaped by the material, has still managed to disclose a freedom.”

Seeing objects as materially fixed gestures means framing artefacts according to the mode of becoming, not being. It would thus make sense to at least consider the effects of moving away from the traditional viewpoint in archaeology and anthropology that wants objects as end-products meant for consumption, towards a process-based framework that turns the spotlight on production. From Bergson’s (1944) point of view, objects are never really finished; they are instead constantly in the mode of making. Case in point, the Daruma doll—a Japanese traditional doll depicting the homonymous Buddhist monk (Fig. 1). According to Lucas (2009), this hollow, round doll contains the gestures required to craft the papier-mâché egg and decorate it with Daruma’s depiction. Yet besides being a trace of past gestures, the object remains in a state of becoming, for once production is completed,

it starts attracting a whole new set of gestures. One of these is the gesture of painting in one of its eyes when embarking on a difficult task, leaving the other eye for when the task has been successfully completed. Or the gesture of trying to set the tumbling doll off balance, only for it to return upright yet again. In the case of Lucas' study, the rocking of the doll acted as a catalyst for a number of other gestures as well, gestures involved in video frame-capturing, Laban movement notation, architectural drawing, and calligraphic painting. Seeing how it is through time that all of these inscriptive practices unfold and develop, he finds it best if we associate gesture with the Bergsonian notion of *duration*. Rather than seeing it unfold in a series of interdependent yet clearly discrete moments (i.e., production, consumption, deposition), we could try exploring gesture's inherently temporal emergence as a continuous process whose parts flow into one another, changing form and meaning as they grow. A move like this would mean shifting our focus from an anthropology of art objects to an anthropology of the creative practice, as Lucas (2009, 156) aptly recognizes.



Fig. 1: "Daruma Doll". Wikipedia/Crisco 1492, licensed under CC BY 4.0.

A paradigm shift of this nature is entirely within the spirit of this chapter. In fact, the theory of material engagement, whose outlook on gesture we plan to develop here, calls for a similar change of direction in the domain of cognitive archaeology (Malafouris 2013). To be more specific, *Material Engagement Theory* (or *MET*, for short) seeks to overcome the problematic assumption that we can learn a lot about the minds of our ancestors by treating their artefacts as end products of a creative process that started as a predefined template envisaged by a neurocogni-

tively prodigious individual. Faced with the problematic assumptions inherent in this general tendency, MET draws inspiration from recent philosophies of mind, such as enactivism and extended mind theory, which it employs as suitable alternatives to the Cartesian dualism and methodological individualism pervading the archaeology of mind (Iliopoulos and Garofoli 2016). From an externalist point of view, the mind is not something to be found located within the braincase; it is instead incited and (at least partly) constituted by material objects in the physical world. But it is not only problem-solving activities that are carried out through praxis; actions can also transform objects into “emotional anchors” that can elicit a strong affective response. MET’s enactivist framework can therefore account for the “active” participation of material vehicles in both cognitive *and* affective processes.

To appreciate the role of enaction in gesture performance and thus move past its representationalist understanding in gesture studies, we shall now be drawing upon the three working hypotheses comprising the core body of MET. Our goal in what remains of this chapter is to consider the implications of these hypotheses for gestural prosthesis (§3.1), signification (§3.2), and intentionality (§3.3).

3.1 Gesture as Enactive Prosthesis

Here, we would like to examine gesture as it is enacted in tool use and incorporation—that is, as what Malafouris (2012, 2013, 153–155) calls *enactive prosthesis*. From MET’s point of view, there are a couple of reasons why connecting something to a human body may “add” to the effect and meaning of a gesture.

The first reason is “physiological.” It has to do with the fact that a tool-involving movement expands the boundaries of the gesturer’s peripersonal space, while at the same time giving rise to new sensory dependencies and action possibilities. The famous case of the blind man’s stick helps illustrate both of these claims. There should be no question that the stick allows the blind man to “see” because it effectively enables its user to substitute vision for touch. As cortical studies on cross-modal plasticity have come to confirm, sensory deprivation in one modality can significantly impact the development of other modalities (Bavelier and Neville 2002). Yet the stick also extends the reach of the blind man’s hands—what Mead (1938) would call his *manipulatory area*—both physically and experientially. When holding it, tactile sensation is somehow projected at the point where the stick’s tip meets the pavement. Studies have shown that when used as an artificial extension of the body, a stick causes a remapping of far space as near space (Berti and Frassinetti 2000). Keeping in mind the definitional aspects of gesture, we could then argue that integrating a thing into the body extends its expressivity and, let us not forget, its

communicability. For not only is the stick extending the reach of the user through its length, it also helps communicate through its white color that the user is blind. In effect, then, the stick does not just allow the man to discover and make sense of the environment, it also allows him bring forth the world, personal and communal alike—not just by representing, but also by enacting. After all, MET’s core idea rests on the fact that it is possible for humans “*to think through things, in action, without the need of mental representation*” (Malafouris 2013, 237, emphasis original). According to its *hypothesis of the extended mind*, cognition and material culture are constitutively entwined (Malafouris 2013, Chapter 4). On the face of this, one would probably be justified in seeing the material components of gesture’s enactive prosthesis as constitutive parts of the cognitive process. If it is acceptable for an “embodied” take on gesture to frame plain body movements as (at least partly) constitutive of gestural meaning, then the same should hold for tool-enhanced movements when seen from the “extended” point of view.

Though, as we said above, there is also another reason why a tool may be “adding” to a gesture, a “technological” reason. We would like to suggest that tools function as an interface that specifies the information flowing from environment to person and vice versa. In unfolding through technical artefacts, the human mind can be said to have an *artefactual* character (Aydin 2015). It is easy to imagine, for instance, that the material used to make the blind man’s stick affects how he perceives the world around him. An experienced user should be able to notice a difference when switching between different kinds of sticks (e.g., plastic, aluminum, fiberglass, and carbon fiber). It should probably come to no surprise that the material composition of the stick actually transforms the information flowing through the interface between the blind man and the world. His experience is in effect shaped by the ontological form of this bio-cultural interface. It follows from this that the thoughts produced through material engagement are not the same as those that would have been yielded through purely neural means. MET’s emphasis on the constitutive entwining of cognition and material culture means that the very form that a thought process comes to assume depends on the cognitive system’s material constitution, as well as on the way mind and matter come together. Having recognized the analytic potential of the *brain-artefact interface*, MET tries to elucidate how the dynamic alignment between brains, bodies, and things can be supported through the organization of material assemblies. From its praxis-oriented perspective, the tool-wielding gesture is the movement that sets in motion and keeps driving the bidirectional coalitions between neural, bodily, and cultural processes. What is more, their plasticity makes for a wide variety of possible configurations. A visually-impaired person may for instance rely on a guide dog, in which case the gesture of handling gives rise to very different phenomena than those experienced through the stick. Evidently, then, humans, animals, and things coalesce in

a rich variety of cognitively important ways. The theory of material engagement attempts to describe the plasticity of these malleable assemblages by introducing the term *metaplasticity* (Malafouris 2015), a concept invoked here to address the multiplicity and variation in gestural form.

Interestingly enough, the metaplasticity of the human mind is a phenomenon that could be treated as a species-defining characteristic. Following Leroi-Gourhan (1993) and Stiegler (1998), MET claims that what makes humans unique is their prolonged, multiplicitous, and committed engagement with technology by means of what Malafouris (2012, 2013, 154, and 2021, 114–115) calls *prosthetic gestures*.

3.2 Gesture as Enactive Sign

From the perspective of MET, gestures can also be seen as *enactive signs*. Seeing how we have already defined gesture as a bodily movement that performs and bears meaning, let us now frame it as an act of *enactive signification*—a concept that Malafouris (2013, Chapter 5) uses to describe the process of bringing forth meaning by means of material engagement. Rather than referring to something that has been already defined by convention, *material signs* express meanings that emerge from the materiality of the bodies and things engaging in a particular context; which is why, instead of accepting the widespread idea that an expression needs to represent a pre-existing content (as is usually the case with linguistic signs), MET's *hypothesis of enactive signification* places signifier and signified on the same pedestal. From the vantage point of Material Engagement Theory, the meaning of a material sign emerges through the actual expression of its qualities and affordances.

Paolucci (2019) links this “expressive” sort of sign to Eco’s (1976) *ratio difficilis*, a term used to describe the mode of sign production. Unlike cases of *ratio facilis*, in which the *plane of expression* has a preformed *type* (that corresponds through coding to a *type of content*), in cases of *ratio difficilis* it lacks one completely. The expression of meaning is, in this case, achieved by a gesture through the exact combination of material forms. So long as something is made by hand, the way in which gesture brings together particular materials (natural and artefactual) is always unique. To the extent that materials never meet each other in the same way any two times, the value of an enactive sign like gesture becomes inseparable from the specificities of each case. As Paolucci points out, it is for this very reason that copies do not have the same value and meaning as original works of art. In semiotic terms, works of art do not fare well as *tokens* of a *type*. Not only is the *plane of expression* an emergent product of material engagement in such cases, but so is the *plane of content*. In fact, the planes of expression and content are

always inseparable in enactive signification, considering how gestures of material engagement bring both of them forth at the same time.

From MET's semiotic point of view, signifier and signified emerge together through a *hylonoetic*² process that involves the blending of material and mental spaces (Malafouris 2013, Chapter 5). When mappings are established between a material and a mental space, then these fuse through integrative projections into a third, hybrid space that Hutchins (2005) calls *blend*. Once this happens, an object starts functioning as a *material anchor* (Hutchins 2005) for what Fauconnier and Turner (2002) describe as *conceptual blending*. According to MET's hypothesis of enactive signification, it is through this materially anchored process of conceptual blending that form and meaning co-emerge, essentially yielding the material sign. Of course, one might consider Fauconnier and Turner's theory formalist, and the concepts of "input space" and "blend space" somewhat "disembodied." It is, in fact, for these very reasons that Paolucci (2019) finds conceptual blending incompatible with the core ideas of MET, and proposes it be replaced with Peirce's *diagrammatic* thinking, which involves the visualization of concepts and ideas through diagrams.

Diagrammatic or schematic reasoning can indeed prove complementary to the theory of material engagement by helping illuminate the emergence of new, not immediately apparent information through the manipulation of material signs (Iliopoulos 2019). According to Paolucci (2019, 2021), diagrammatic thinking can lead to the production of knowledge because it involves seeing things that would be otherwise imperceptible through the projection of a relation from an object that can be directly observed to one that cannot. Instead of relying on projection to integrate one-to-one correspondences between two spaces into a third one, diagrammatic reasoning invokes the concept of *diagram* in order to explain the projection of a relation from a material sign that is directly present to another one that still eludes us. As Paolucci (2019) is keen to point out, the meaning of the sign rests not on the form of the relation on the original object, but on its preservation through semiotic transformation on the new plane being explored. Manipulating objects at hand does not just help generate new worlds of meaning; it also helps navigate them better.

From the standpoint of MET, material engagement allows us to transform difficult conceptual problems into more manageable perceptual tasks by integrating through projection the problems with the stable material structures provided by objects. This is exactly where Paolucci (2019) thinks Kirsh's (2011) perspective on projection could be of use. According to Kirsh (2011, 20, emphasis original): "When we project onto an object, we experience ourselves intentionally augmenting the object; we feel that there is both the external thing causing part of our

2 The term *hylonoetic* comes from the Greek words *hyle* (matter) and *nous* (mind).

experience and, in addition, there is an extra element *caused* or *partially caused* by us. Part of our experience is under our control.” One could then say that “[p]rojection lives somewhere between perception and imagination” (Kirsh 2011, 204). On the one hand, it relies on perceiving a material structure that affords anchoring a mental structure and building upon it; on the other, on imagining a possibility that would augment reality. It is this version of projection then—the one that is partly a product of perception and partly a product of imagination—that we would like to associate with enactive signification. On this basis, gestures of material engagement can be framed as enactive signs in that they support the cognitive process of projection by manipulating an object and driving the interplay between its perceived and its imagined states.

3.3 Gesture as Enactive Intention

Let us finally close our examination of gestures according to MET’s basic tenets by considering their function as *enactive intentions*. As we saw earlier, gestures are spurred by the will to perform a value-laden act. However, this desire should not be conceived as a mental state or propositional attitude that we would get from reflective contemplation. The meaningfulness and directedness of *intentionality* should instead be viewed as emanating from the bodily and motor dispositions of an organism towards a specific set of *affordances*, physical, social, and/or cultural (Gibson 1979). Drawing upon the phenomenology of Merleau-Ponty (2012), Gallagher (2017, 77–79) tells us that intention first emerges in an operational context wherein actions are performed as a response to the opportunities presented by the actions of others. *Operational intentionality* is thus born out of the perception of others’ intentions in the actual relations established between them and us. Perhaps we could extend Gallagher’s argument about intercorporeality and social affordances to the realm of material culture, so as to appreciate how a gesture of work might entail the generation of operational intentionality through the situated engagement of brains, bodies, and things. According to MET’s *hypothesis of material agency*, intentions emerge on the basis of what a given object affords, and the affordances of the material world are likewise inextricably entwined with the various intentions that a human being could actually have (Malafouris 2013, Chapter 6). From the viewpoint of MET, intention and affordance are not properties of humans and things respectively, but of particular engagements, and therefore make sense only when instantiated in situated action.

Of course, these postulates about intentionality should not be taken to concern the world of artists and artisans alone. From the perspective of MET, the meaning and directionality of materially engaging gestures depend on whether a particular

object resonates with someone's idiosyncrasies. Though, as we are cautioned by Flusser (2014, 41), "[a] calling is not the plea of a mysterious voice from an unknown place, pressing on the ear to choose one particular object and impose a value on it." A calling, he says, is simply the discovery through struggle of the fact that one's hands prefer handling some materials over others. It should thus follow that the freedom expressed by these operational movements is not related to a pure, absolute state of will. We instead find it manifested in degrees based on constraints imposed by personal desires, sensorimotor skills, and material affordances. These extra-theoretical factors must therefore be taken into consideration when trying to account for the intentions spurring human-thing interactions, if not for any purpose other than to recognize the agentive dimension of gesture.

4 Summary and Conclusion

To sum up, this chapter set out to provide an alternative to the usual conception of gesture as a movement of the body that is defined by representational function and co-verbal occurrence. As we saw when dealing with the primordial issue of definition, gesture is a will-driven performance for oneself or another, which bears meaning through its medial character. This is precisely why Agamben (2000, 59) ties it to "communication of a communicability." From the perspective we developed, the communicative function of gestures is best explained through the conception of these body movements as visible expressions of freely enacted content, values and ideas.

After arriving at this working definition, we followed our archaeological sensibility and focused on gestures directed towards materials, or as Flusser calls them: gestures of work. Based on his writings, we portrayed products of work as fixed gestures that manage to disclose a freedom despite being themselves shaped by the material. Conceiving material culture in terms of gestural artefacts entails moving from an archaeology of art objects to an archaeology of the creative practice, which is why we then turned to the theory of material engagement, a framework developed for this very purpose. Seeking to overcome the "internalist" understanding of mind in archaeology, MET draws its inspiration from "externalist" theories such as enactivism, in order to account for the praxis-based nature of cognitive and affective processes.

Influenced by the paradigm of enactive cognition, we subsequently framed gesture as enactive prosthesis, in the sense that the incorporation of a tool extends both the expressive and the communicative range of the gesturer. Besides noting this physiological augmentation, we also identified a technological factor

at play in the extension of effect and meaning. As we suggested, different materials bring forth different kinds of thoughts, with the variety in the ways that bodies and things meet adding an extra layer of diversity.

We then portrayed gesture as a process of enactive signification—that is, as a hylonoetic process in which expression and content emerge together. It was posited that diagrammatic thinking might prove useful in helping us trace the projection of a relation from the perceptible plane of expression to the imperceptible plane of content being created through performance. As we saw, the fact that projection sits right between perception and imagination allows it to cover the gap between “what is” and “what could be.” In this light, projecting gestures can be conceived as bodily movements that lead to the construction and discovery of new information by enabling us to think diagrammatically through the semiotic capacities of material objects.

Finally, we also framed gesture along the lines of enactive intentionality, in that any intention spurring this kind of body movement emerges in operational contexts involving skilled humans and affording things. With an operational backdrop in place, we ultimately followed Flusser in seeing a “calling” as nothing more than the good rapport established between specific hands and particular materials.

From the vantage point of MET, then, the creative practice through which minds, signs, and intentions emerge can be conceived as a process of *enactive discovery*—that is, as a discovery actually realized through the performance of an activity. In moving towards a participatory way of thinking, the theory of material engagement introduces the notion of Creative *thinging* (Malafouris 2014). The aim of this portmanteau is to designate “*a long-term commitment to the discovery of new varieties of material forms, so far as it is possible in a given historical situation, through a saturated, situated engagement of thinking and feeling with things and form-generating materials*” (Malafouris 2014, 144, emphasis original). Inspired by Bergson’s (1944) ideas on creative evolution, let us thus close this chapter by entertaining the idea that humans depend on their propensity for making in order to discover what the world allows them to create. And of course it should go without saying that in doing so, they are effectively driving a process of autopoiesis, given that they are quite literally shaping themselves. As Ihde and Malafouris (2019, 209, emphasis original) recently argued, “we are *Homo faber* not just because we make things but also because we are made by them.” To this extent, the *creative gesture* is portrayed here as one that brings forth novelty not just in the material world but in the human condition itself. In fact, no clear-cut distinction can be made between the two.

References

- Agamben, Giorgio. 2000. *Means without end: Notes on politics*. Translated by Vincenzo Binetti and Cesare Casarino. Minneapolis: University of Minnesota Press.
- Aydin, Ciano. 2015. "The artifactual mind: Overcoming the 'inside–outside' dualism in the extended mind thesis and recognizing the technological dimension of cognition." *Phenomenology and the Cognitive Sciences* 14: 73–94.
- Bavelier, Daphne and Helen J. Neville. 2002. "Cross-modal plasticity: Where and how?" *Nature Reviews Neuroscience* 3: 443–452.
- Bergson, Henri. 1944. *Creative Evolution*. Translated by Arthur Mitchell. New York: Random House.
- Berti, Anna and Francesca Frassinetti. 2000. "When far becomes near: Remapping of space by tool use." *Journal of Cognitive Neuroscience* 12: 415–420.
- Cuffari, Elena and Jürgen Streeck. 2017. "Taking the world by hand: How (some) gestures mean." In Meyer, Christian, Jürgen Streeck, and J. Scott Jordan (Eds.). *Intercorporeality: Emerging Socialities in Interaction*, 173–201. New York: Oxford University Press.
- Dewey, John. 1939. *Theory of Valuation*. *International Encyclopedia of Unified Science*. Volume II, Number 4. Chicago: University of Chicago Press.
- Eco, Umberto. 1976. *A Theory of Semiotics*. Bloomington and London: Indiana University Press.
- Fauconnier, Gilles and Mark Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.
- Flusser, Vilém. 2014. *Gestures*. Translated by Nancy Ann Roth. Minneapolis and London: University of Minnesota Press.
- Gallagher, Shaun. 2017. *Enactivist Interventions: Rethinking the Mind*. New York: Oxford University Press.
- Gibson, James J. 1979. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.
- Goldin-Meadow, Susan and Diane Brentari. 2017. "Gesture, sign, and language: The coming of age of sign language and gesture studies." *Behavioral and Brain Sciences* 40: e46.
- Goodwin, Charles. 2003. "The body in action." In Coupland, Justine and Richard Gwyn (Eds.). *Discourse, the Body, and Identity*, 19–42. New York: Palgrave/Macmillan.
- Hutchins, Edwin. 2005. "Material anchors for conceptual blends." *Journal of Pragmatics* 37: 1555–1577.
- Ihde, Don and Lambros Malafouris. 2019. "Homo faber revisited: Postphenomenology and Material Engagement Theory." *Philosophy and Technology* 32: 195–214.
- Iliopoulos, Antonis. 2019. "Material Engagement Theory and its philosophical ties to pragmatism." *Phenomenology and the Cognitive Sciences* 18 (1): 39–63.
- Iliopoulos, Antonis, and Duilio Garofoli. 2016. "The material dimensions of cognition: Reexamining the nature and emergence of the human mind." *Quaternary International* 405 (Part A): 1–7.
- Iliopoulos, Antonis and Lambros Malafouris. 2024. "Towards an ecology of gesture: A review (and some promising paths)." In Breyer, Thimo, Alexander M. Gerner, Niklas Grouls, and Johannes Schick (Eds.). *Diachronic Perspectives on Embodiment and Technology: Gestures and Artefacts*, 131–144. Cham: Springer.
- Kendon, Adam. 1980. "Gesticulation and speech: Two aspects of the process of utterance." In Key, Mary R. (Ed.). *The Relationship of Verbal and Nonverbal Communication*, 207–228. The Hague: De Gruyter-Mouton.
- Kendon, Adam. 2000. "Language and gesture: unity or duality?" In McNeill, David (Ed.). *Language and Gesture*, 47–63. Cambridge: Cambridge University Press.

- Kirsh, David. 2011. "How marking in dance constitutes thinking with the body." *Versus: Quaderni di Studi Semiotici* 113–115: 179–210.
- Leroi-Gouran, André. 1964, 1993. *Gesture and Speech*. Translated by Anna Bostock Berger. Cambridge and London: MIT Press.
- Lucas, Raymond. 2009. "Gestural artefacts: Notations of a Daruma doll." In Gunn, Wendy (Ed.). *Fieldnotes and Sketchbooks: Challenging the Boundaries between Descriptions and Processes of Describing*, 155–173. Hamburg: Peter Lang.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture: Completing Pragmatists' Incomplete Revolution*. Montreal: McGill-Queen's University Press.
- Malafouris, Lambros. 2012. "Prosthetic gestures: How the tool shapes the mind." *Behavioral and Brain Sciences* 35 (4): 230–231.
- Malafouris, Lambros. 2013. *How Things Shape the Mind: A Theory of Material Engagement*. Cambridge: MIT Press.
- Malafouris, Lambros. 2014. "Creative *thinging*: The feeling of and for clay." *Pragmatics & Cognition* 22 (1): 140–158.
- Malafouris, Lambros. 2015. "Metaplasticity and the primacy of material engagement." *Time and Mind* 8 (4): 351–371.
- Malafouris, Lambros. 2021. "How does thinking relate to tool making?" *Adaptive Behavior* 29 (2): 107–121.
- McNeill, David. 1992. *Hand and Mind: What Gestures Reveal about Thought*. Chicago: University of Chicago Press.
- Mead, George Herbert. 1938. *The Philosophy of the Act*, edited by Charles W. Morris, John M. Brewster, Albert M. Dunham, and David L. Miller. Chicago: University of Chicago Press.
- Merleau-Ponty, Maurice. 2012. *Phenomenology of Perception*. Translated by Donald. A. Landes. London and New York: Routledge.
- Novack, Miriam A. and Goldin-Meadow, Susan. 2017. "Gesture as representational action: A paper about function." *Psychonomic Bulletin & Review* 24: 652–665.
- Paolucci, Claudio. 2019. *Cognitive Semiotics and Material Engagement Theory*. Conference presentation given at *Mediating Material Engagement: Technology, Narrativity, Performance*, Messina and Capo Peloro, Italy, September 25–27, 2019.
- Paolucci, Claudio. 2021. *Cognitive Semiotics: Integrating Signs, Minds, Meaning and Cognition*. Cham: Switzerland.
- Stiegler, Bernard. 1998. *Technics and Time, 1: The Fault of Epimetheus*. Translated by Richard Beardsworth and George Collins. Stanford: Stanford University Press.
- Wind, Edgar. 1963. *Art and Anarchy*. London: Faber and Faber.

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Chapter 17

Reason, Language, and Life: Frank Lorimer's Critical Development of Dewey's Approach

Abstract: In this chapter, I wish to draw scholars' attention to Frank Lorimer, a much overlooked figure within Pragmatism, by arguing that he provided an insightful contribution to the "naturalism of continuity with difference" supported by Dewey (Bernstein 2020). Lorimer suggested a continuistic account of the origins of human reason out of previous forms of organic intelligence through the transformation of the latter brought about by the development of human language. Secondly, he worked out a naturalistic interpretation of language development, primarily from an ontogenetic point of view. Particularly insightful are his conception of organic intelligence, his idea of a primarily affective-aesthetic fabric of speech, his thesis about the birth of nomination out of the continuous flow of speech, and the claim that grammar and logic are ultimately grounded in the structures of organic life within a given environment and continue to develop within a symbolic and socially shared medium. Such suggestions prove to be still relevant in the current philosophical debate on naturalism, the intertwining of experience and language in the human world, and the specificities of human cognition with reference to other forms of sense-making.

Keywords: continuistic naturalism, pragmatism, Dewey, organic intelligence, human reason, language

1 Introduction

Frank Lorimer is a neglected figure within pragmatist scholarship, probably because after obtaining his PhD under John Dewey's supervision at Columbia in the late 1920s,¹ he quit philosophy, served as part-time professor of sociology in Washington, D.C. from 1938 to 1964, and devoted most of his efforts to the study

¹ Previously, in 1921, he had received a master's degree from the University of Chicago.

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of demography, becoming President of the Population Association of America in 1946–1947 (de Walle 1985). His investigations focused on population dynamics, particularly at the intersection among fertility, culture, intelligence, and social development—significantly touching upon subjects involving a strong entanglement of biological and cultural aspects.² Somewhat emphatically, it could be said that he concretely tried to enact the pragmatic stance by putting the continuistic naturalism he theorized in his youth into practice.

In what follows, I will argue that Frank Lorimer provides a valuable contribution to the “naturalism of continuity with difference” supported by Dewey (Bernstein 2020, 53) by developing a continuistic account of the origins of human reason out of life—namely, a naturalist yet non-reductive interpretation of the arising of a specifically human form of cognition. In his book, *The Growth of Reason. A Study of the Role of Verbal Activity in the Growth of the Structure of the Human Mind*, published by Paul Kegan in 1929, he focused on the role of language in the shaping of reason, or “symbolic intelligence,” out of already existing forms of organic or “hypo-symbolic intelligence.” In the *Preface*, Lorimer explicitly claims that Dewey’s thought represents the main source of inspiration for his volume; this statement is more than just a formal acknowledgement of the role played by John Dewey as the scientific supervisor of Lorimer’s PhD program at Columbia University. More substantially, I would suggest, Lorimer’s account can be considered a critical development of the view of language and the mind worked out in *Experience and Nature*, a development based on a fruitful engagement with a variety of multidisciplinary resources—from anthropology (Grace de Laguna, Malinowski, Donovan) to linguistics (Jespersen, Ogden and Richards, Morris), from infant to comparative psychology (Baldwin, Luquet, Piaget, Köhler). Dewey possessed and annotated a copy of the book, currently preserved in the Morris Library in Carbondale, Illinois.³

As hinted above, Lorimer’s philosophical position is clearly set within the continuistic naturalism developed by James, Dewey, and Mead. In line with the Classical Pragmatists, Frank Lorimer’s approach is strongly continuistic regarding the development of both language and the human mind out of already existent organic and environmental resources. His attitude is most explicitly stated from the very beginning of his book:

² See Lorimer (1958). For a complete list of his publications, cf. van de Walle (1985).

³ I discovered Frank Lorimer’s work during a period of study I spent at the Morris Library of Southern Illinois University, Carbondale, upon Kenneth Stickers’ kind invitation. I have already emphasized the importance of Lorimer’s contribution in my book *Human Landscapes* (Dreon 2022), specifically in Chapters 5 and 6.

The processes and organization of communication are continuous with other physiological and social processes, and the evolving structure of intellectual activity (including the *forms* discovered by logical analysis) is a function of the total growth of life prior to and including the growth of verbal activity; the structure and processes of intellectual activity, at all stages, are capable of systematic investigation and genetic interpretation. (Lorimer 1929, 4)

The human mind and language are not *sui generis* substances or faculties, opposite in principle to natural things and entities; rather, they consist of new forms of interaction between organisms and an ever-changing environment, to put it in Dewey's terms.⁴

Furthermore—and again, perfectly in line with the Pragmatist—cognition is considered to be a function of life in Lorimer's approach, and a mode of socio-organic behavior in the case of humans. In other words, it is not understood as a tool for representing reality as it would be independently from human actions. This life-related and non-representational conception of cognition comes to the fore particularly through his definition of “organic intelligence” as something connected to organisms' efforts to maintain or re-cover dynamic forms of equilibrium with their environment—a view that will be worked out more in detail in the next section.

Finally, Lorimer evidently radicalized the Pragmatists' inclinations to engage with a variety of scientific investigations in order to interpret language and the mind—including physiology, anthropology, psychology, and linguistics—without reducing philosophical issues to scientific problems. He put into practice the Pragmatists' characteristic openness to a plurality of scientific approaches and contributions (Bernstein 2020) and did not privilege a single scientific paradigm—as has instead occurred with the recent trend towards naturalization in philosophy,

⁴ As far as lexical choices are concerned, Franck Lorimer used the word “intelligence” in a broad way, with meanings extending from “organic intelligence” to “free intelligence,” namely, typically human intelligence, characterized by the advent of language and a highly refined capacity to defer references to actually present actions and objects. “Reason” is used exclusively in connection with humans, i.e., as a synonym of free intelligence or even “symbolic thinking”—but Lorimer considered the opportunity to recognize forms of “hypo-symbolic” thinking occurring among non-human animals. “Mind” is also used in a broad sense, corresponding not only to the human mind, but also to organic forms of intelligence. Hence, there is a difference in comparison to Dewey and Mead, who chose to reserve the term mind for humans' intelligent interactions with their environment. In any case, Lorimer shared their idea of a primary connection of mind with life, rather than with representation, as well as a non-substantive, but interactional (and possibly adverbial: see Steiner 2017 and Dreon 2019a) conception of it. Finally, Lorimer did not use the term “cognition,” but I have chosen to employ it as a synonym of intelligence, in order to converse more easily with the current debate.

which has identified a certain idea of physics as its main interlocutor (see De Caro and MacArthur 2004).

In the first section of this chapter, I will argue that according to Lorimer human reason is not generated by the mere advent of language; rather, he claimed that human cognition arises from the deep reorganization or reconstitution of organic intelligence effected by linguistic behavior. In his view, language operates within each individual life (both phylogenetically and ontogenetically) as a powerfully transformative agent producing irreversible changes in previous forms of organic-environmental interaction. This conception was developed through a constructive criticism of Dewey's position, involving a distinctive focus on so-called "organic intelligence."

In the second section, I will provide a picture of Frank Lorimer's naturalistic account of language, focusing on three important claims arising from his book. Firstly, I will highlight his idea of the primarily affective-aesthetic fabric of speech. Secondly, I will succinctly reconstruct his thesis about the arising of nomination out of the continuous flow of speech—involving the claim that nomination is not the primary step in language. Lastly, I will briefly sketch out some aspects of his idea of grammar and logic as elements that are ultimately grounded in the structures of organic life within an environment and which continue to develop within a symbolic and socially shared medium.

Although Lorimer did not develop a specific treatment of gestures, I would argue that his inquiry provides a decisive contribution to the kind of continuistic naturalism which represents an alternative paradigm to parallelism for interpreting the role of gestures in human phylogenesis and ontogenesis (cf. the editors' *Introduction* to this volume). More specifically, I believe that Lorimer's account of human reason as emerging through the transformation of pre-existing forms of organic intelligence caused by language could be considered complementary to Mead's hypothesis of the genesis of linguistic communication out of pre-existing forms of non-verbal, gestural communication among non-human animals. Both research lines are key components of the integrated bio-social account of human language characterizing the pragmatist tradition.

2 Language as a Transformative Agent of Organic Intelligence

Frank Lorimer's contribution to an account of the relationship between cognition and language is not a simple extension of Dewey's position, but—I would suggest—a valuable critical or clarificatory development that carries significant implications.

Lorimer saw a potential weakness in Dewey's account of the mind as the peculiar mode of organic-environmental interaction elicited by the advent of language—he seriously considered the possibility that Dewey's interpretation could be read as involving the thesis that

Thinking is a type of behaviour which is fundamentally linguistic in its organization, and the whole structure of mental life can be discovered in the social organization of the processes of words, gestures, or other symbols; to have ideas is to form words, aloud or silently. (Lorimer 1929, 4)

Dewey's view could be considered to be a reactive response to the extra-naturalist idea of the mind as a kind of unique substance or function—Aristotle's *nous*, Descartes' *res cogitans*, or even Kant's transcendental unity of apperception (Margolis 2004)—which implies that words and language are simple vehicles of transmission. By denying this dogmatic or metaphysical perspective, in the literal sense of the term, Dewey seems to “overstate the extent to which the structure of human thinking is derived from discourse and fails to give adequate recognition to the *organization* of intellectual processes prior to verbal activity” (Lorimer 1929, 85).⁵ Briefly, Lorimer saw the danger of a possible conflation of thought and language in the account provided by *Experience and Nature* and worked out a clear strategy in two steps to offer a more coherent interpretation of the growth of human cognition in a natural-continuistic vein. On the one hand (1), he recognized and defined forms of organic intelligence prior to—and existing apart from—human life; on the other hand (2), he assumed that verbal behavior and symbolic activity crucially contributed to the arising of mental behavior by causing a profound reorganization of previous kinds of organic intelligence. In a nutshell, Frank Lorimer's claim is that linguistic behavior is not the only source out of which the human mind emerged, but a powerfully transformative agent, producing irreversible changes in previous forms of less socially conditioned and hypo-symbolic intelligence.

More specifically concerning the first step (1), according to Lorimer the core of organic intelligence in its simplest forms consists in “the tensional organismic correlation of vital processes and adaptability, the capacity to restore equilibrium in relation to quite a wide range of environmental changes” (Lorimer 1929, 10). First of all, it must be emphasized that Lorimer regards intelligence as a function of life, i.e., he locates it in the dynamic tension characterizing living beings in an environment with which they interact and try to maintain a provisional equilibrium.⁶ Al-

⁵ See Margolis (2017, 42) for a similar issue with reference to Mead's position.

⁶ Of course, this position puts him at odds with conceptions of cognition in representational terms long before Rorty (Rorty 1980), on the one hand, and the Enactivists (Varela, Thompson, Rosch 1991) on the other.

though Lorimer argues that different forms of intelligence are characterized by the development of a nervous system as a “specialized apparatus,” he clearly resists any brain-centered view of cognition in favor of a holistic view of behavior as including both “*minute* and *implicit* processes on the one hand, and *gross* and *overt* processes on the other hand” (Lorimer 1929, 19, emphasis original). Furthermore, he prefers to stress the fact that different forms of intelligent behavior⁷ are characterized by different degrees of flexibility in adapting to environmental changes, as well as by more or less distinct phases of “organismic tension” and “habit formation” (Lorimer 1929, 139). Major degrees of organic flexibility vis-à-vis changes in the environment involve a clearer distinction between “preparatory reactions” and “consummatory reactions” in organic behavior (Lorimer 1929, 18)—clearly reminiscent of Dewey’s distinction between immediate and reflective experience (Dewey 1981).

Against this background, Lorimer reserves the words “free intelligence” for human cognition, mental behavior, or reason—to put it in the traditional terms adopted in the title of the book. He applies this expression to a form of organic intelligence that is not strictly conditioned by immediately perceived situations, i.e., one that is not exclusively absorbed in what things, events, and other people can directly do to the organism (Dewey 1981, 15, 22, and 71). Instead, free intelligence is highly flexible and can be differentiated into the preparatory and the consummatory phases of organic-environmental interactions. According to Lorimer, this kind of intelligence is largely dependent upon linguistic behavior and a symbolic activity that implies meaningful gestures and words and is “fundamentally social in origin” (Lorimer 1929, 8). This means that, according to Lorimer, it is through language—understood as a kind of symbolic behavior—that organic intelligence is transformed or “reconstituted” (Lorimer 1929, 86) into a strongly flexible and highly differentiated mode of interaction, through which human beings try to maintain a rhythmical equilibrium with a deeply socialized natural environment. Of course, it remains to be clarified what Lorimer means by symbol and symbolic behavior, namely, how the latter introduces complex kinds of discrimination through deferment, functional substitution, nominal integration, and abstraction: a point I will develop in the next section.

7 To be honest, the reader sometimes gets the impression that Lorimer does not definitely abandon the idea of different degrees of intelligence—rather than different forms—and the correlated residue of a teleological interpretation of evolutionary dynamics. I cannot delve into this issue, which is not the topic of my chapter, but I will say at least that the emphasis on radical contingentism among the Pragmatists—the Classical Pragmatists and especially so-called neo-pragmatists such as Rorty and Margolis (see Calcaterra 2016 and 2019)—works as an antidote to evolutionary teleologism.

For the moment, I wish to emphasize that Lorimer's conception of "organic intelligence" is philosophically stunning, as it foreshadows the idea of cognition as sense-making, famously worked out by enactivist scholars (cf. Thompson and Stapleton 2009). Both conceptions define cognition as a function of life, rather than considering it to be primarily a kind of representation of the reality that exists "out there." However, Lorimer does not simply focus on the continuity between sense-making in bacteria and human cognition: his aim is to provide a plausible account of the profound reshaping of organic intelligence into symbolic intelligence through the feedback action of language.

This position did not prevent Lorimer from recognizing that an adult human being can solve complex problems silently, through sensory schemata, as argued by James (James 1983). However, against James' position with reference to deaf-mute cases, Lorimer emphasized that strong embodied actions of this kind among humans "involve the assumption that the development of such distinct perceptual schemata, capable of systematic exploitation in relation to definite problems, is itself dependent upon verbal or gestural activity."⁸

At the same time, Lorimer did not exclude that a symbolic culture could have been developed among anthropomorphic apes thanks to their "splendid brains" (Lorimer 1929, 32). While being a careful reader of Koehler's *The Mentality of Apes*, he claimed that there is "no evidence that perceptual processes which are organized wholly independently of symbolic processes and co-operative social activities make possible any genuine reflective thinking, or systematic mental experimentation with possible methods of handling situations which are not actually present" (Lorimer 1929, 26–27).

The point for him was that "free intelligence" is grounded in a linguistic culture insofar as it involves the capacity "to use ideas as units of intellectual experimentations" (Lorimer 1929, 31), namely, to perform complex behavior in the absence of actually perceived objects, to choose between favorable and unfavorable alternatives, to make fine-grained distinctions between the various phases of interaction. In a nutshell, "words introduce a new mode of explicit analysis and synthesis into thinking (the last term being used in its generic sense as the implicit correlation of behavior), provide a new systematic structure of inference, and make possible type of thinking known as discursive thinking, or reason. Words do not create the structure of mind, they reconstitute its organization" (Lorimer 1929, 85–86).

⁸ This passage is underlined in pencil stroke in Dewey's copy of Lorimer's book preserved at the Morris Library. For a detailed discussion of Lorimer's engagement with James on this point, see Dreon (2022, 170 ff.).

3 A Naturalistic Account of Human Language

The claim that the human mind derives from the transformation of organic forms of intelligence by means of their reorganization and/or reconstitution via language accounts for the peculiarity of reason compared to non-human animals' forms of intelligence. However, nothing less than a naturalistic account of human language is needed at this point, if one wants to stick to naturalism's basic assumption of "rejecting any appeal to supernatural entities" in order to explain what there is in nature (Putnam 2016, 22; see also Margolis 2002, 6–7). Frank Lorimer tackled this issue as early as the late 1920s: he tried to combine a range of different scientific resources and approaches so as to develop a naturalistic account of language, by enhancing—as previously noted—Dewey's open-mindedness towards "a plurality of types of human inquiries" (Bernstein 2020, 44, discussing so-called liberal naturalism).

It is not my task here to verify whether his efforts were robust enough and whether they are still relevant in the light of more recent scientific hypotheses—such an analysis would require specific skills in evolutionary linguistics, child psychology, comparative psychology, and natural anthropology that I do not possess. My point here is to show that Lorimer already lucidly focused on these issues, basing his investigation on a variety of scientific resources of his time, and providing a series of challenging hypotheses. In what follows, I will point out three main elements that remain thought-provoking for the current debate. The first is Lorimer's emphasis on the primarily affective-aesthetic functioning of speech—a perspective he shared with James, Dewey, and Mead, but which he developed in an original way and enhanced (cf. Gavin 1992 as well as Dreon 2019 and 2020); the second element is the claim that nominal integration is the product of a differentiation process, i.e., in the denial that language is primarily produced through the association of words; the third and last element has to do with the idea of a natural history of grammar and logic.

3.1 The Affective-Aesthetic Features of Speech

Lorimer's point of departure when it comes to language could be described as bio-social:⁹ voice is understood as a modification of breath, crying, and other spontaneous and organic sonorous reflexes in very young infants, which become speech through their exposure to a social context. In particular, he emphasizes the so-called

⁹ See Baggio (2015), who uses this expression with reference to Mead.

babble or *lallen* phase, when the infant seems to take pleasure in free experimentation and vocal play, following the first instinctive emissions of sounds connected to organic needs and disturbances. On the one hand, Lorimer underlies the fully embodied and habitual-behavioral characterization of this phase, where a “fundamental kinesthetic- and auditory-vocal organization [. . .] is established in the child’s habits system” (Lorimer 1929, 33–34). On the other hand, he stresses pleasure, almost a first kind of aesthetic enjoyment, as the feature characterizing this phase and anticipating more properly artistic practices and experiences: “Eventually *lallen* becomes a joyous activity, an end in itself, an infantile art—a joy which is the common joy of the most primitive and the most sophisticated peoples, and which is basic in more elaborate arts, song, symphony and poetry” (Lorimer 1929, 40–41). In this vein, he makes reference to the claims of Jespersen and Donovan, supporting the hypothesis that, from an anthropological point of view, the origin of languages could have been less related to the communication of needs than to “the repertoire of drama, songs and dance, as vocal accompaniments of activity” (Lorimer 1929, 40).¹⁰

In parallel to this emphasis on the proto-artistic and/or proto-aesthetic attitude towards vocal activity, Lorimer focuses on the linguistic context into which the child’s auditory-vocal activities are integrated, permitting “the incorporation of new unitary phonetic patterns (words, or distinct vocables)” and the acquisition of “the basic mechanism of the habitual patterns of idiom, conventional syntax (as distinguished from functional syntax), balance, cadence and rhythm of speech” (Lorimer 1929, 44). More specifically, he says that the acquisition of cadence and rhythm is genetically prior to grammar and vocabulary because the acquisition of language is grounded in forms of entrainment with the rhythm of conversations, as well as in *metatalia*, which is to say the development of the capacity to complete an interlocutor’s utterances through the right sounds, rather than through an alleged “instinctive imitation” (Lorimer 1929, 44). Lorimer concludes that early infant speech is “highly affective” and largely controlled through “emotive organization” (Lorimer 1929, 63–64). To sum up:

One of the immediate conclusions to be drawn from this study of the growth of verbal activity in the life of the child is the artificiality of making any rigid distinction between the affective and the referential relationships of words. Symbolic structure is a gradually differentiated structure within the total physiological and social context of linguistic activity. This is, of course, no disparagement of the normative value of insisting upon the differentiation of strict symbolic reference from vague fancy and emotive connotation. It is

¹⁰ For current and at least partially convergent hypotheses, see Dissanayake (2011) and Brown (2017).

simply a protest against the assumption of such a division as pointing to factors originally isolated in the rise of symbolic activity or as involving an absolute metaphysical distinction. (Lorimer 1929, 63)

This view of language as an affectively regulated social activity was not new among the Classical Pragmatists: we can find similarities and a special closeness between Lorimer's view and Mead's idea of the genesis of verbal conversations out of exchanges of mainly affectively regulated silent gestures (see Dreon 2019). Lorimer's claim was not intended to deny the possibility or even opportuneness of drawing analytical distinctions between the various aspects of linguistic behavior. By opposing the assumption that only the semantic and syntactic features of language are essential to it, he made an important contribution to acknowledge of the relevant role played by the so-called merely supra-segmental aspects of speech (for example, rhythm, cadence, timbre, and gestures) as well as by affective, highly situation-specific connotations.¹¹ Secondly, Lorimer's emphasis on the aesthetic-affective character of speech is intended to claim that analytic distinctions between words as well as between signs and their meanings occur against the background of a primarily holistic conversational flow, on which I am going to focus in the following section.

3.2 The Birth of Nomination out of the Continuum of Speech

In his treatise, Frank Lorimer refers to "nominal integration" as a further, crucial phase in language acquisition, articulating the primarily continuous flow of speech into distinct parts—a continuous flow ultimately deriving from the transformation of organic vocalizations because of their embeddedness in a social medium. The process of nomination establishes correlations between vocal and perceptive units (Lorimer 1929, 34) and marks "the rise of the capacity to use and understand words" (Lorimer 1929, 50) within behavioral contexts. This means that "[s]peech cannot be considered as made of separate elements placed side by side as letters" (Lorimer 1929, 36) and that the birth of nomination is not the primary phase of speech development. Language should not be understood primarily as an association of names and verbs, and the picture of language as grounded in a series of non-linguistic baptismal acts is misleading. Dewey had already supported a similar thesis in an article dating back to 1894 that is explicitly men-

¹¹ For more recent criticisms of the merely ancillary role played by gestures and other so-called supra-segmental features of speech, see Kendon (2009) as well as Cowley on "linguaging" (Steffensen and Cowley 2021).

tioned in Lorimer's book: there, he argued that words progressively acquire their rigidity while being gradually differentiated within the "original protoplasmic-verbal-nominal-interjectional form" (Dewey 1971, 69).

Moreover, some further insights deserve mention in relation to Lorimer's account of nominal integration. Firstly, the process of gradual differentiation of words occurs via vocal, kinaesthetic factors, primarily through cadence, and conversational rhythm, namely, through strongly embodied activities involving perception and movement, rather than through syntactic or semantic features.¹² Secondly, Lorimer conceives of differentiation and fixation processes through which the meaning of a word is established in behavioral terms: for him, as for Dewey and Mead, fixed "symbolic relations" or meanings do not primarily concern the connection between a sign and a corresponding object, but rather the relation "between unitary phonetic patterns and patterns of situation and behavior [. . .], so that words may function as *foci* of or *substitutes* for organic patterns in the processes of intellectual experimentation" (Lorimer 1929, 71). Thirdly, Lorimer considers the rise of nomination to be strictly connected to the social contexts it is embedded in. He explicitly recognizes that social organization is prior to linguistic activity—as can be appreciated by examining non-human animals (Lorimer 1929, 74)—and that vocal acts already function as "the keys to social attention" (Lorimer 1929, 77). However, "[t]he gradual differentiation and extension of the social functions of vocal activity, among a race of animals characterized by increasingly complex nervous systems, is the fundamental principle of the historic trend of vocal activity toward verbal activity, and the emergence of language" (Lorimer 1929, 77). The process of nominal integration emerges in human speech in relation to "*traditional types of social behaviour, and, in turn, more specific and intricate types of social behaviour are built up in relation to words*" (Lorimer 1929, 79). Words are fixed through social practices and in turn become crucial in scaffolding more complex social activities and forms of organization. It seems that the human world is characterized by a mutual-feeding relationship between the gradual differentiation and extension of social functions and the development of vocal activity into a highly complex organization of symbolic relations.

¹² A similar claim has recently been emphasized by Diane Falk in her ontogenetic theory of language development among humans (see Falk 2009).

3.3 Prolegomena to a Bio-Social History of Grammar and Logic

As already stated, Lorimer's ultimate aim is to provide an account of the growth of human reason via the re-organization of previous forms of organic intelligence elicited by verbal activity. Against this background, it becomes urgent to develop a continuistic view of the formation of grammar and logic, i.e., of the establishment of fixed symbolic relations between different sequences within verbal processes as well as between increasingly complex intellectual processes (Lorimer 1929, 71). Although Lorimer explicitly admits that grammar and logic can be brought into focus as relatively independent domains, isolated and/or abstracted from the bio-social history within which they emerged, his declared commitment to the principle of continuity¹³ obliges him to avoid any autonomization of the space of reason from the empirical space of vocal activities, human utterances, and linguistic practices it stems from and which it contributes to scaffolding. In other words, I would argue that Lorimer's view, maybe even more radically than Dewey's (see Dewey 2004), provides a useful theoretical framework to avoid the alleged "unbridgeable gap between conceptual normativity and nature" that still afflicts the type of Kantianism characterizing Sellar's and McDowell's Neopragmatism (Bernstein 2020, 45). Lorimer's strategy is not to reduce syntax and logic to psychological processes and to assume that logical relations are ultimately equal to psychic events or neurological programs. His proposal—although sketched, correctable, and open to integrations—consists in an account of the emergence of highly complex forms of organization of symbols and symbolic relations out of the processes of human life, a process which is taken to occur between human organisms (their neuro-physiological constitution included) and a peculiarly social and linguistically transformed environment.

Let us consider—if only very succinctly—some of the main insights and definitions suggested by Lorimer in this vein.

One first step is represented by his conception of meanings, concepts, and symbols (1).

Lorimer provides a behavioral definition of concepts that is in line with Dewey's account (Dewey 1981) and closer to the linguistic anthropologists of his time (Jespersen, Malinowski, Sapir) than to the philosophy of language drawn from Frege: a concept is "an implicit behaviour pattern focused in a word or other socially established symbol" (Lorimer 1929, 81–82). It is this capacity to develop a specific focus that is due to language: as stated above (§1), Lorimer claims that verbal activity provides an organization of experience capable of isolating analytic and synthetic

13 In the version formulated by Hollingworth (Lorimer 1929, 166–167).

processes (Lorimer 1929, 82). In other words, language introduces into organic experience “the capacity to analyze consciously one element of experience as distinct and simultaneously to recognize it as related to other elements” (Lorimer 1929, 86). Through language, one word becomes the output or the final term of a previous process and the point of departure of a following process within a shared social context. In this way, concepts become “instruments of skilled thinking” (Lorimer 1929, 83). At the same time, Lorimer suggests a conception of symbols as strictly connected to action and behavior, either at the individual or the social level: “A *symbol*,” he says, “is *an item established in social conduct or in reflective thinking as a functional substitute for certain other items in social or individual behaviour*” (Lorimer 1929, 87). The meaning of a symbol can also be “the conditioned reaction to a specific kind of situation,” as happens, for example, when a child exclaims “Kitty!” because something has entered into the room. Or it may consist in a “conditioned stimulus to a specific type of social or personal adjustment,” as is the case when one responds “Bye bye” to an interlocutor’s hint.

When moving on to consider syntax, Lorimer’s reference to the organic roots of intelligence as well as to the primarily affective-emotional value of speech again comes to the fore (2). Although Lorimer thinks that mature symbolic intelligence is conscious, and explicitly scaffolded through conceptual relations, he emphasizes that “the dominant currents of this movement are themselves at first implicit, organismic and emotional” insofar as they are grounded in “habit patterns previously involved in the tensional correlation behaviour on the pre-verbal level” (Lorimer 1929, 93). Coherently with his view of intelligence as a function of life, rather than as a faculty for mirroring reality, Lorimer correlates the structure of sentences to the dynamics of life,¹⁴ insofar as sentences reproduce the transition from tension to fulfilment characterizing organic-environmental interactions:

The organization of a conceptual nexus in which the first symbolic act (or group of acts) expresses a relatively immediate and apparent phase of the situation and in which a subsequent symbolic act (or group of acts) expresses the relatively consummatory solution of the situation as regards its conceptual organization is the archetype recognized in grammar as the *sentence* and in logic as the *proposition*. Because life is a process of fluctuating tensions, in which new problematic situations, as they are solved, constantly give rise to new problems and new judgement processes, the structure of the sentence appears as the characteristic type of developed conceptual thought. (Lorimer 1929, 93)

¹⁴ This point is marked in Dewey’s copy of the book.

The formation of a sentence or proposition, in other words, appears as the temporary resolution of a phase of tension and the re-establishment of a new equilibrium, namely, as a peculiar mode of interaction between human life and the environmental conditions in which a higher symbolic species enfolds. More specifically, in Lorimer's view a sentence's internal differentiation derives from the "tensional nexus of intellectual activity between one term which represents an event isolated for further treatment and another term which expresses the response actually selected in the process of judgment" (Lorimer 1929, 102): nouns differ from other parts of the sentence because they are relatively complete in themselves, whereas other words are perceived as incomplete and transitive.

Finally, Lorimer attempts to sketch a view of logical operations as corresponding to "types of bio-social activity among human beings in their natural environment." Again, this occurs in accordance with a continuistic picture of the development of animal intelligence from "hyposymbolical" to "symbolical activities" (Lorimer 1929, 151), i.e., Lorimer does not assume that non-human animals' forms of intelligence simply ignore all symbolism. Along this line of thought, he traces logical implications back to the transmission of arousal in organic behavior, whereas logical negation is correlated with the inhibition of an act by a certain organism. A logical contradiction would stem from the prospect of behavioral alternatives on the physiological level, in the form of organic aversion to and attraction towards the environment (Lorimer 1929, 152–153). Lastly, he claims that "[i]nductive inference is inference which 'leads into' new symbolic structures, capable of new application in the control of new problems," while "[d]eductive inference 'leads from' previously formulated symbolic structures in the treatment of new problems" (Lorimer 1929, 157). Stemming originally from organic-environmental tensions and temporary phases of equilibrium, logical operations would be fixed through habits, which is to say through the relatively stable channeling of both organic and environmental resources (Dreon 2022, 94), including complex social interconnections and highly refined webs of symbolic relationships.

Although I have oversimplified some of Lorimer's main claims, it is clear that his hypotheses are bold ones that require further, rigorous elaboration. However, Lorimer's proposal is worthy of philosophical consideration, in my view, for his attempt to sketch a sort of natural history of logic not through physicalist reductionism, but by trying to trace logical operations back to the dynamics of organic life in an environment that undergoes continuous change and may include the output of previous interactions.

4 Conclusion

One could sum up Frank Lorimer's enterprise as a brilliant attempt to provide a naturalistic conception of the emergence of human reason out of already existing resources, namely, previous forms of organic intelligence that underwent profound reorganization through the advent of language and its extraordinary analytic and synthetic powers. At the same time, Lorimer does not limit language to the reflective phases of analysis and synthesis: instead, he stressed the organic, affective, and aesthetic roots of human speech, which is genetically pre-existing with respect to the capacity to draw subtle distinctions between names and other parts of speech. Ultimately, in his view, grammar and logic are continuous with the organic environmental rhythm of life, insofar as new forms of symbolism and intelligent and linguistic interchanges transform and complicate the rhythm itself in novel, unexpected ways.

Moreover, Lorimer's contribution to a form of naturalistic, yet not reductive, "continuism with difference" with regard to the arising of human reason out of language and organic intelligence could be seen as complementary to Mead's theory of human speech, according to which conversations of verbal gestures developed and changed already existing conversations of gestures among non-human animals (Dreon 2022, 179 ff.).

Although limited in terms of publications, I would argue that Lorimer's contribution to philosophy proves valuable for areas beyond the specialist scholarship on Pragmatism and American Naturalism for a number of reasons. It shows that the Classic Pragmatists were already very interested in language and closely evaluated its role in the development of the peculiar form of experience characterizing humans and their world rather than being dogmatically bound to a naive view of experience itself. This contribution is not intended to rekindle the experience vs. language debate; on the contrary, it should be interpreted as an opportunity "to take a step forward" beyond the rigidities of this debate, as suggested by Chris Voparil—a step forward that could further be reached through a more embodied, affect-laden picture of language and a "behaviorist conception of meaning" (Voparil 2022, 35).

Furthermore, the recovery of Frank Lorimer's thought represents an important contribution to the project of developing a continuistic naturalism which definitely abandons the difference of principle between the natural and the normative. Considering some more recent trends in current naturalism, Richard Bernstein noted that "[t]here is also a movement away from the type of Kantianism that insists that there is an unbridgeable gap between conceptual normativity and nature. We are moving closer to Dewey's naturalism where there is continuity with difference" (Bernstein 2020, 45). Indeed, the name of Frank Lorimer might fit this claim even

better than Dewey's, for the reasons detailed in the first and the second sections of this chapter.

Finally, Lorimer's study of "the role of verbal activity in the growth of the structure of the human mind"—as stated in the subtitle of his book—could inspire post-cognitivist scholarship, and specifically Enactivists, who are (only) now discovering the relevance of language in shaping the specifically human mode of sense-making (Di Paolo, Cuffari, and De Jaegher 2018).

References

- Baggio, Guido. 2015. *La mente bio-sociale: filosofia e psicologia in G. H. Mead*. Pisa: ETS.
- Bernstein, Richard J. 2020. *Pragmatic Naturalism. John Dewey's Living Legacy*. Seattle: AmazonBooks. [Originally printed as Bernstein, Richard J. 2019. "Pragmatic Naturalism. John Dewey's Living Legacy." *Graduate Faculty Philosophy Journal* 40 (2): 527–594.]
- Brown, Steven. 2017. "A joint prosodic origin of language and music." *Frontiers in Psychology* 8: 1894.
- Calcaterra, Rosa M. 2016. "Constructing on contingency: William James from biology to ethics and politics." *Cognitio* 13 (1): 219–231.
- Calcaterra, Rosa M. 2019. *Contingency and normativity. The challenges of Richard Rorty*. Leiden and Boston: Brill Rodopi.
- De Caro, Mario and David Macarthur. 2004. "The Nature of Naturalism." In De Caro, Mario and David Macarthur (Eds.). *Naturalism in Question*. Cambridge: Cambridge University Press.
- Dewey, John. 1971. "The psychology of infant language." In Dewey, John. *The Early Works*. Volume IV, 152–188. Carbondale and Edwardsville: Southern Illinois University Press.
- Dewey, John. 1981. *Experience and Nature. The Later Works*. Volume I. Carbondale and Edwardsville: Southern Illinois University Press.
- Dewey, John. 2004. *Essays in Experimental Logic*. Mineola and New York: Dover Publication.
- Di Paolo, Ezequiel, Elena C. Cuffari, and Hanne De Jaegher. 2018. *Linguistic Bodies. The Continuity between Life and Language*. Cambridge and London: MIT Press.
- Dissanayake, Ellen. 2011. "Prelinguistic and preliterate substrates of poetic narrative." *Poetics Today* 32 (1): 55–79.
- Dreon, Roberta. 2019a. "Framing cognition. Dewey's potential contributions to some enactivist issues." *Synthese, Radical Views on Cognition*: 1–22.
- Dreon, Roberta. 2019b. "Gesti emotivi e gesti verbali. L'eredità di George Herbert Mead sulla genesi del linguaggio umano." *Sistemi intelligenti* 1: 115–133.
- Dreon, Roberta. 2020. "James on the stream of language: with some remarks on his influence on Wittgenstein." *Cognitio* 21 (1): 68–82.
- Dreon, Roberta. 2022. *Human Landscapes. Contributions to a Pragmatist Anthropology*. New York: State University of New York Press.
- Falk, Dean. 2009. *Finding our tongues: Mothers, infants, and the origins of language*. New York: Basic Books.
- Gavin, William J. 1992. *William James and the Reinstatement of the Vague*. Philadelphia: Temple University Press.
- James, William. 1983. "Thought before language: A deaf-mute's recollection." In James, William. *Essays in Psychology*, 278–291. Cambridge: Harvard University Press.

- Kendon, Adam. 2009. "Language Matrix." *Gesture* 9 (3): 352–372.
- Lorimer, Frank. 1929. *The Growth of Reason. A Study of the Role of Verbal Activity in the Growth of the Structure of the Human Mind*. London and New York: Routledge.
- Lorimer, Frank (Ed.). 1958. *Culture and Human Fertility*. Paris: Unesco.
- Margolis, Joseph. 2002. *Reinventing Pragmatism. American Philosophy at the End of the Twentieth Century*. Ithaca and London: Cornell University Press.
- Margolis, Joseph. 2004. "Placing Artworks—Placing Ourselves." *Journal of Chinese Philosophy* 1 (31): 1–16.
- Margolis, Joseph. 2017. *Three Paradoxes of Personhood. The Venetian Lectures*. Milan: Mimesis International.
- Putnam, Hilary. 2016. *Naturalism, Realism, and Normativity*. Cambridge: Harvard University Press.
- Rorty, Richard. 1980. *Philosophy and the Mirror of Nature*. Oxford: Basil Blackwell.
- Steffensen, Sune V. and Stephen J. Cowley. 2021. "Thinking on behalf of the world: Radical embodied ecolinguistics." In Xu, Wen and John R. Taylor (Eds.). *The Routledge Handbook of Cognitive Linguistics*, 723–736. New York and London: Routledge.
- Steiner, Pierre. 2017. "Pragmatism in cognitive science: From the pragmatic turn to Deweyan adverbialism." *Pragmatism Today* 8 (1): 9–27.
- Thompson, Evan and Mog Stapleton. 2009. "Making Sense of Sense-Making: Reflections on Enactive and Extended Mind Theories." *Topoi* 28: 23–30.
- Varela, Francisco J., Evan Thompson, and Eleanor Rosch. 1991. *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge and London: MIT Press.
- Voparil, Chris. 2022. *Richard Rorty and the Classical Pragmatists*. New York: Oxford University Press.
- Walle, Etienne van de. 1985. "Frank Lorimer, 1894–1985." *Population Index* 51 (4): 635–642.

Barbara Formis

Chapter 18

Handling Things Together: Artistic Practice as Research

Abstract: In order to understand the philosophical signification of our daily gestures, I propose to base my conceptualization on John Dewey's *Art as Experience* and Richard Shusterman's *somaesthetics* in order to deepen these theories into art practice, notably Allan Kaprow's *happenings*. This conceptualization inspires the practices of the *Laboratoire du geste* (*Gesture Laboratory*) that I co-direct with choreographer and lecturer Mélanie Perrier. The *Gesture Laboratory* places performance at the heart of the scientific and pedagogical system in order to compartmentalize artistic activities. The collective workshop called *Ecosphere* is the later protocol that we are experimenting in order to grasp the aesthetic qualities and philosophical theory of ordinary gestures.

Keywords: performance, pragmatism, collectivity, experimentation, art, practice, ordinary

1 Gestures of Handling

How to do something together? How to have an aesthetic experience that is collectively shared? How to grasp concepts through collective practice? How to innovate pedagogy and research through experimentation? From the perspective of the philosophy of gesture, certainly, management can be taken in the strict sense of administration and support of everyday affairs of life, as in the Latin expression *gerere aetatem* which means to spend one's life, often followed by *cum aliquo* (with someone), so as to take charge of the temporal part of the life that is passing by conducted and maintained during this passage. Applied to art, this collective way of acting allows us to understand that "spending time with someone," in this case with a group, also expresses the relational aspect of research in art as a social or common disposition, as an instance of meaning that must be shared.

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The English verb “to handle” is beautifully constructed and very evocative from the point of view of the conceptualization of gesture, insofar as its meaning is inhabited by the noun “hand,” and it evokes the “grip” that is necessary in order to understand the grasping of a gesture (as strikingly put by Giovanni Maddalena in *The Philosophy of Gesture*¹). Handling can also be related to a particular form of action that we can call “managing.” The subjects are not in the process of making, of constructing, of producing something together, the subjects involved do not follow a precise purpose known to all, where the journey is linear and drawn in advance.

The verb “to manage” can also signify another function, that of posture or attitude, when it is used in the Latin expression *gerere regem* which can be translated as “to behave like a king.” This expression gives an action that has been completed a certain theatrical quality: the action is staged. In the collective experimentation with pedagogy and research, in this “handling together,” there is an undeniable and profound common effort: to the point that our cultural values themselves can be challenged. We are always doing and perceiving, doing nothing or being agitated, we are always caught in an oscillation between action and passion; this oscillation is also form of management, in which we handle a situation together, in which “we make up the rules as we go along” as Wittgenstein used to advocate in his philosophy of language games or *Sprachspiel*.

In a general sense, the idea of handling is also a specific form of education, similar to preromantic philosophy. Goethe reminds us in his botanical studies that pedagogy is a way of shaping bodies and minds: he teaches us that science and art meet on the unexpected terrain of morphology, as studies of forms, as attempts, often unfinished and failed, to stop the very movement of life. Goethe organizes his study of the metamorphosis of plants via a dialectical tension between the German terms *Gestalt* and *Bildung*, both of which mean “form.” But if *Gestalt* refers to a principle of abstraction through which, even within a dynamic, there is a stability that remains, *Bildung* as formation indicates not only the product but also the process of self-production. Subsequently, in German thought, *Gestalt* has been associated with a process of perception, whereas *Bildung* has been associated with the process of education. Following Goethe, we can understand collective management as an embodied process of self-formation such that a workshop can be said to “manage itself together.”

At a more global level, according to its etymology, gesture involves the concept of “portability”; that is, it carries, supports, brings with it, maintains and ensures duration. Thus, the etymology of term “gesture” embraces not only the

1 Maddalena (2015 and 2021).

etymology of the term “management,” with its administrative aspect, but also the etymology of the term “gestation,” thus designating pregnancy, gravidity, the long period of waiting, care and protection before the birth of a living being. Gestation, like management, indicates the temporal quality of gesture as well as its profoundly elastic, plastic, resistant nature. Thus, the idea of gesture concerns both legal administration and natural gestation, both regulatory decision-making and organic support. It is the foundation for the order of the affairs of everyday life as well as the primary food of this same life. Gesture transports, one could say, the agent from the moment that it supports her within her action, to bringing her matter to manage, to finally being able to accomplish and finalize her activity.

This idea of common management as “handling together” is linked to the philosophical concept of gesture, such as found in Giorgio Agamben’s (1996/2000) *Means without ends*. On the basis of its etymological roots, Agamben argues that gesture involves a structure of support and management which is precisely what ensures its independence from production and action. The Latin term *gestum* comes from the verb *gero, gerere*, which means to carry, to administer, to represent, to produce, to accomplish, to continue, to behave. This Latin root is evident in the French word *gestion* or in the Italian word *gestione*, which both mean administration or management. As this etymology shows, and following Agamben, the conceptual resources and disruptive qualities of the idea of gesture are found in the relationships and connections between domains that we traditionally consider as separate: creative production and political action, aesthetics and ethics, art and life, body and mind.

2 Experimentation and Performance: The Laboratory as a Method

Experience is very complex and very troubling in that it is difficult to talk about it, and to write about it, especially from the standpoint of philosophy. It is easier for intellectuals to deal with sentences than gestures, because they are more used to the field of spoken and written language than the field of the body. The academic *habitus* is to verbalize about practice without really engaging with it. It is easier to debate the concept of experience than to actually *have* an experience. Pragmatism attempts to change this academic *habitus* by anchoring knowledge in experience, especially a shared and plural experience. This is the lesson of the third chapter of John Dewey’s *Art as Experience* entitled “Having an Experience”: an experience is something that must be “had” and not “conceptualized.”

This imperative to put aesthetic experience into practice was precisely what led me in 2009 to engage in co-directing the *Gesture Laboratory* with Mélanie Perrier.² For more than a decade now, I have been leading this dynamic project with Mélanie Perrier, and it never ceases to feed and inspire my work as an academic researcher. The Gesture Laboratory is a research platform whose object of study is the notion of gesture. It combines research-practice and promotion around emerging forms of contemporary art, in particular performance art. In juridical terms, the Laboratory is a non-profit association; this status gives us the freedom to experiment. The Laboratory has a website³ that serves three functions. It publicizes the production of artworks and general research activities. Secondly, it presents researchers' specific activities and promotes them. The third function is an online curatorial project called "Focus" which is oriented around a particular gesture. The Laboratory's overall objective is not so much to find a unique definition of what the notion of gesture would mean, but rather to indicate the operational capacity of gestures as methods for research (whether generally scientific or specifically artistic).

From an academic point of view, the Laboratory's work corresponds to the academic discipline called Performance Studies, which started in the early nineties in the United States as a hybrid discipline between anthropology and theater studies. The Laboratory has ties to the *Performance Philosophy* network.⁴ The *Gesture Laboratory's* approach is deeply indebted to the tradition of pragmatist philosophy and aesthetics, and in particular it has been directly inspired by Richard Shusterman's soma-aesthetics. Consequently, Professor Richard Shusterman of Florida Atlantic University, USA, Director of the *Body, Mind and Culture Center*,⁵ is an honorary member of the Gesture Laboratory's scientific committee.

The Gesture Laboratory's activities are situated in a triple relationship between the visual arts, the performing arts and philosophy, an articulation within which a new form of art and of thinking is emerging. More specifically, starting from a basis of experimental gestures, without the support of an established narrative or a discursive framework, our position is that *performance art* is profoundly different from, the *performing arts* (theater, dance, music), even though it is related to them. This difference is due to the fact that performance art attempts to establish a new form of theatricality based on anthropology, with direct

2 Lecturer at INSPE, Sorbonne Universities, permanent member of the ACTE Institute, and choreographer of the Compagnie 2Minimum.

3 www.laboratoiredegeste.com, last accessed March 6, 2024.

4 <https://www.performancephilosophy.org>, last accessed March 6, 2024.

5 <https://www.fau.edu/artsandletters/bodymindculture>, last accessed March 6, 2024.

social and political implications. Performance in general is a critical tool against narrativity, the personification of characters and fictional dramaturgy.

Performance art's critique of theatricality is based on a specific usage and definition of what we call "gesture." One of the initial hypotheses is to shift from the performativity of speech to bodily gesture. This is a fundamental move in a world dominated by discourse, and this is why we have privileged non-discursive methods, in particular avoiding institutional and academic speech. Thus, the "doing" proper to performance opens up specific spatial and temporal characteristics which require direct experience, such as the abandon of perennity and of reification or the reduction of gestures to external objective traces. This allows us to consider performance as a practice capable of developing specific kinetic and somatic strategies for research.

In this context, the idea of gesture is to be understood neither as an action producing a trace (as in the case of the pictorial gesture) nor as a technique producing a solid form (as in the case of the sculptural gesture) but more generally as an action or a posture that is continuous with everyday activity and ordinary behavior. Gesture is not a completed action, but rather an ongoing process, an activity that defines the agent but can also be reshaped by its interpretation on the part of a beholder. The sense of a gesture is to be found in the middle in that it lies between practice and theory, attempts and achievement, agent and beholder.

Because of its inner relational aspect, a gesture can be better understood in a plural relationship. That is why the Laboratory is above all a collective and experimental space allowing us to shift from the realm of random experience to the practice of designed experimentation. The word "experimental" is necessary in order to designate an art that requires a displacement of its borders, beyond the norms and formal codes established by tradition. Also, the word "experimentation" indicates a method of research, which is not only based on disciplinary tensions but provokes them. John Cage famously explained in his essay *Experimental Music* (1955) that "the word 'experimental' is apt, providing it is understood not as descriptive of an act to be later judged in terms of success and failure, but simply as of an act the outcome of which is unknown" (Cage 2010). Or, to use the words of John Dewey, who had an influence on John Cage: "any direct experience is always qualitative" (Dewey 1934, 293).

The paradox of the experimental paradigm can be summarized in this formula: *to make art, it is necessary to leave art behind*. This paradigm incites us not only to extend our vision beyond the circle of objects and sacralized codes, postures and behaviors ritualized by the tradition, but to bypass them, to divert, inhibit, evacuate, even destroy. It is especially a question of seeking art where it is not, of including in a new circle of physical phenomena, objects of everyday life, tasks or ordinary actions, communities, ecosystems composed of machines and

living beings, and artifacts produced by engineering and robotics. Such a radical displacement of borders on the one hand, denounces the incapacity of traditional forms, to respond to the true mandate of art, entangled as they are in decorative or commercial functions. On the other hand, it exhibits art's capacity to appropriate any element whatsoever—perhaps because the real and the ordinary are already potentially art forms, as I showed in my book *Esthétique de la vie ordinaire* (*Aesthetics of Ordinary Life*; Formis 2010).

Within the dynamic of the Laboratory, scholars and artists work in a democratic way in which the relationship between theory and practice is redrawn as a loop rather than a directional vector. Through dialogue between researchers and artists and through the sharing of experiences, by participation in common experiments, a process is built within which theorization, instead of deriving from a preconceived and self-centered framework, is elaborated on the basis of concrete somatic practices, from actual exchanges and interdisciplinary confrontations. As such, research does not aim to apply or verify a theoretical hypothesis in practice, nor does it aim to resolve practical problems by means of a theoretical interpretation, but on the contrary the goal is to develop a reciprocal process of testing between the two dimensions.

The overall purpose is always scientific and epistemological. The Gesture Laboratory is not a platform for the production of art: we do not create artworks or performative pieces for the art market or for cultural institutions. At the same time, despite production not being the Laboratory's goal, it is the case that we often navigate in the realm of artistic practice and "research-creation" and sometimes something may be "left over" from our workshops, but it is more as a collateral trace or a document than an intentional by-product. The aim of the experiment is scientific knowledge, but the tools and the traces can be artistic. Among the tools we use and the traces of the workshops, we can list: performances, choreographic sequences, scores, theatrical processes, scenic devices, drawings, writings, design diagrams, graphic facilitations, audiovisual recording, film, photography, sounds (recorded and produced), different objects made of paper or textiles and sometimes even food. Through the combination of such elements, the visual arts, the performative arts, audiovisual arts and philosophy relate to each other. One of the Laboratory's challenges is to propose protocols and somatic activities that induce and provoke what John Dewey calls "an" aesthetic experience, along with its fulfillment, but also with the critical dimension that can emerge due to the fact that the experience is produced collectively.

In an experimental practice, any particular action that takes place resides within a somewhat indeterminate form of acting. The artist cannot come with a preconceived lesson and force a learning process that would produce boredom, or worse, be experienced as a form of violence. The artist must necessarily adjust

to the level of the agents involved in the collective practice of his or her session, he or she must deal with the reality of the latter's capacities and desires. The space of the Laboratory requires one to exchange tools rather than explain how to use tools or even more how to interpret the results of using these tools. This "handling" or "collective management" is not to be understood in a negative sense as a way of simply dealing with, or letting things be, nor does it take place within purely material or administrative dimensions. Rather, management can be understood as a way of confronting ordinary situations in order to both come to know them better, and to transform them without distorting their energy or reason for being.

From the methodological standpoint of the Gesture Laboratory, to make something "together" does not imply producing something collectively, nor doing something in the same manner or at the same time. In an anti-capitalistic disposition, the Gesture Laboratory tries to resist the ends and aims specific to the visual arts or the performing arts. That is to say, participating in a Gesture Laboratory workshop is very different to contributing to a flash-mob, a ballet, or a collaborative artwork (such as an installation for example). There is no unified or single goal. That is why I like to name the type of practice proper to the Laboratory a way of "handling" a situation together, rather than "making" something together.

3 Fulfillment, Action, and Activity

Artistic experimentation as a way of handling a situation together, can be related to American pragmatism, and more precisely it could be compared to specific concepts of pragmatism, such as fulfillment, action and activity. The reasons are not only conceptual but also historical. If a pragmatist approach is present within the artistic practices of the neo-avant-garde, it is also thanks to the influence of John Dewey's *Art as Experience* on American artists of the 1960s and 1970s, such as Allan Kaprow, who was one of the leaders of this trend and who invented "happenings." This influence is not limited to Dewey's book on art alone: what is at stake is a deeply theoretical and fundamentally American tradition, as Kaprow himself explains:

There's a whole current of "for life rather than art" that goes back to the time of Wordsworth at least, to the current that emphasizes art as experience, that tries to bring art back to life, and that goes through Emerson and Whitman, all the way to John Dewey and even beyond—this tradition has influenced me a lot. (Kaprow 1995,65)

This current takes a critical stance towards art, opening up a field of possibilities in the realm of life and considering experimental art practices, such as happenings

and activities, as an extension of ordinary life. As Kaprow clearly says, this current is anchored in a fundamentally pragmatist approach. It may well seem to be a questionable premise that the literature of Emerson or Whitman (to which one might add Thoreau) is inspired by pragmatism. If the “founding fathers” of pragmatism are historically identified as Charles Sanders Peirce, William James, John Dewey, and George Herbert Mead, then the beginning of pragmatist philosophy cannot be placed earlier than the 1870s. Nevertheless, there are common factors between pragmatist thought and the American literature initiated by Emerson, namely, the goal of emancipation from European traditions, a consideration of the thinker as a citizen, and an opening to sociology and political issues. Also, and more importantly, pragmatism shares with this line of writers the idea of knowledge as an activity that can be described and understood as a form of practice.

Allan Kaprow proposed a hypothesis that American neo-avantgarde artists inherited a conceptual frame inspired by pragmatism. We can follow this hypothesis by redrawing the contours and retracing the lineage of this pragmatist inheritance. In particular, we can reconsider pragmatism from the standpoint of those artists, and their productions, that were influenced by it. If Dewey’s *motto* consists in considering art as an experience, the artists and especially Allan Kaprow propose that we consider art as happenings or activities, which in turn could be understood as multiple gestures. Indeed, American neo-avantgarde artists do seem to suggest the possibility of living an experience (in Dewey’s sense of) without having to restrict this experience to the form of a subjective experience characterized by fulfillment.

When an artist such as Kaprow attempts to remain faithful to the pragmatist framework, the passage from experience to activity is significant. According to the Deweyan perspective, aesthetic experience leaves a memory in the mind on the condition that such experience is “marked out” from the ordinary continuum of life by the unity of its form, by the presence of a kind of internal rhythm that is accompanied by a certain satisfaction which Dewey calls *fulfillment*. Aesthetic experience involves an accomplishment, or realization obtained through the isolation of a particular temporal unit, as a phase within a cycle of several diverse experiences. According to Dewey, one can only have an “aesthetic” experience in relation to countless other mediocre, bad or ordinary experiences. One of his examples is a “meal in a Parisian restaurant.” Thus, within one of the variants of pragmatism in, an experience that is marked out from ordinary experiences is equated with a memorable and remarkable relationship to the situation, often ethically nuanced.

But if we follow Dewey, how can we make sure that transcendence, which has been chased out the door, does not come back in through the window when he defines aesthetic experience as complete, remarkable, satisfying and unified? How can one avoid fulfillment being accompanied by the return of the old metaphysics of authenticity? One method is simply to stay as close as possible to prac-

tice without ever idealizing it. Because the field of action is commonly opposed to that of thought, pragmatism was very quickly interpreted in the light of the philosophical theory of action, and thus against the current of idealist philosophies of intentionality. Richard Bernstein in *Praxis and Action: Contemporary Philosophies of Human Activity* (Bernstein 1971) underlines the contribution of pragmatism against transcendentalism. Indeed, pragmatism has been accused of defending a doctrine according to which something possesses meaning, value, or even truth provided that it is useful and functions in the field of action. But one only has to read pragmatist philosophers carefully, as Bernstein does, to realize that these accusations are unfounded. Within pragmatism, action becomes a field where the fallibility of knowledge is shown, where intention and reflective consciousness no longer dictate the norm.

According to this pragmatist approach action is, of course, understood in the most banal and mundane sense, but never at the level of a mere gesture. Without going into a deeper analysis, it is extremely important to sketch the difference between action and gesture since it is on the basis of this conceptual difference that we can hope to inaugurate a new philosophy of gesture clearly distinct from the old philosophy of action. From a pragmatist perspective, an action has a more unified nature than a gesture; still, some characteristics of action could help us to designate some practical features of gesture.

In pragmatism, an action is never isolated: it always takes place in a plural and complex situation in which energies are exchanged. Action is to be understood as an interaction, as a relation between a living being and its environment. It is important to recall that Dewey's concept of interaction is derived from Newton's physics, which stipulates that for every action there is an opposite and equal reaction. Action is also to be comprehended as a trans-action, as expressed by Dewey in his 1949 book *Knowing and the Known*, co-authored with Arthur Bentley. The idea of transaction made it possible to grasp the dialectical and multiple movement of different phases of an action without attributing value to the final result alone, and by recognizing the exchanges between the different subjects of the experience.

Thus, in the field of aesthetics, the fulfillment Dewey advocates is not to be understood as a subjective satisfaction, a kind of pleasure, which would relate to a form of beauty or even of harmony. On the contrary, this completeness is rather to be understood as the natural accomplishment of a form, without passing via aesthetic judgment, the notions of values or established cultural standards. Action as it takes shape in pragmatist philosophy is thus above all a movement, a tension, an exchange and a constant negotiation. Action may seem paradoxical since it endures over time yet it also shapes itself freely and changes constantly.

This is where the pragmatist conception of action can come close to artistic activity. If practice, as pragmatism understands it, is an entirely self-sufficient ex-

perience, independent of any productive purpose, then it should be able to maintain its aesthetic qualities even when it produces strictly nothing, including a residual feeling of pleasure. The inter-action and the trans-action that would be at work in this kind of experience would only serve to feed the experience itself, even if this same support would have as a final result the simple passing of time, and thus the erasure of the action itself. The pragmatist meaning of action is very similar to what Allan Kaprow names “activity”: they share a semantic field with the idea of action. More specifically, Kaprow’s “activity” is in line with Jackson Pollock’s “action painting” with reference to which Kaprow explicitly places his own practice.

But if the notion of experience is linked within pragmatism to both practice and action, what can we say about activity? How do we define this term, and how might this term help pragmatism shed the traditional residues of pleasure, form and unity? For activity is not the same thing as action. If action is the operation taken in its course, activity is defined as the character of what is active, it designates the very quality of the action, it thus envisages the agent under the relation of her own power directed towards this same operation. Activity thus seems more stable than action, since it is less linked to the real constraints of space and time. This is also why activity cannot be reduced to an activation, like the activation of a work of art in a gallery or a museum for example, because in the latter case, the result is measured by the effects, by the capacity of production of experience. Activity as proposed by Kaprow is therefore very different from activation, as Nelson Goodman or Umberto Eco theorized it at the same time.

For Kaprow, activity is independent of the existence of the work; it is always linked to the mechanisms of perception and psycho-sensory interaction between individuals. It is an “innocent game” in his terms, or a “poetic naturism.” Activity, for example, involves carrying furniture in the street to help someone move, brushing one’s teeth every morning for two weeks while paying attention to these gestures and one’s feelings, shaking someone’s hand several times and becoming aware of the words exchanged, phoning someone and saying nothing while letting them hear only one’s breath through the receiver. Kaprow writes:

I do not (to use a pietistic term) ‘create’ an Activity; rather, I organize its “program.” (Kaprow 2011, 17)

Just like practice in the pragmatist field, activity is clearly separated from what one might call “creation” in the field of the arts. An activity, as Kaprow defines it, is then different from a theatrical performance and comes to strongly criticize the unity and the contemporaneity of the present. It thus criticizes the phantasmatic seat of identity of place, space and action stipulated by Aristotelian poetics to support the vital character of dispersion, repetition and flow.

4 The Ecosphere: A Collective Experience

In very different ways, art and philosophy both put into question our conceptions of practical gestures. In my view, they both challenge the primacy of intentionality and individuality and allow an epistemological perspective on ways of relating to human beings and to the environment. It is via this research inquiry, that at the Gesture Laboratory we have started increasing our experimentation with collective and responsive gestures. That is why, drawing from the ecological concerns of the contemporary world, and inspired by pragmatism, I proposed a workshop in the Gesture Laboratory that I named *Ecosphere*. This term, which I thought I was inventing, actually already existed. It was coined by the American ecologist Lamont Cole in 1958 and it refers to an ecosystem in which several levels interact with each other: matter, energy and living beings.

In astronomy, the ecosphere is the zone surrounding a star, in which the temperature allows the presence of water in liquid form. This zone has the shape of a hollow shell. In the case of the solar system the Earth is located in this zone. On July 15, 1982, Joe Hanson of the NASA Jet Propulsion Laboratory (JPL) in Pasadena, California, held a workshop on “Closed Ecosystems” (CES) which are ecosystems that do not rely on matter exchange with any part outside the system. In 1983, Loren Acker, President of Engineering and Research Associates, Inc., obtained a NASA Spin-Off Technology license for the Ecosphere and with Daniel Harmony, put the Ecosphere into full production in 1984. The terms “Ecosphere” and “Original Ecosphere” later became trademark names for sealed blown-glass miniature aquaria formerly produced by Ecosphere Associates, Inc., of Tucson, Arizona, United States. Fig. 1 They are sold worldwide as scientific novelties and decorative objects. The Ecosphere’s main visual appeal is provided by tiny red-pink shrimps, between 1/4 and 3/8 inch (or approximately a centimeter) in length. The shrimp swim energetically around the aquarium, eat the brown bacterial and algal scum on the glass, consume the filamentous green algae which sometimes forms a globular pillow in the water, and perch on a fragment of soft coral. The manufacturer states that shrimp live in the Ecosphere for an average of 2 to 3 years and are known to live over 12 years.

For the workshop of the Gesture Laboratory, I imagined a discrete space, where people feel that they are either inside it or outside, but of course with the possibility of entering and exiting the space freely. Two main rules are given: 1. “nobody is allowed to speak,” and 2. “every act has to be a reaction to what is already happening in the Ecosphere.” The length of an Ecosphere is rather long and has been established between a minimum of four hours and a maximum of eight hours. Each Ecosphere has a given thematic (i.e., “Gesture,” “Air,” “Light” . . .) and a corner with books and reading material about this thematic is previously put together, as well



Fig. 1: A Pod of an Oval Ecosphere.
Wikimedia, Public Domain, Ecosphere Associates, Inc.

as a series of objects and tools that could serve epistemological and pragmatist inquiries into this theme.

Here are the guidelines for those who wish to participate in an Ecosphere, the workshop held by the Gesture Laboratory:

The Ecosphere is a space without words.

You can (re)enter and leave whenever you want.

You can stay as long as you want.

You can bring a contribution (texts, objects, images, sounds, tools . . .);

you can bring elements of comfort (cushions, tea, food, mats, blankets . . .).

The Ecosphere is a collective space where you are in a situation of listening and responding within a device whose plasticity is replayed each time.

The Ecosphere is a space of effort and tension. It is a space of research.

The Ecosphere is open to all (children and animals are welcome).



Fig. 2: Ecosphere “GESTURES,” March 16, 2019, School of the Arts at the Sorbonne.
Photo Credit: Hope Curran Lundblad.

The Ecosphere of the Gesture Laboratory is a space where gestures and bodies take precedence over words and other modes of communication and transmission are invented.⁶ The ecosphere is a practice where a network of links is collectively woven, where thought is produced around a theme and from elements brought by the participants. It is a situation of gestures and bodies, a context where discourse is rendered tacit in order to capture the movement of ideas. One can find comfort and reassurance. Food is shared. The Ecosphere is a space of coexistence where something beyond oneself is housed; it is a collective space. The Ecosphere is a space where people are in a situation to listen, care and respond. It is a space of mutual respect, sympathy, neighborliness, and relationships. The Ecosphere is a space of expectation, where action is more of a reaction than an act of will.

The Ecosphere is a space but also a *time* that we dedicate above all to ourselves and to what is important to us, to what interests us, to what resists in our life and work, to what poses a problem for us. An Ecosphere is therefore a space where speech is abolished, where people, materials and objects communicate intensely. The Ecosphere workshop functions in a tense relationship between, on the one hand, the forms of time (latency, slow motion, reaction, resistance, inertia, acceleration, accentuation) and, on the other hand, the procedures of artistic disciplines (the daily work of the artist, the relationship to the collective body in

⁶ See <http://www.laboratoiredegeste.com/spip.php?rubrique54>, last accessed March 6, 2024.



Fig. 3: Ecosphere “GESTURES,” March 16, 2019, School of the Arts at the Sorbonne.
Photo Credit: Hope Curran Lundblad.

dance and theater, the coordination of co-existing gestures). The main idea is to embody a type of gesture that is not an action, and to suspend intentionality and individuality as much as possible. How far can a gesture “hold” itself in time and space without being related to volition and individual experience?

This experience is impersonal and collectively shared, it is based on the idea of “handling together” and it gives rise to another type of lived experience. It opens up the hypothesis of bodily gestures in which the subject is collective and dispersed, where the experience lends itself neither to the classic criteria of judgment nor to contemplative distance.

5 Gestures without Actions

One of the main results of the Ecosphere workshop is that gestures are practically and epistemically different from actions. They belong more to the field of reaction and passive motion than to the field of action and proactive movement. Earlier on, I made a distinction between action and gesture, and here I am going to explore it further. From a terminological point of view, if a gesture is not an action, it would be wrong to use them as synonyms. Therefore, a clear distinction must be drawn. It then becomes relevant that pragmatism, as we have seen earlier, extends the inquiry into action to other concepts such as trans-action, reac-



Fig. 4: Ecosphere “GESTURES,” March 16, 2019, School of the Arts at the Sorbonne.
Photo Credit: Hope Curran Lundblad.

tion, practice, activity and inter-action. In order to better understand the concept of gesture we need to emancipate it from the idea of action, and in order to do that a clear definition of the term “action” is needed. What is an action? And, more precisely for our purpose, what is a collective action? We generally identify an action with the implementation of a power, or even with the exercise of a process, often intentional. It does not matter if this intention is claimed or unconscious, what we are looking for is to attribute a motivation, a volition to the action. The action refers intrinsically to a subject endowed with a power (to) act. In other words, the action is not itself “acting,” it is the subject who becomes an agent; an action is thus based on the power to act, on the capacity to initiate action.

This capacity is extremely important since, without the possession of such a capacity, of such a power, it would be impossible to attribute any responsibility to the agent. This seems to be a truism: just as there is no speech without a person speaking, there is no action without a subject acting. One does not blame an avalanche for causing death, because the avalanche does not act, it is not responsible for the consequences of its existence. Thus, it is easy to see that the idea of action is highly human, even too human in my opinion, and the identification between action and intention does not promote understanding. Moreover, once an action is evaluated as remarkable, it is somehow isolated from the conditions that governed

its execution and is separated from all the other ordinary and mediocre actions that do not enjoy the same undisputed admiration.

The idea of gesture is often simply associated with that of action but in reality they should not be confused with each other. To put it in metaphysical terms, is there an ontological difference between gesture and action? And, if so, what would be the epistemological, and thus also pedagogical, consequences of such a difference? If the association between action and gesture is not bad in itself, it becomes so when it is exclusive. The term gesture does not succeed in becoming a concept because it is simply crushed by the long philosophical history of the idea of action, begun by Aristotle, prolonged by Saint Augustine and continued up to Donald Davidson or Paul Ricoeur by way of Elizabeth Anscombe and Hannah Arendt. By an ironic detour, the idea of gesture suffers precisely from what seems to be its asset, namely, its belonging to the domain of action. In anthropology, sociology, or semiotics, the notion of “gesture” navigates in the troubled waters of action, act, activity, movement, and everything that seems to have to do with dynamism and initiative.

In my opinion, the association between the concept of gesture and the philosophy of action has ended up constituting a difficulty for the understanding of the nature of gesture, which is not exempt from a certain dose of *passivity*. This “passivity,” for lack of a better term, may allow us to remedy some conceptual impasses concerning the domain of action, which is much too involved with ideas of intention, individuality, judgment, explanation, reason, responsibility and value. In general, it seems to me that these questions are important for the theory of action, and more specifically for our reflections in the field of morality, politics and of course for the field of art. Nevertheless, I realized that the existence of the concept of action, or even of a real philosophical theory about it, has become an obstacle to the conceptualization of what we mean by “gesture.”

It is said that the philosophy of action was born following a famous question asked by Ludwig Wittgenstein: “*What is left over if I subtract the fact that my arm goes up from the fact that I raise my arm?*”⁷ The question, vertiginous, touches on the nature of human action and the possibilities of explaining an action. It is an inquiry into the reasons for action and the relationship between these reasons and their effects. Action theorists are divided into causalists and non-causalists; the former claim that reasons for action are the causes of action, the latter argue the opposite, that reasons are not sufficient as causes. From a strictly philosophical point of view, the decisive problem raised by Wittgenstein is that “wanting to do” and “doing” are separated by an act of consciousness of an abstract order; in

7 Wittgenstein, *Philosophical Investigations*, §621 (1961, 294).

other words, in practice, the act is indistinguishable from the bodily movement that carries it out.⁸

Philosophers of action have tried to make this difference discernible by extracting volition from the bodily act, focusing, as Wittgenstein says, on what remains in the action once the body movement is removed. This is a very good method indeed, and it raises a difficult question: what remains when the body is no longer there, when it is put on hold, muted, in parentheses? We see clearly that the method used is reductionist and suspensive. We suspend the body and we reduce the action to the will. The indistinguishable nature of “wanting to do” and “doing” has led philosophers of action to focus on the wanting, but, in my opinion, and I am not the only one, of course, to think so, there is another way, which consists in focusing on the doing and not on the wanting. It is not a question of suspending the body but of doing with it.

The method that I proposed to experiment through the workshop of the Eco-sphere also involves suspension, but it is not reductionist, insofar as we do not reduce gesture to the body. If Wittgenstein suspended the body (doing), we attempt to suspend the will (wanting). How then to suspend the will in the domain of action? It is by removing, or diminishing, its springs: namely, intention and individuation. Instead of doing, wanting to do, acting and wanting to act, it would be a matter of handling and managing. This “grey” area is where the concept of gesture lies, already advanced by Agamben in *Means without end* (Agamben 1996/2000), but also more recently in *Karman* (Agamben 2017), where the concept of gesture sets in motion the system of collective and ancestral responsibility that we could still find in the idea of action and fault. In another way, Erving Goffman had already treated this phenomenon of collectivity through the theatricality of the ordinary in his work on the staging of the self in everyday life (Goffman 1959).

Anthropology and sociology touch here on theatrical studies, we realize that we play at the reality of our lives and that, therefore, this supposed “reality” is much less real than it seems: the reality is disguised with artifice. But above all, this theatricality of the ordinary was already an important feature of Wittgenstein’s philosophy. This is true for “language games,” understood as free but regulated activities, but also for what he will later call “forms of life,” a complex concept to which the idea of gesture is intimately linked. There is indeed, in Wittgenstein, a drama of the ordinary which allows to restore together the constraining and irremovable part of living with the emancipated and dynamic part. The traditional concept of intentionality and individuality are less effective in this case and they require a critical perspective onto the more established philoso-

⁸ I analyze this problem in *Formis* (2009).

phies of action, and in particular also their repercussions in contemporary criticism, as in Vincent Descombes (2013) and Jocelyn Benoist (2013), who deal with identity and the real and criticize the idea of *identity* and the concept of the *real*.

The obstacles to understanding gesture are two categories essential to the concept of action, namely, individuality and intentionality. These two ideas block the notion of gesture and are due to a reductionist process of the idea of gesture. To put it simply, the philosophical problem of gesture is that we treat it as if it were an isolable event, or even as a thing. If this was still possible for the idea of action, it is not possible for gesture. Why is this so? One answer is that the gesture is not mine. It is not mine because it does not derive its mode of existence from my will, but also, in a slightly more surprising way, it does not depend entirely on my body, I inherit it from other people and I address it to somebody else. The gestures do not belong to us: this is the hypothesis that I propose and for which I find resonances with Giovanni Maddalena's work in pragmatism (Maddalena 2015) and Erin Manning's work in the Deleuzian field (Manning 2016).

Drawing from the work done at the Gesture Laboratory, my claim is that a gesture cannot be reduced to a thing since it is a form, and more specifically a living and collective form, made up of gazes and exchanges. The method is therefore a morphological investigation. How do gestures emerge, how do they transmigrate from one body to another, how are they perceived? How do they disappear, then reform and transform? A gesture is always grasped within a management of forms, in a situation that is handled collectively. How do they emerge in the very fabric of collective living? Carrie Noland has already pointed out the migratory nature of gestures (Noland, Ness, 2008). What is their modality of existence? Art is also a matter of forms and gestures. In the case of "morphology," we have to deal with a logic of the forms which often seeks to gather them (these forms) in their relation to a model, a mode or a module. This method must necessarily pass through a series of transformations and changes. Morphology thus crosses *cancellare metamorphosis*; they both require a modification of forms. And, the morphological method is not without echoes with the methods of inquiry close to pragmatism. Indeed, pragmatists, such as Dewey or James, have been able to indicate the very meaning of the capacities to act, and to think, in interactions, situations, habits and, of course, in practices.

In such a context, a gesture is never taken alone, but it is deployed in a multiplicity of forms, it is pluralized and loses its singularity. The question of cooperation is therefore central to the possibilities of this plural "doing" that requires an individual "undoing." The idea of a "conversation of gestures" dear to George Herbert Mead (1934) is very useful here. We are not going to oppose the self to the others as if there were an unshakeable ontological difference. On the contrary, through the sedimented layers of its meaning and experience, gestural pluralism gives us the intuition that the subject of agentivity is already plural from the start.

What is also interesting is that Mead describes the human similarly to Wittgenstein and associates it with the animal and the primitive. What often goes unnoticed is Mead's inclusion of insects in his analysis of the conversation of gestures.

This passage beyond the human has important consequences for ethics and politics. We can thus see that the concept of "gesture" is no longer reducible to humanity, its meaning may include the domain of the animal and the primitive. For my part, I also associate gesture with the movement of plants so as to think its vegetal force. This takes our analysis into the realm of environmental aesthetics but also into ethical debates on vulnerability. The idea of "togetherness" as an opening to the plurality proposed by gesture exposes us to the complexity of the situation of our lives. The idea of "gesture" suggests that we take into account somatic reactions and conversations as a network of life forms that go beyond the notion of humanity. This has crucial consequences for what we mean by "aesthetic experience," "creative process," and "work of art."

The collectively shared gesture and the management of its experience are forms of life that we have experimented with in the Gesture Laboratory. The results are powerful pedagogical and epistemological tools. The research implemented is based on a democratization of knowledge that is particularly beneficial to the emancipation necessary for learning; also, thanks to the silence that was imposed as an instruction, it was possible to reach a real level of concentration. The exploratory and experimental dimension showed its effectiveness insofar as the traces produced during the workshop were both unexpected and interesting to keep and to manipulate afterwards. Finally, the collective management showed that intelligence shared in a somatic way can arrive at real epistemological results without going through verbalization or analytical explanation. This encourages the continuation of the work as a form of alternative education associated with research-creation as a field of encounter between artistic creation and scientific research.

References

- Agamben, Giorgio. 1996. *Mezzi senza fine. Note sulla politica*. Turin: Bollati Boringhieri. [English Translation: Agamben, Giorgio. 2000. *Means Without End: Notes of Politics*. Translated by Vincenzo Binetti and Cesare Casarino. Minneapolis: University of Minnesota Press.]
- Agamben, Giorgio. 2017. *Karman. Breve trattato sull'azione, la colpa e il gesto*. Turin: Bollati Boringhieri. [English Translation: Agamben, Giorgio. 2017. *Karman: A Brief Treatise on Action, Guilt, and Gesture*. Translated by Adam Kotsko. Stanford: Stanford University Press.]
- Benoist, Jocelyn. 2013. *Le Bruit du sensible. Passages*. Paris: Éditions du Cerf.
- Bernstein, Richard J. 1971. *Praxis and Action: Contemporary Philosophies of Human Activity*. Philadelphia: University of Pennsylvania Press.
- Cage, John. 2010. *Silence: Lectures and writings*. Middletown: Wesleyan University Press.

- Descombes, Vincent. 2013. *Les Embarras de l'identité. NRF Essais*. Paris: Gallimard.
- Dewey, John. 1934. *Art as Experience*. New York: Pedigree.
- Dewey, John and Arthur Bentley. 1949. *Knowing and the Known*. Boston: Beacon Press.
- Formis, Barbara. 2009. "Toucher, bouger, la théorie somatique à l'épreuve de la vie." In Formis, Barbara (Ed.). *Penser en corps. Soma-esthétique, art et philosophie*. Paris: L'Harmattan.
- Formis, Barbara. 2010. *Esthétique de la vie ordinaire*. Paris: Presses Universitaires de France.
- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. Edinburgh: University of Edinburgh Social Sciences Research Centre, Anchor Books.
- James, William. 1912. "The Experience of Activity." In James, William. *Essays in Radical Empiricism*. New York: Longman Green and Co.
- Kaprow, Allan. 1995. "Interview with Susan Hapgood (August 12, 1992)." In Hapgood, Susan and Jennifer Rittner. "Neo-Dada: Redefining Art, 1958–1962." *Performing Arts Journal* 17 (1): 63–70.
- Kaprow, Allan. 2003. "Performing life (1979)." In *Essays on the Blurring of Art and Life*, edited by Jeff Kelly, 195–200. Oakland: University of California Press.
- Kaprow, Allan. 2011. *A Bibliography*. Bookspace 01, edited by Giorgio Maffei. Milan: Mousse Publishing.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture: Completing Pragmatists' Incomplete Revolution*. Montreal: McGill-Queen's University Press.
- Maddalena, Giovanni. 2021. *Filosofia del gesto*. Rome: Carrocci.
- Manning, Erin. 2016. *The Minor Gesture*. Durham: Duke University Press.
- Mead, George Herbert. 1934. "Wundt and the Concept of the Gesture." In *Mind Self and Society from the Standpoint of a Social Behaviorist*, 57, edited by Charles W. Morris. Chicago: University of Chicago Press.
- Noland, Carrie and Ness Sally Ann. 2008. *Migrations of Gesture*. University of Minnesota Press.
- Wittgenstein, Ludwig. 2009. *Philosophical Investigations (Philosophische Untersuchungen)*. Hoboken: Wiley-Blackwell.

Daniele Goldoni

Chapter 19

Indeterminacy and Vagueness in Improvisation and in Experimental Music

Abstract: This essay deals with a family of musical practices that are marked by similar features and grouped under the labels of “indeterminacy,” “experimental music,” and “improvisation.” Although, according to John Cage, musical improvisation, experimentalism, and indeterminacy were originally motivated by different goals and concepts and characterized by different practices—although ethnic and “free” Western improvisation are also very different from each other—they all share a common trait in terms of their intention, the realization of their performances, or their reception, and that is to say: a certain unpredictability in their outcome.

In one sense, some features of these musical gestures are “replicable,” as evidenced by the perception of them as “genres” as well as by the existence of musical circuits and communities devoted to them. However, a performance of this sort is only considered successful by the composer, performer, or listener if something “unpredictable” happens.

This apparently complex situation promises to be a fruitful field for better understanding and testing the concepts of “complete” and “incomplete” gesture and of “vagueness” proposed by Giovanni Maddalena, based on an investigation into “replicability” and the experience of time, place, and community in these musical practices. If a wholly or partially non-replicable practice is to be considered “incomplete,” are improvisational and indeterminate musical practices incomplete gestures?

Keywords: indeterminacy, experimentalism, improvisation, unpredictability, replicability, vagueness

1 Introduction

I would like to discuss a family of musical practices with similar characteristics that can be grouped under the labels of “indeterminacy,” “experimental music,” and “improvisation.” These practices promise to be some fruitful musical material

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through which to test the concept of gesture proposed by Giovanni Maddalena (Maddalena 2021, 35 ff., and 2015). To what extent can they be considered complete or incomplete gestures?

1) According to John Cage, an “experimental” musical performance is an action whose aim is to produce an unpredictable outcome:

An experimental action is one the outcome of which is not foreseen. Being unforeseen, this action is not concerned with its excuse. Like the land, like the air, it needs none. A performance of a composition which is indeterminate of its performance is necessarily unique. It cannot be repeated. When performed for a second time, the outcome is other than it was. Nothing therefore is accomplished by such a performance since that performance cannot be grasped as an object in time. A recording of such a work has no more value than a postcard: it provides a knowledge of something that happened, whereas the action was a non-knowledge of something that had not yet happened. (Cage, 2013, 39)

2) Improvisation can also have different degrees of unpredictability. Indeed, in the modern and contemporary Western musical context, it is often believed that the purpose and essential meaning of improvisation is to produce the unexpected. This concept of improvisation is shared by many listeners, improvisers and musicologists.¹ So, it might seem that we already have an answer to the question of the completeness or incompleteness of these gestures: the purpose is clear, but *thirdness*, the indication of *replicability*, the symbolic universalization of the gesture (Maddalena 2021, 35–47 and 71–82) seem to be partially or totally missing. Is this one of the reasons why this type of gesture should be called “incomplete?”

Things are not that simple. Indeed, one could argue that many aspects of replicability are present in all genres of improvisation and indeterminate music. A sort of “school” of contemporary music was born from Cage’s theories (Pritchett 1993, 143, and Piekut 2011, 71). Different “genres” of improvisation have emerged in Western music (organ, flamenco, blues, jazz, free music, classical: Bailey 1993). There are also different traditions and schools in ethnic music (for example: Indian, Ottoman, and so on).

To investigate the complexity of the subject, I will consider different meanings and modes of improvisation and indeterminacy in music.

But first, I would like to prevent a possible misunderstanding.

¹ See, among many more or less “radical” improvisers: Bailey (1993); Evangelisti (1991); Globokar (1970); and Stockhausen (1971). Among musicologists, see, for example: Caporaletti’s distinction between improvisation and extemporization (2005, 98–170); Bormann, Brandstetter, and Matzke (2010, 7 ff.); and Sparti (2016). Goehr (2016, 460 f. and 470) sees the search for the unexpected and innovative aspects in the *impromptu* rather than in the *extempore*.

2 Improvisation and Composition

A misunderstanding about the completeness or incompleteness of an improvisation could arise if it were understood as an *incomplete composition*. Considering improvisation something “imperfect” with respect to composition is somewhat misleading—even though this concept has been proposed, perhaps somewhat ironically, by a jazz musician (Gioia 1988). This misunderstanding is due to both historical and theoretical reasons.

Musicians of past centuries such as Bach, Mozart, Paganini, Beethoven, Hummel, and many others, used to mix composed and improvised parts in the same performance.

Performers would exercise their skills by improvising according to certain musical styles and to written “patterns” called *partimenti* (Guido 2017).

During the 19th century, in contemporary classical music, the performance of complete written scores became predominant, at the expense of improvisation. But in the 20th century some leading exponents of musical improvisation (Futurists, jazz and “free-improvisation” musicians, classical-contemporary musicians like Franco Evangelisti) started claiming that improvisation was more creative than composition.

The distinction between improvisation and composition has not always been clear. During the 20th century there was a dialectical, sometimes fluctuating relationship between “composition,” “improvisation” and “indeterminacy” (see also Feisst 2016). Improvisation found its way into Schönberg’s thought (Feisst 2022). The improvisers of Nuova Consonanza were composers. Musicologists and musicians championing “free” or “radical” improvisation loved—and still love—to consider this music a form of “composition in real time” or “rapid composition.”² Conversely, composers of contemporary classical music (for example, Luigi Nono and Sylvano Bussotti) required improvised parts in their “open works.” Indeterminacy was sought by John Cage through “indeterminate compositions” with a written or otherwise established score. Cage always claimed to be a composer and was critical of improvisation (until the 1980s, according to Pauline Oliveros³), as he suspected it was merely the expression of the performer’s ego.

Another possible source of misunderstanding can arise from reproduction. A recording of an improvisation can be repeated, the improvisation can be transcribed or memorized and analyzed as if it were a complete work. This circum-

2 For a succinct overview of the whole issue, see Goldoni (2022, 243–248).

3 Pauline Oliveros informed me of this change in Cage’s attitude towards improvisation at a conference at Ca’ Foscari University in 2012.

stance might suggest applying to an improvisation the same criteria of judgment as are used for a composition. However, the recording of an improvisation is not the same as the improvisation itself (see Cardew 1971, *The Problems of Registration*, and Bailey 1993, 103 ff.). I will return to this point later, in the section entitled “non-knowledge.”

3 Play, Game

Musical improvisation can be divided into genres and can also be recognized as belonging to certain trends and schools. That happens even in “experimental music” (see Nyman 1999; Gottschalk 2016; Piekut 2011, 2019; and Goldoni 2022, 251–252). This circumstance does not eliminate the factor of the *unexpected* but suggests that a factor of *replicability* also comes into play. To understand the relationship between replicable and non-replicable factors, I will now talk about different aspects of improvisation.

One might find a competitive element in improvisation: a challenge, an individual, one-to-one, or collective game.

One could find it, for example,

- 1) in the stornelli or *fronn’e limone* of Italian shepherd-poet-singers of past centuries (Tuscany, Lazio, Campania, Sardinia, Romagna); in other so-called “ethnic” forms of improvisation. The game consists in the performer’s ability to use traditional material to invent the music, according to a taste and virtuosity recognized by a community of musicians and listeners (Kezich 1986; Arom 1991, 2013; Nettle 2016; and De Zorzi 2019);
- 2) in jazz jam sessions, in so-called “chases” between musicians on stage;
- 3) in a “solo” exhibition before an audience;
- 4) during the interplay of an improvisation.

As with any game, any type of improvisational practice can be taught to a certain extent. People can learn many ways to “respond” to a musical gesture improvised by other musicians. It is almost like learning to talk to others, to argue, to support one’s point of view. To the extent that this is a practice recognized as correct by a community, it can be replicated, taught, and judged in teaching-learning contexts. Indeed, conversational and discussion patterns are detectable in many Western and non-Western cultural and educational models. Similarly, schools have been established to teach organ, flamenco, rock, jazz, and different “ethnic” ways of conceiving and practicing improvisation. Although individual talent is always required, might we say that, within these contexts and boundaries, entailing an ex-

tensive use of formulas and patterns, improvisation is a complete (replicable) gesture?

In 1971, the composer and improviser Cornelius Cardew stated:

improvisation is a sport *too*, and a spectator sport [. . .] (Cardew 1971, 2)

Are sport games like football, basket, tennis, etc., “complete gestures,” inasmuch as they have rules and are taught? If so, could *cantare in ottava rima*, flamenco, jam sessions, and ethnic improvisations be considered complete gestures? We should note, though, that there is an essential difference between sports in which rules establish who wins and who loses, and improvisation. Cardew continues by saying:

improvisation is a sport *too*, and a spectator sport [. . .] where the subtlest interplay on the physical level can throw into high relief some of the mystery of being alive. (Cardew 1971, 2)

A certain revelation of the mystery of being alive is not the effect of following a rule. Nor is there a winner or loser.

4 An Ideology of Novelty in Improvisation

As I anticipated above, the modern Western word “improvisation” and the usual tracing back of its meaning to the Latin word *improvisus* seem to suggest that the unexpected, or unrepeatable, is the essential nature of the practices that bear this name today. But the words “improvvisazione” and “improvisation” in Italian, French, English, and German were initially applied to poetry and only later, from the 19th century onwards, to musical practices which, however, had hitherto been referred to with other words (see Goldoni 2022, 246).

In the late 18th and early 20th centuries, the ideology of originality (Kant 2000, §§ 46 and 47) and of novelty strongly entailed the concepts of art and music—with composers such as Wagner and Schönberg—as well as that of improvisation. In the 20th century, the emphasis was placed precisely on the novelty, on the non-replicability of improvisation. The Futurist manifesto *L'improvvisazione musicale* by Mario Bartoccini and Aldo Mantia entrusted “free improvisation” with the “absolute destruction of all musical laws.” “Any harmony or motif already listened to” had to be avoided, so as to eliminate the “obsession with tempo, structure, rhythm, and formal laws.” Free improvisation should create an “infinite originality of brilliant ideas,” capable of “electrifying forcefully and immensifying music with genius, a sublime art and, at the same time, a very effective hygiene of social elevation” (Bartoccini and Mantia 1921, my translation; see also Goldoni 2022, 248).

Some relevant aspects of the ideology of novelty are also detectable in the intentions, statements, and practices of many jazz, rock, progressive, free jazz, free music, “experimental music” improvisers in the second half of the 20th century (Piekut 2011, 75). The goal of producing “unexpected,” “surprising” music through a renewal of musical “language” became the very benchmark for improvisation.⁴ As we will see, this goal and the corresponding musical practices have brought to light an essential element of improvisation, but some ideological interpretations have also led to paradoxical results.

5 Freedom

Improvisers like Evangelisti and Globokar prescribed *negative* rules and exercises aimed at avoiding recognizable and traditional melodic, rhythmic, and timbre elements (Evangelisti 1991, 67–71; Globokar 1970; and Schiaffini 2011, 85).

Such caution—when understood and applied by taking account of their true purpose and the context of the performance and, above all, without falling into stylistic schemes or into any “radical” fanaticism—have been and can still be useful in fostering a fruitful freedom among improvisers. Indeed, in free improvisation there are no positive formal rules to establish the boundaries of the correctness of the interaction, even if very few non-explicit conventions can be recognized, deriving from executive practices, such as:

- 1) listening to others and the environment;
- 2) playing together (“together” is a rather “vague” concept: anyone can be silent or intervene when she/he wishes);
- 3) finishing so as to make the end perceptible.

Negative prescriptions such as those mentioned above were created with the aim of making the use of such non-explicit conventions as free as possible. Indeed,

- 4) any overly codified musical material forces improvisers to “follow” it or to counter it with possible non-musical outcomes. Avoiding overly codified material allows improvisers to suggest an idea at a chosen moment through a musical gesture. The latter may be accepted and interpreted by the other musicians, contributing to orienting the music collectively produced in a new direction.
- 5) The lack of a predictable development of the music promotes attention (*Awakeness*: Cardew 1971, 7) towards what is happening *in the present*. It fosters partic-

⁴ See note 1.

ular attention to the sounds, environment, present relationships, and the quality of the ongoing process. This poetics converges, in a certain sense, with the “experimental” one of John Cage. His use of chance was aimed at enabling and broadening the perception of unexpected sounds: any sound, even beyond the prevailing taste in Western musical traditions.

6 Transgressions Become New Clichés

In these contexts, the unexpected, the “new,” can be a *condition for* or a *result of* experimental music and improvisation, but in itself, it is not the essence of improvisation: what makes musicians love improvising, especially with other improvisers, as we will see shortly. When that essence is forgotten and replaced by the formal idea of novelty, those “negative” suggestions risk becoming only stylistic prescriptions and new clichés. These introduce some replicable elements in improvisation.

Derek Bailey (Bailey 1993) urged musicians to avoid “idiomatic” languages.

Indeed, every great improviser of the 20th century has practiced non-idiomatic improvisation. But when you *invent* and *establish* a “new” language, what today sounds unheard risks becoming tomorrow’s mainstream and a set of replicable patterns. This has happened, for instance, with John Coltrane. When one listens to John Coltrane’s *Giant Steps*⁵ or *Interstellar Space*⁶ one might recognize that today many skilled saxophonists can replicate his *language*. However, they do not play his *music*.

Derek Bailey himself invented many new ways of playing the guitar, to avoid “idiomatic improvisation”.⁷ But his musical creations are so well thought out and coherent, that they somehow constitute a new idiom that any skilled guitarist can imitate.

Nuova Consonanza and Vinko Globokar (among others) have invented new sounds, new forms of music, by also using “extended techniques,” that is a non-conventional use of conventional instruments. Examples: Nuova Consonanza,⁸ Vinko Globokar: *Oblak Semen*;⁹ and Vinko Globokar: *Der Engel der Geschichte*.¹⁰

5 See https://www.youtube.com/watch?v=xy_fxj1mMY, last accessed March 6, 2024.

6 See <https://www.youtube.com/watch?v=TkrMkxIGti0>, last accessed March 6, 2024.

7 See e.g. <https://www.youtube.com/watch?v=xMoHRidtQcw>, last accessed March 6, 2024.

8 See <https://www.youtube.com/watch?v=dqvAhBJ99wA>, last accessed March 6, 2024.

9 See <https://www.youtube.com/watch?v=VLrtJoRC20w>, last accessed March 6, 2024.

10 See <https://www.youtube.com/watch?v=wTZI-hZsk4k>, last accessed March 6, 2024.

Some of these ways of transgressing tradition have become tacit, implicit school prescriptions, according to the shared taste of communities of “free” improvisers and their “fans.” After more than fifty years, it is not difficult to recognize new clichés in some of these attempts to avoid melodic phrases and traditional timbres through extended techniques (see also Goldoni 2022, 248–249).

7 A Matter of Taste

More generally, it would be a misunderstanding to believe that in free improvisation taste has never been major factor in the positive reception of performances. This misunderstanding may arise from the fact that intense and unconventional tonal research, the use of non-tempered pitches and micro-intervals, and the positive (sometimes ideological) appreciation of “errors” (see Schiaffini 2011, 83) make such music harsh to ears that are unaccustomed to experimentalism: this music might seem to go against all “taste.” But if, in a so-called “radical” free improvisation, you pick up a regular rhythm for a while, if you play something that looks like a modal or tonal melody, other listeners may look askance at you. Maybe they will reproach you (this was my personal experience as a trumpet player many years ago, when I was still naive: an experience that I then shared with a now famous double bass improviser and a now famous percussion improviser. Sometimes, when we meet, we recall that experience and have a good laugh).

8 A Computational Approach

In relation to the question of replicability, it is also worth mentioning the algorithmic, computational approach as an extremely formal way of practicing musical improvisation, resorting to replicable procedures.

The psychologist Philip Johnson-Laird (2002) claimed that it was possible to practice and understand improvisation through algorithms. I invited him to Ca’ Foscari University, Venice. He showed us how certain algorithms and software could reproduce Parker’s musical language. Indeed, the computer played some formulaic patterns from Parker. This experience can help us analyze Parker’s melodic, rhythmic, and harmonic creations and his approach to traditional jazz forms (blues, 32-bar rhythm changes, songs . . .). It may be useful for a learning purpose. But the whole thing, of course, did not sound like Parker. You cannot simply use algorithms and software to reproduce Parker’s attacks, breath, accent, and timbre in the context of an improvisation; moreover, this also includes other

elements, such as the presence of other improvisers, of an audience, and the sounds of the location. So, I would not take this experiment as an example of improvisation.

In relation to the question of replicability, if a piece of music can be produced through a recursive function that determines a finite number of development possibilities, that music can be replicated in a finite range of cases. Any unpredictability in terms of what happens during the listening could only affect the listener, not the procedure. But if the surprised listener is also an improviser who interacts with that music in real time, the improvisation becomes unpredictable.

The French center for acoustical/musical research (IRCAM) has produced a computer that can interact with an improviser, so as to surprise the performer and force him/her to promptly come up with musical unpredicted responses. The great improviser and trombonist George Lewis has created something similar. When I invited him to Venice Ca' Foscari University, I listened to his trombone interact with his computer, connected to a Disklavier. I really loved the way he played and what happened was interesting. It highlighted Lewis' great improvisational skills. But what is the musical relevance of those experiments?

9 An Ethic of Improvisation

Any purely formal approach to the question of the musical language of improvisation, whether human or computerized, whether made of patterns or performed radically *against* them in order to be surprising, is reductive. Music always has to do with a certain community, with its ways and moments of understanding and misunderstanding, of provoking and responding, enjoying, and playing. Improvisation is no exception. In fact, excellent improvisers, even the most radical ones, say that what they want the most is to play with other improvisers (see Bailey 1993, 112). Music is more than just a good combination of sounds, as it shapes the time and place for shared listening in a special way, different from the time and place of ordinary affairs.

The mutual implication between place, the *present*, and the community becomes clear in the following words by Cornelius Cardew:

A city analogy can also be used to illustrate the interpreter's relationship to the music he is playing. I once wrote: "Entering a city for the first time you view it at a particular time of day and year, under particular weather and light conditions. You see its surface and can form only theoretical ideas of how this surface was moulded. As you stay there over the years you see the light change in a million ways, you see the insides of houses-and having seen the inside of a house the outside will never look the same again. You get to know the

inhabitants, maybe you marry one of them, eventually you are inhabitant—a native yourself. You have become part of the city. If the city is attacked, *you* go to defend it; if it is under siege, *you* feel hunger—you are the city. When you play music, *you* are the music. (Cardew 1971, 2)

Love is a dimension like time, not some small thing that has to be made more interesting by elaborate preamble. The basic dream—of both love and music—is of a continuity, something that will live forever. The simplest practical attempt at realising this dream is the family. In music, we try to eliminate time psychologically [. . .] to work in time in such a way that it loses its hold on us, relaxes its pressure. Quoting Wittgenstein again: “If by eternity is understood not endless temporal duration but timelessness, then he lives eternally who lives in the present.” (Cardew 1971, 4)

The present, in this sense, is not an instant within a temporal line. This present entails an “ethical” attitude to the place I am in, the people I am with, the sound I hear, my own body and movements (indeed, the title of Cardew’s text is *Towards an Ethic of Improvisation*). There is no longer any separation between myself, the environment, and others:

When you play music, *you* are the music. (Cardew, 1971, 2)

It is not only I who plays.

This is a difference compared to other (musical and non-musical) situations in which commercial or professional aims are predominant and lead to a competition. There is no competition, no winner or loser—unlike in other games and sports—and no strategy.

Once Peirce wrote:

In fact, it is Pure Play [. . .] Pure Play has no rules, except this very law of liberty [. . .] (Peirce 1931–1938/1958, Volume VI, 458–459)

10 Two Examples of Indeterminacy

“Deep listening” is a sort of “indeterminacy” or improvisation in playing-and-listening, that discovers new properties in sound.¹¹

This happens with some “experimental” and “indeterminate” music, for example, by Oliveros and by Eliane Radigue. In *The Heart of Tones*, by Oliveros, the starting material is only a central D. Musicians make changes through improvised

¹¹ See/listen to Pauline Oliveros: *The Difference between Listening and Hearing*, https://www.youtube.com/watch?v=_QHfOuRrJB8, last accessed March 6, 2024.

slight variations in the pitch (just above or below the D) and in the dynamics. The performance allows you to discover a rich set of musical possibilities in that central D.¹² The performance can be repeated, but the differences in the pitch, dynamics and in the positions in space by performers are not determined, so the outcome is different every time.

In *Occam Ocean* by Eliane Radigue,¹³ you might hear, above the mass of chords and drones improvised by strings, winds, brass, and percussions, some thin, rapid, and intermittent melodies of overtones, which no one plays intentionally. Thus, this music is partially indeterminate and unpredictable.

11 Exercises

Against the opinion that improvised and indeterminate music are incomplete gestures because they cannot be replicated, one could argue that improvisation and indeterminate music also require many exercises to be successful, and that the exercises are replicable. This is true.

Franco Evangelisti prescribed certain exercises to ensure success in collective improvisation (Evangelisti 1991, 66–71). Many exercises are necessary to be able to master the musical material, tone down the mind’s chatter and anxieties, and to promote listening and awareness—in short: to learn to play while staying in the present.

For years, Musicafoscari ensembles have also been taking part in workshops led by composers and improvisers such as Pauline Oliveros, George Lewis, Evan Parker, Fabrizio Ottaviucci, Daniele Roccato, and Michele Rabbia (among others). The members of the ensemble have been led to appreciate silence and sound, to listen to the others and to the environment, to recognize the “right” moment to intervene and the “right” moment to finish. It has been like learning to “purify” one’s listening, and to make the performance space a free and welcoming place for friends and unexpected guests. Much exercise, solid practice, familiarity and friendship among the musicians can remove any sense of alarm in the mind and take down its defenses, favoring improvisation and musical experimentation. But none of these necessary conditions, nor all of them together, are sufficient in themselves to make the “present”—and the marvel of music—happen (see also Evangelisti 1991, 71). No one knows in advance when and why it happens.

¹² See <https://www.youtube.com/watch?v=uOKPcDActVw>, last accessed March 6, 2024.

¹³ See <https://www.youtube.com/watch?v=DAWBuyzPwvg>, last accessed March 6, 2024.

12 Non-Knowledge, Vagueness

This present cannot be achieved without a transformation of one's attitude toward time and sound. This transformation cannot be calculated as if it could "be grasped as an object in time" (Cage 2013, 39). *Presence* cannot be placed on a timeline in which a previous phenomenon is a necessary and sufficient cause of its arising.

I do not mean that, in improvisation, there is no concern for a control over the musical material employed. This concern is introjected by the improviser, becoming almost instinctive; probably it is tacitly at work, but not overwhelming.

Indeed, the improviser borrows a lot of already used and known musical material. She/he can retrospectively recognize why she/he made a certain choice, why opted for a given phrase or sound . . . Later, the improviser can remember one of own improvisations or an improvisation by someone with whom she/he was playing, by resorting to own memory, the memory of other improvisers, or a recording. The improviser can use all of this for the purpose of analyzing the strengths or weaknesses of that improvisation, can judge the degree of mastery over the musical material, the coherence of the development, the performance skills, etc. This judgment can be fruitful for a subsequent improvisation or for a composition. Listening to the recording of that improvisation can bring out forgotten aspects, for the better or worse. But the recording of an improvisation is *not that improvisation*: that present is missing. A free conversation about a former improvisation is another improvisation, based on words. A written analysis of an improvisation is a kind of word-composition. The channel that connects an improvisation with a subsequent conversation or with the analysis of a recording is open and often fruitful, but nobody can take a full look at it. They belong to different media, chronological, and experiential dimensions. The "right" awareness of an improvisation takes place during the performance itself, in its "present." I would not consider this awareness an "analysis": its matter is "vague" (see also Maddalena 2021, 91). One may be aware of the pertinence of the musical material employed, how the other improvisers responses to it, of the shape that the whole process is taking, but what decides and shapes the music is joy, the desire to play—or, if music does not work, a feeling of obstruction of the flow, of a level drop, a lack of joy. When a joyous moment occurs, it is like a "grace" from above. Is grace analyzable? I do not think so.

People exercise to receive grace: in religion, also in music. Are exercises replicable? They are. Is there a necessary and sufficient "causal" connection between the exercises and the grace? If there is one, most of us do not know it.

Peirce's sentence quoted above continues with a quote from John 3:8:

Pure Play has no rules [. . .] It bloweth where it listeth [. . .] (Peirce 1931–1938/1958, Volume VI, 458–459).

It is significant that a philosopher (Davidson 2016, 523–538) and an improviser (Lewis 2011) speak of improvisation as a “spiritual exercise.”

According to Plato, considerable practice is required to experience beauty, but when it manifests itself, if it ever does, it is as a sudden (εξαίφνης), unexpected vision and experience (Plato 1991, 204 [210 and 4]).

To summarize the arguments used in this essay in order to discuss a complex musical situation into a simplified conclusion, I would say:

if we consider a gesture incomplete when it cannot be replicated, then we should conclude that any form of improvised or “experimental” musical practice is incomplete.

The vagueness of the connection between exercise, techniques and musical outcome in improvised or “indeterminate” music, suggests that even the concepts of successful improvisation and of the “right” outcome of an “experimental” musical action are vague, even though they are unquestionably detectable in our experience.

I have given musical examples, but those considerations can also be extended to other arts, other practices, and many decisive aspects of culture and daily life—and indeed to life in general.

Vagueness plays a very relevant role in religion, ethics (see Wittgenstein's *Lecture on Ethics*, 2022), art, and philosophy. For example, the idea of beauty expressed in Plato's *Symposium* is also vague (see Maddalena 2021, 35).

References

- Arom, Simha. 1991. *African Polyphony and Polyrhythm: Musical Structure and Methodology*. Cambridge: Cambridge University Press.
- Arom, Simha. 2013. *Le ragioni della musica*. Lucca: LIM.
- Bailey, Derek. 1993. *Improvisation: Its Nature and Practice in Music*. Boston: Da Capo.
- Bartoccini, Mario and Aldo Mantia. 1921. *L'improvvisazione musicale. Manifesto futurista*. Milan: Taveggia.
- Bormann, Hans-Friedrich, Gabriele Brandstetter, and Annemarie Matzke (Eds.). 2010. *Improvvisieren. Paradoxien des Unvorhersehbares*. Bielefeld: Transcript.
- Cage, John. 2013. *Silence. 50th Anniversary Edition*. Middletown: Wesleyan University Press.
- Caporaletti, Vincenzo. 2005. *I processi improvvisativi nella musica*. Lucca: LIM.

- Cardew, Cornelius. 1971. "Towards an Ethic of Improvisation." In Cardew, Cornelius. *Treatise Handbook*. London: Peters. https://www.ubu.com/papers/cardew_ethics.html, last accessed March 6, 2024.
- Davidson, Arnold I. 2016. "Spiritual Exercises, Improvisation and Moral Perfectionism: With Special Reference to Sonny Rollins." In Lewis, George and Benjamin Piekut (Eds.). *The Oxford Handbook of Critical Improvisation Studies*. Volume I, 523–538. Oxford: Oxford University Press.
- De Zorzi, Giovanni. 2019. *Maqām. Percorsi tra le musiche d'arte in area mediorientale e centroasiatica*. Rome: Squilibri.
- Evangelisti, Franco. 1991. *Dal silenzio a un nuovo mondo sonoro*. Rome: Semar.
- Feisst, Sabine. 2016. "Negotiating Freedom and Control in Composition. Improvisation and Its Offshoots." In Lewis, George and Benjamin Piekut (Eds.). *The Oxford Handbook of Critical Improvisation Studies*. Volume II, 206–229. Oxford: Oxford University Press.
- Feisst, Sabine. 2022. "Improvisation and Composition. A Schoenbergian View." In Bertinetto, Alessandro and Marcello Ruta (Eds.). *The Routledge Handbook of Philosophy and Improvisation in the Arts*, 374–391. New York: Routledge.
- Gioia, Ted. 1988. *The Imperfect Art*. Oxford: Oxford University Press.
- Globokar, Vinko. 1970. "Reacting." *International Improvised Music Archive*. <http://intuitivemusic.dk/iima/vg.htm>, last accessed March 6, 2024.
- Goehr, Lydia. 2016. "Improvising Impromptu, or, What to Do with a Broken String." In Lewis, George and Benjamin Piekut (Eds.). *The Oxford Handbook of Critical Improvisation Studies*. Volume I, 458–480. Oxford: Oxford University Press.
- Goldoni, Daniele. 2015. "Abitare l'improvvisazione." In Bonfantini, Massimo A., Rossella Fabbrichesi, and Salvatore Zingale (Eds.). *Su Peirce*, 230–246. Milan: Bompiani.
- Goldoni, Daniele. 2022. "Forms of Improvisation and Experimentalism." In Bertinetto, Alessandro and Marcello Ruta (Eds.). *The Routledge Handbook of Philosophy and Improvisation in the Arts*, 243–258. New York: Routledge.
- Gottschalk, Jennie. 2016. *Experimental Music since 1970*. New York and London: Bloomsbury.
- Guido, Massimiliano (Ed.). 2017. *Studies in Historical Improvisation. From Cantare super Librum to Partimenti*. New York: Routledge.
- Kant, Immanuel. 1790, 2000. *Critique of the Power of Judgment*, edited by Paul Guyer (Ed.). Cambridge and New York: Cambridge University Press.
- Kezich, Giovanni (Ed.). 1986. *I poeti contadini*. Rome: Bulzoni.
- Johnson-Laird, Philip N. 2002. "How Jazz Musicians Improvise." In *Music Perception* 19 (3): 415–442.
- Lewis, George. 2011. *Les Exercices Spirituels*. New York: Tzadik Records TZA 8081CD.
- Maddalena, Giovanni. 2021. *Filosofia del gesto. Un nuovo uso per pratiche antiche*. Rome: Carocci.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture. Completing Pragmatist's Incomplete Revolution*. Montreal: McGill-Queen's University Press.
- Nettl, Bruno. 2016. "Landmarks in the Study of Improvisation: Perspectives from Ethnomusicology." In Lewis, George and Benjamin Piekut (Eds.). *The Oxford Handbook of Critical Improvisation Studies*. Volume II, 169–184. Oxford: Oxford University Press.
- Nyman, Michael. 1999. *Experimental Music: Cage and Beyond*. Cambridge: Cambridge University Press.
- Peirce, Charles S. 1931–1938, 1958. *Collected Papers*. 8 Volumes, edited by Charles Hartshorne, Arthur Burks, and Paul Weiss. Cambridge: Harvard University Press.
- Piekut, Benjamin. 2011. *Experimentalism Otherwise*. Berkeley and Los Angeles: University of California Press.
- Piekut, Benjamin. 2019. *Henry Cow. The World Is a Problem*. Durham: Duke University Press.

- Plato. 1991. *Symposium*. In Burnet, John (Ed.). *Platonis Opera*, 151–222. Oxford: Oxford University Press.
- Reich, Steve. 2014. *Biennale Musica 2014—A meeting with Steve Reich*. https://www.youtube.com/watch?v=_a90CL1FRi0, last accessed March 6, 2024.
- Pritchett, James. 1993. *The Music of John Cage*. Cambridge: Cambridge University Press.
- Schiaffini, Giancarlo. 2011. *E non chiamatelo jazz*. Milan: Auditorium, Casanova e Chianura Edizioni.
- Schönberg, Arnold. 2008. *Stile e pensiero*. Milan: Il Saggiatore.
- Sparti, Davide. 2016. “On the Edge: A Frame of Analysis for Improvisation.” In Lewis, George and Benjamin Piekut (Eds.). *The Oxford Handbook of Critical Improvisation Studies*. Volume I, 182–201. Oxford: Oxford University Press.
- Stockhausen, Karlheinz. 1971. “Questions and Answers on Intuitive Music.” http://intuitivemusic.dk/iima/sh_qa.pdf, last accessed March 6, 2024.
- Wittgenstein, Ludwig. 1922, 2014. *A Lecture on Ethics*, edited by Edoardo Zamuner, Ermelinda V. Di Lascio, and David K. Levy. Chichester: Wiley.

Kelly Schoina

Chapter 20

The Self as Multiplicity in Virginia Woolf's *Orlando*: Tracing Identity by Way of Pragmatism

Abstract: In working towards a synergistic fusion of philosophy and literature, we focus our attention on the issue of recognizing diachronic identity in Virginia Woolf's *Orlando: A Biography*. Orlando, the book's protagonist, offers us an especially good case to study the emergence of personal identity, seeing how they undergo a series of transformations throughout the more than three centuries of their life. To trace the experience and recognition of their identity, we draw upon Maddalena's concept of *complete gesture*, a Peircean tool that allows us to conceive the formation of identity as a synthetic process of bearing meaning from one point to the next—a process which, in turn, enables us to recognize the continuity linking them as the unity we call self. As we see it, Orlando's writing of the *Oak Tree* poem is the complete gesture that enables them to recognize their identity through the changes to which they had been subjected. In fact, the same can be said for Woolf herself and her writing of *Orlando*. Yet, as we suggest, it is through others that both Woolf and Orlando manage to fulfil their writing gestures, thus paving the way for the realization and recognition of their identities.

Keywords: Woolf, Virginia, Orlando, pragmatism, gesture, identity, selfhood

Πολλοί αναρωτιούνται γιατί ήμουν κάποτε αλλιώς.
Άλλοι αναζητάν να βρουν γιατί είμαι έτσι σήμερα.
Ποιός είμαι ή ποιός ήμουν;
Αναζητήσεις δίχως σημασία.
Το κέρδος είναι ότι τους ξέφευγα διαρκώς.
—Τάσος Λειβαδίτης, “Απόδραση,” *Εγχειρίδιο Ευθανασίας*

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1 In Lieu of an Introduction: An Attempt at Clarification

This essay analyzes the question of the recognition of diachronic identity in the work of Virginia Woolf and, more specifically, in *Orlando: A Biography*—a book that oscillates between fantasy and reality, between biography and fiction. It is precisely this characteristic that enables it to expand the limits of what is possible, planting the first seeds for the emergence of a new world. Without a doubt, this function of literature is the one that interests us the most in this essay, since it paves the way for a direct conversation with philosophy, bringing it face to face with that element of surprise that will offer it new and essential content.

Literature is the space where subjective consciousness meets reality, and each work offers a unique perspective. It meets the reflection on reality, the philosophical gesture par excellence,¹ in order to offer it what reality cannot, either because literature describes a potential image of the world for which the conditions of its actualization are not yet clear or feasible, or because the flow of becoming and the constant changes it brings about do not permit the crystallization of this image for the purpose of studying it further. At the same time, the entanglement of philosophy and literature updates literature by showing its direct relevance to reality, while also enriching or even enabling the basic function of philosophy to reflect upon it.

Pragmatism, in particular, can shed ample light on issues concerning literary study. A connection between Woolf and pragmatism should not come as a surprise, especially if we consider that Woolf mined her acquaintances from Cambridge and the Bloomsbury Group, including Frank Ramsey, a scholar whose thought had been steeped in Peircean pragmatism (Misak 2020, 147–148). The American school of philosophy that grants praxis ontological priority can, in fact, help us investigate the practical effects, both positive and negative, of literary works (Gaskill 2012). To give but one example, Peirce's defense of real generals—that is, the defense of singular tendencies, or habits—has been recently used to account for the emergence of identity (Maddalena 2015). In fact, Peirce's approach to the self can provide us with a semiotic perspective that helps illuminate the emergence of the human subject, which is both historical and singular (Colapietro 1989).

All great works of literature, including *Orlando*, are the result of the era that gave birth to them, as well as an image from the future and a direct reference to the past. After all, pragmatists maintain that there is no moment so small that it

¹ According to Maddalena's (2015, 69–70) philosophy of gesture, “[g]esture is any performed act with a beginning and an end that carries a meaning (from *gero* = I bear, I carry on).”

does not contain shreds of the past that birthed it and the future that follows it. This pragmatistic frame of thinking resides at the heart of Woolf's work. A multitude of examples could be given to support this position, with the most striking perhaps being the reference to Shakespeare's supposedly dead sister who will live on through the young women poets, in *A Room of One's Own* (Room 2007). But, even in *A Letter to a Young Poet*, Woolf, wanting to emphasize the unbroken continuity of poetry, refers to the same idea. As Berlis points out in the afterword of this book's Greek translation: "In the young poet all the poets of the past live, and from him will spring all the poets of the future."² Orlando, a poet himself, stands as an exemplary case of this dictum, for they live for almost three centuries. A figure of historical becoming, they find their continuity precisely in the melding of the three elements of time.

What we call *self* in *Orlando* is forced into a series of continuous territorializations and deterritorializations,³ with the most important of course being the unexpected change of their gender. Among the successive changes, and especially in the way in which these changes take place within a relationship of constant negotiation with reality, Orlando is constituted in a subject that enunciates and understands themselves as a continuum. This constitution, which Peirce calls *identity*, is nothing more than "continuity within continuity, the continuity established by the line of identity within the continuity of the plastic continuum of multiple dimensions" (Maddalena 2015, 106). To put it otherwise, the continuity of Orlando's identity is a continuity within the continuity of perpetual becoming.

In the case at hand, we face the concept of continuity in a Peircean way and hence refer to a "perfect" or "true" continuity, in terms of which we also understand the concept of change, as we will see below. For us, then, "true" continuity, which involves the notion of immediate connection (CP 4.642),⁴ is the possibility of a realization (Maddalena 2015, 49), as is also made clear by the example about the poet cited above, where the continuity of poetry gives the possibility to poets of the future to spring from within him. In the case of Orlando, the individual events of their life are nothing more than various realizations of the same possi-

2 Own translation of "Στον νέο ποιητή ζουν όλοι οι ποιητές του παρελθόντος και από αυτόν θα ξεπηδήσουν όλοι οι ποιητές του μέλλοντος" (Γράμμα 2012, 47).

3 Territorialization is not hereby conceived as a process driven by internal factors. It is instead taken as the process of seizing and assembling external forces. According to Deleuze and Guattari (1987 [1980], 315), "[t]erritorialization is an act of rhythm that has become expressive, or of milieu components that have become qualitative." Contrastingly, they view deterritorialization as the process of opening a territory up to other assemblages, which in turn leads to the loss or change of function characteristic of becoming.

4 Adhering to scholarly tradition, we cite Peirce's work as CP (followed by volume and paragraph number in *The Collected Papers of Charles Sanders Peirce*).

bility which tends towards a general coherence—that is, the very realization of their identity.

To borrow Peirce's own example, we can imagine the events of their life as randomly placed dots on a blackboard (Maddalena 2015, 109). These points are in a continuum with each other. Not in the sense that one succeeds the other in order, but in that they all share some elements of similarity and become distinct because they are placed on the same blackboard. So the continuum to which we refer is a continuum of qualities. The periodicity with which these qualities appear in the world enables relations of similarity to be perceived as two singularities,⁵ as two different subjectivities of Orlando, at two different moments in their life—and can be composed into something greater than just their summation, which is in turn part of a broader reality.

This sense of belonging in the world is, therefore, guaranteed by perfect continuity. A feeling that Woolf's heroines and, of course, Orlando know well, since it is this sense of being familiar with reality that constitutes a fundamental part of their understanding of themselves in the world and, eventually, in their recognition of their identity. Woolf does not choose this immanent position for her heroines alone, but recommends it to anyone wanting to write poetry. As she beautifully writes in an attempt to refute the prevalent view in her era that reality makes poetry impossible:

But surely that is nonsense. These accidents are superficial; they do not go nearly deep enough to destroy the most profound and primitive of instincts, the instinct of rhythm. All you need now is to stand at the window and let your rhythmical sense open and shut, open, and shut, boldly and freely, until one thing melts in another, until the taxis are dancing with the daffodils, until a whole has been made from all these separate fragments. I am talking nonsense, I know. What I mean is, summon all your courage, exert all your vigilance, invoke all the gifts that Nature has been induced to bestow. Then let your rhythmical sense wind itself in and out among men and women, omnibuses, sparrows—whatever come along the street—until it has strung them together in one harmonious whole. That perhaps is your task—to find the relation between things that seem incompatible yet have a mysterious affinity, to absorb every experience that comes your way fearlessly and saturate it completely so that your poem is a whole, not a fragment; to re-think human life into poetry and so give us tragedy again and comedy by means of characters not spun out at length in the novelist's way, but condensed and synthesised in the poet's way—that is what we look to you to do now. (*Letter* 1932, 22)

The rhythm to which Woolf refers is the qualitative continuity, and the mysterious affinity the relations of similarity that arise as a result of this continuity.

⁵ Here, *singularity* refers to the breach of continuity. According to Peirce, “singularity is a locus of discontinuity” (CP 6.210).

Woolf insists on the process of writing as a *synthetic gesture* much like the one defined by Giovanni Maddalena (2015): a semiotic process that can transform the vague (i.e., the poet's perception of reality) into a general (i.e., a crystallized and complete image of it) through a real action (i.e., that of writing).

Woolf's take on writing as a synthetic gesture concerns us not only because, as will be seen below, it legitimizes our theoretical approach—after all, her perspective is what calls for it in the first place—but more compellingly because, in the book under discussion, our heroine is a poet whose entire life has been faithful to the writing of a poem, *The Oak Tree*. Their poem constitutes precisely this gesture of writing through which Orlando transforms the vagueness of their lived experience into a recordable generality. *The Oak Tree's* writing will be for Orlando one of the main synthetic gestures that lead them to the recognition of their identity.

2 *Orlando* or a Story of Transformations

But for Orlando recognizing the continuity in question is subject to a series of changes. For only through change can they understand themselves as two distinct and different things in time capable of being compared. Through their similarities and differences, Orlando is able to recognize the continuity between them.

The concept of change for Woolf is deeply entwined with the concept of time, which constitutes one of the most structural components of Orlando's experience, since in this case time is understood pragmatically—that is, as an evolution “embodied in individuals” (Maddalena 2015, 25). It can only be experienced subjectively, so that clock time and experienced time are not always the same. As Woolf puts it:

But Time, unfortunately, though it makes animals and vegetables bloom and fade with amazing punctuality, has no such simple effect upon the mind of man. The mind of man, moreover, works with equal strangeness upon the body of time. An hour, once it lodges in the queer element of the human spirit, may be stretched to fifty or a hundred times its clock length; on the other hand, an hour may be accurately represented on the timepiece of the mind by one second. This extraordinary discrepancy between time on the clock and time in the mind is less known than it should be and deserves fuller investigation. (*Orlando* 2014, 64)

Woolf's time is a relative time because it is deeply material and corporeal, since it arises as an outgrowth of the very process of Orlando's perpetual transformation.⁶

⁶ The issue of time in Woolf's *Orlando* is discussed by Chase (1928) in the book's first review, which appeared in the *New York Times*.

Orlando becomes and, in becoming, gives birth to their own time. This idea could not be better described than in the words of William James: “Everything that happens to us brings its own duration and extension, and both are vaguely surrounded by a marginal ‘more’ that runs into the duration and extension of the next thing that comes” (James 1922, 177). Each event cultivates the conditions for the next one to occur, and each present gives way to another one whose conditions flourish within it. Continuity nestles within perpetual change, within the end of time.

“Time has passed over me,” she thought, trying to collect herself. “This is the oncome of middle age. How strange it is! Nothing is any longer one thing. I take up a handbag and I think of an old bumboat woman frozen in the ice. Someone lights a pink candle and I see a girl in Russian trousers. When I step out of doors—as I do now,” here she stepped onto the pavement of Oxford Street, “what is it that I taste? Little herbs. I hear goat bells. I see mountains. Turkey? India? Persia?” Her eyes filled with tears. (*Orlando* 2014, 204)

Within the present lies the past of a lived world. For Orlando, every gesture that takes place in the present carries the meaning of a past image or is related to it in some way. These images effectively describe their basic subjectivizations, or “selves” as Woolf would call them. All these selves exist in the present and pull Orlando from one end of time to the other.

For Woolf, those who are successful in the art of living manage to coordinate this plurality of manifestations of our existence in such a way that, as she characteristically writes, “the present is neither a violent disruption nor completely forgotten in the past” (*Orlando* 2014, 204). That is, a present which will be in continuity with the past without being identified with it because this would entail a freezing of time. If we do not have time, though, we do not have change, since the former is a consequence of the latter, as we already have seen. And without change, this biography would be nothing more than a blank page. Woolf here meets pragmatism by opposing two important philosophical positions: that reality, as an object of our conception, is continuous, but also that it is inevitably subject to change, without which it would be condemned to death. To this extent, an existence frozen or static, an existence without the possibility of evolution and transformation, already would be dead, and Woolf knows this well. As we read from Orlando’s biographer:

Yet still, for all her travels and adventures and profound thinkings and turnings this way and that, she was only in process of fabrication. What the future might bring, Heaven only knew. Change was incessant, and change perhaps would never cease. High battlements of thought, habits that had seemed durable as stone, went down like shadows at the touch of another mind and left a naked sky and fresh stars twinkling in it. (*Orlando* 2014, 117)

In order for the new to emerge—that is, the novelty that guarantees the continuity of life—change must be eternal. Orlando is constantly and perpetually in the process of becoming. In fact, this line of thinking becomes even clearer if we con-

sider Woolf's decision to transform Orlando into a woman in the third chapter of her book, and only when we have reached the 18th century. Undoubtedly, this choice is not random at all but is caused by the fact that it was in that century that, for the first time, women were recognized as a separate anatomical sex from men and could consequently take part in the discourse or even live as poets (Kitsi-Mitakou 2017, 470). Referring to the difficult task of Orlando's biographer to have as the subject of his biography a woman who, according to the spirit of the age, will probably be condemned to some kind of inactivity, Woolf overturns this condition.

Unlike the women of their time, Orlando lives a turbulent and full life traversing a delicate balance between social dictates and their own desires. As Woolf notes: "Orlando had so ordered it that she was in an extremely happy position; she need neither fight her age nor submit to it; she was of it, yet remained herself" (*Orlando* 2014, 178). In fact, it is the changes to which they are subjected that allow them to persevere in their being, since these changes give birth to a new field of action in their life. As Orlando meets the thoughts of others and some of the certainties of their own thinking crumble, new stars are born. The more their experiences, the more pluralistic their understanding of reality, the greater their oversight and consequently their ability to bring about changes in the world, being themselves part of these changes. Indeed, change in Orlando's life constitutes—what Maddalena (2015, 54, emphasis original) would refer to as—"a continuous reality in continuous transition among modalities."

This claim is reinforced by the following passage, where Orlando, as they wonder "What then? Who then?" recalls all those transitions between the individual modes in which they had existed during the course of their life: "Thirty-six, in a motor car, a woman. Yes, but a million other things as well. A snob am I? The garter in the hall? The leopards? My ancestors? Proud of them? Yes! Greedy, luxurious, vicious? Am I? (Here a new self came in)" (*Orlando* 2014, 208). As we continue reading, another self comes in, and then another, and another, and so on and so forth, until they eventually allude to *The Oak Tree*, which is their most precious poem (*Orlando* 2014, 209). All these transitions merge into different continua of time, space, the history of physical reality, love, etc. The continua are all different aspects or perspectives on reality, which make up the narrative of their life. The process of recognizing their identity is contextual and happens within a historically situated society with distinct cultural characteristics.

The way in which Orlando is subjectivized in each historical period can never, as Woolf writes, completely escape the spirit of their age. Its effects become distinct in the following passage where, living in the Victorian era, Orlando feels the need—as they are accustomed—to marry:

“Whom,” she asked, casting her eyes upon the revolving clouds, clasping her hands as she knelt on the window sill, and looking the very image of appealing womanhood as she did so, “can I lean upon?” Her words formed themselves, her hands clasped themselves, involuntarily, just as her pen had written of its own accord. It was not Orlando who spoke, but the spirit of the age. (*Orlando* 2014, 164)

Here, identity is not ahistorical, but includes all the power relations and the idiosyncratic characteristics of the era in which it emerges, as well as the ways in which our heroine, especially as a woman and a poet, negotiates with both. As Orlando’s biographer tells us: “[t]he transaction between a writer and the spirit of the age is one of infinite delicacy, and upon a nice arrangement between the two the whole fortune of his works depends” (*Orlando* 2014, 178).

From a Peircean point of view, Orlando’s identity can be conceived as “a pure potentiality that becomes generality (necessity) through a singular act, sustained by the relationship with a narrative path” (Maddalena 2015, 106). This narrativity constitutes a logical function which not only enables identity to emerge, but also shapes its diachronic character. Orlando’s life, as becomes clear from Woolf’s critique of the genre of biography, is more than a simple record of the events that took place during it; it is a story of transformations. Hence, the truth of their life is not nested in a linear listing of events, but in the way in which these different or even contradictory events relate to one another, interweaving a narrative that provides fertile ground for the recognition of Orlando’s identity by the reader as well as Orlando himself.

It is precisely this narrative path that they seek in the following passage where, devastated by their breakup with Sasha, they desperately search for a connection with a past that will give them an opportunity to find themselves again, this time as part of a narrative greater than themselves. As we read:

Orlando now took a strange delight in thoughts of death and decay and, after pacing the long galleries and ballrooms with a taper in his hand, looking at picture after picture as if he sought the likeness of somebody whom he could not find, would mount into the family pew and sit for hours watching the banners stir and the moonlight waver with a bat or death’s-head moth to keep him company. Even this was not enough for him, but he must descend into the crypt where his ancestors lay, coffin piled upon coffin, for ten generations together. (*Orlando* 2014, 45–46)

Unfortunately, though, this gesture will not be able to lead to an imminent constitution.

A little later, however, another narrative path emerges— that of their relationship with writing. Their love of books seems to have been early and followed them as a constant need throughout their life.

The taste for books was an early one. [. . .] [H]e was a nobleman afflicted with a love of literature. Many people of his time, still more of his rank, escaped the infection [. . .] But

some were early infected by a germ said to be bred of the pollen of the asphodel and to be blown out of Greece and Italy [. . .] It was the fatal nature of this disease to substitute a phantom for reality, so that Orlando, to whom fortune had given every gift . . . had only to open a book for the whole vast accumulation to turn to mist. (*Orlando* 2014, 47–48)

In fact, as the following passage reveals, writing is so entwined with their existence that they wished it was part of their very origin. They find the fulfilment that their relationship with Aristocracy failed to give them in their relationship with writing:

He bethought him with pride that he had always been called a scholar, and sneered at for his love of solitude and books. [. . .] Eagerly recalling these and other instances of his unfitness for the life of society, an ineffable hope, that all the turbulence of his youth, his clumsiness, his blushes, his long walks, and his love of the country proved that he himself belonged to the sacred race rather than to the noble—was by birth a writer, rather than an aristocrat—possessed him. For the first time since the night of the great flood he was happy. (*Orlando* 2014, 54)

And this happiness was to Orlando like the stability that governs a pebble which, as it falls into the water, slowly and steadily, touches the floor of the sea.

In the gesture of writing, Orlando recognizes a narrative path to which they can belong, ensuring the diachronicity of their identity. In writing *Orlando*, Woolf not only succeeds in offering her time an image of the future, in satirizing and irreparably exposing patriarchy, in tenderly describing the queer experience, and in criticizing biography, but she also faces with amazing courage a major philosophical problem, that of recognizing diachronic identity.

3 *The Oak Tree or the Realization of a Complete Gesture*

If the particularity of our analysis consists in the fact that it is carried out in synthetic terms, *synthesis* here means the recognition of identity through change. We follow, in this, Maddalena (2015), who sets out to complete what he calls the pragmatists' "incomplete revolution" by bringing together analytical tools, mostly Peircean, for the purpose of accounting for the emergence of identity in synthetic (rather than strictly analytic) terms. Based on Peirce's work on the so-called *Existential Graphs* (CP 4.347–4.584),⁷ he speaks of an identity not based on similarity,

⁷ According to Peirce, the existential graphs are a system of graphs that represent ordinary syllogisms (CP 4.347).

as in the case of $A = A$, but of difference, as in $A = B$, a much broader conception of which the former kind is merely a special subcase. It is not surprising, then, that in our attempt to recognize identity through difference, the process of change takes center stage. Orlando's identity as a continuum within a perpetual becoming following its own narrative path is realized at the very moment of its recognition, because identity and the recognition of identity are one and the same phenomenological and semiotic event (Maddalena 2015, 113). But how does this recognition take place?

It is clear that any reflective process, especially that of memory, plays a key role in the recognition of Orlando's identity. While, for Peirce, the criterion of memory always has a relatively vague character, it is one of the most fundamental for the emergence of their identity (Maddalena 2015, 104). This ambiguous character also becomes distinct in the following passage, where Woolf attempts to describe the experience of Orlando's memory:

Memory is the seamstress, and a capricious one at that. Memory runs her needle in and out, up and down, hither and thither. We know not what comes next, or what follows after. Thus the most ordinary movement in the world, such as sitting down at a table and pulling the inkstand towards one, may agitate a thousand odd, disconnected fragments, now bright, now dim, hanging and bobbing and dipping and flaunting, like the underlinen of a family of fourteen on a line in a gale of wind. Instead of being a single, downright, bluff piece of work of which no man need feel ashamed, our commonest deeds are set about with a fluttering and flickering of wings, a rising and falling of lights. (*Orlando* 2014, 51)

Memory intrudes into Orlando's most ordinary of moments. Fragmented images of the past disrupt their sense of continuity, expanding the limits of experience beyond the real right then and there. Their contradictory life experiences co-exist in a rather mysterious way. As Woolf concludes a bit further down: "Memory is inexplicable" (*Orlando* 2014, 51).

Nevertheless, it is in this ambiguity, in this openness to interpretation, that this plurality of directions is born, leading Orlando to their identity—a fact that Woolf makes clear as one of the most special events of Orlando's life unfolds, that of their gender change. As she writes:

Orlando had become a woman—there is no denying it. But in every other respect, Orlando remained precisely as he had been. The change of sex, though it altered their future, did nothing whatever to alter their identity. Their faces remained, as their portraits prove, practically the same. His memory—but in future we must, for convention's sake, say "her" for "his," and "she" for "he"—her memory then, went back through all the events of her past life without encountering any obstacle. Some slight haziness there may have been, as if a few dark drops had fallen into the clear pool of memory; certain things had become a little dimmed; but that was all. (*Orlando* 2014, 92)

Even after a transformation capable of fundamentally shaking human existence, memory, despite its vague character, continues to be a functional criterion for recognizing identity.

For Woolf, memory is a capricious seamstress who “runs her needle in and out, up and down, hither and thither,” connecting in a narrative a bunch of contradictory manifestations with which nature has endowed our existence. In a world that is constantly changing, Orlando confronts the end of time in search of a continuity and a coherence between the past and the present images of themselves and the world.

Even in a world like that of 1928, where everything seems to have changed, the qualitative continuity between the events in Orlando's life is there for them to recognize. Like the dots on the blackboard, the various aspects of their experiences, scattered in becoming, find their continuity. As we read from their biographer:

[E]ach time the lift stopped and flung its doors open, there was another slice of the world displayed with all the smells of that world clinging to it. She was reminded of the river off Wapping in the time of Elizabeth, where the treasure ships and the merchant ships used to anchor. How richly and curiously they had smelt! How well she remembered the feel of rough rubies running through her fingers when she dabbled them in a treasure sack! (*Orlando* 2014, 201)

On a frantic journey through time, Orlando scrutinizes what has changed and what has stayed the same as the centuries pass lightly over them, recognizing the continuity of themselves in the continuum linking the events that changed their life. Unable to recall every minute of their life, Orlando recalls those events which guarantee continuity and contribute to the formation of their identity. As Woolf beautifully writes, Orlando reconsiders, “as if it were an avenue of great edifices, the progress of her own self along her own past” (*Orlando* 2014, 116).

These edifices are nothing but those events that determined their identity and which Maddalena (2015) would call *complete gestures*—that is, gestures rich in meaning, which constitute their self-realization and thus the recognition of their identity through change. It should be noted that by alluding here to the notion of completeness, we are by no means neglecting the fragmented aspect of human experience. We are instead doing the opposite: we are suggesting that the possible qualities of fragments constitute the very elements that comprise singular acts of gesturing, before gestures become habitualized and, to this extent, complete.⁸ A typ-

⁸ According to Maddalena (2015, Chapter 4), a gesture is “complete” when it exhibits an equal blending of modalities at the phenomenological level (i.e., possibility, actuality, and necessity), as well as an equal blending of signs at the semiotic level (i.e., icon, index, and symbol or, otherwise put, feeling, reaction, and thought).

ical example of Orlando's complete gestures is the writing of their poem, *The Oak Tree*, which follows them throughout their life and, as we mentioned above, constitutes the narrative path through which they recognize themselves.

Each time Orlando writes, they move from a fictional image of their lived experiences to a real scenario, and from that to the telos or overall purpose their story serves, which is none other than "embodied meaning itself" (Maddalena 2015, 73). The gesture of writing, therefore, constitutes for Orlando "an expression of meaning embodied in one person at a singular moment" which tends to become habitual (Maddalena 2015, 72). As the gesture becomes more complete, every possible becomes an act, and every act tends to become a necessity, and therefore Orlando's initial vague sense of self, through their unique poetic expression, gradually becomes more and more defined, taking on a singular form.

But the more Orlando tends towards the self-realization of their singularity, the more they can recognize in this present a crystallized image of themselves, the very general idea of their existence, of their diachronicity. This is also the reason for which, frustrated by literature, they burn fifty-seven poetic works, salvaging only *The Oak Tree*. As we read:

Thus, at the age of thirty, or thereabouts, this young Nobleman had not only had every experience that life has to offer, but had seen the worthlessness of them all. Love and ambition, women and poets were all equally vain. Literature was a farce. The night after reading Greene's *Visit to a Nobleman in the Country*, he burnt in a great conflagration fifty-seven poetical works, only retaining *The Oak Tree*, which was his boyish dream and very short. (Orlando 2014, 63)

This boyish short dream, this present crystallized image to which we refer above, and their movement to save it, carries the general idea of their existence, their diachronicity. And how could it be otherwise since, as their biographer concludes, "her case proved it—that we write, not with the fingers, but with the whole person" (Orlando 2014, 162). This is why *The Oak Tree* is perhaps the most suitable example of a complete gesture.

Examining this gesture from Peirce's semiotic perspective, we could describe it as "creative because of possible forms and feelings, singular and unrepeatable in its individuality, and recognizable for its unity and conformity to an established pattern that the gesture itself tends to realize" (Maddalena 2015, 71). But also from an ontological point of view: "a pure idea or a pure feeling, a physical act that will involve a reaction and a generality" (Maddalena 2015, 71). Through writing, their feelings and ideas during the 350 years of their life are transformed into a coherent narrative capable of being recorded, and, even, more so always ready and accessible as a source of knowledge about themselves and the world. There to reveal all those ways in which they have existed within different states

of affairs. We are, therefore, in a position to say that the writing of *The Oak Tree* is for Orlando “a synthetic tool of knowledge that we can call a gesture” (Maddalena 2015, 119). As they are leafing through their manuscript, they reach a general conclusion about themselves. Despite the passage of time, despite the changes, their past image is familiar to them since they are still governed by the same habits:

She turned back to the first page and read the date, 1586, written in her own boyish hand. She had been working at it for close on three hundred years now. It was time to make an end. Meanwhile she began turning and dipping and reading and skipping and thinking, as she read, how very little she had changed all these years. She had been a gloomy boy, in love with death, as boys are; and then she had been amorous and florid; and then she had been sprightly and satirical; and sometimes she had tried prose and sometimes she had tried drama. Yet through all these changes she had remained, she reflected, fundamentally the same. She had the same brooding meditative temper, the same love of animals and nature, the same passion for the country and the seasons. (*Orlando* 2014, 157)

Through the process of reading, Orlando returns to past gestures looking for an affinity between the present and the past, capable of giving birth to a new complete gesture in the future. Each complete gesture stands as a beacon for the next, weaving a continuity in each and every present, which constitutes, at the same time, its unique expression. *The Oak Tree*, as a material anchor cast in reality, has accompanied Orlando for 300 years and, like every other gesture, it seeks its fulfilment. Orlando's phrase that “[i]t was time to make an end” works as a foreshadowing for what is to come, which is clearly not just about completing a poem, but about recognizing an identity through it.

As Orlando completes their poem, they feel a deep need to share it with someone else; a need which, as their biographer informs us, is expressed by their work itself, which—much like a living organism—begs to be read:

The manuscript which reposed above her heart began shuffling and beating as if it were a living thing and, what was still odder, and showed how fine a sympathy was between them, Orlando, by inclining her head, could make out what it was that it was saying. It wanted to be read. It must be read. It would die in her bosom if it were not read. [. . .] Human beings had become necessary. She rang the bell. She ordered the carriage to take her to London at once. (*Orlando* 2014, 182)

What is of particular interest at this point is the close relationship between Orlando and their work. *The Oak Tree* is the material imprint of their search for themselves in the world, and in this sense its socialization serves exactly the same purpose. Their experience of themselves, having begun to acquire some coherent character through the gesture of writing, is now able to be communicated, given that—according to Maddalena (2015, 176)—“universals are communicated through gestures.” Through

the disclosure of *The Oak Tree*, Orlando longs for a semblance with others that would give them a sense of belonging, while allowing their identity to emerge.

When they arrive in London and accidentally meet their old friend Greene, who had harshly judged their work years ago, the turn the story takes confirms our thoughts. The passing of the centuries has transformed him, so that he is no longer a writer, but a respected literary critic. His turn to propriety sinks Orlando in boredom; his habits have changed and are no longer able to amuse them. This sense of frustration leads to a rather comical event, “some hook or button fastening the upper part of her dress burst open, and out upon the table fell *The Oak Tree*, a poem” (*Orlando* 2014, 187). This time his reaction to Orlando’s work is different. The poem is now well received: “It reminded him, he said as he turned over the pages, of Addison’s *Cato*. It compared favourably with Thomson’s *Seasons*. (. . .) It must, of course, be published instantly” (*Orlando* 2014, 188). In Greene’s words, Orlando finds exactly those relations of similarity mentioned above, which are capable of giving them a sense of belonging. The comparison of their poem with Addison’s or Thomson’s by a respected literary critic is, for Orlando, the golden ticket to the “tribe of writers”⁹ and, for us, a supremely important step in recognizing their identity.

Orlando leaves the meeting feeling free to think about anything. They have overcome social imperatives that make the image of a married woman and that of a poet contradictory and have completed the work from which they have now been separated for publishing purposes. Ecstatic, they communicate with Shel in a language that only the two of them can understand and end up in Central Park in the company of a pile of books. The text takes a particular turn: “Suddenly she started—and here we could only wish that, as on a former occasion, Purity, Chastity, and Modesty would push the door ajar and provide, at least, a breathing space in which we could think how to wrap up what now has to be told delicately, as a biographer should” (*Orlando* 2014, 195).

Everyone seems to know what is going to happen next, but the reader is not quite sure yet. The text becomes awkward and the language fragmented and vague, as if unable to describe what will ensue. Everything points towards an imminent transformation just like the one undergone by their gender. Only this time, as their biographer informs us, we are not going to visit “the blind land” (*Orlando* 2014, 198)—which suggests that Orlando will not pay the price of a small death by falling into the sudden sleep that precedes any transformation. This time, we are flooded by “the red, thick stream of life again” (*Orlando* 2014, 198). It is March 20, 1928, and Orlando has given birth to “a very fine boy” (*Orlando* 2014, 198).

9 This rendition is encountered in the Greek translation of *Orlando* by Argyrō Mantoglou.

But it is also the day on which Woolf completes *Orlando*. On this day, Orlando becomes a married woman poet and now a mother. In a rather curious way, they manage to be everything that the age demands of them without losing themselves. Thus, the day of *Orlando's* birth, in the sense of the completion of its writing, coincides with a birth which signals the fulfilment of Orlando's identity, who through a series of happy coincidences manages to weave a narrative for herself, bridging the contradictions between the various roles they are called upon to perform and those they desire. Indeed, the fact that their husband spends much of his time away and the child is not mentioned explicitly again in the book shows that Woolf gracefully manages to guarantee her heroine the security of a normality without sacrificing any of their unconventional idiosyncrasy, just as she did for herself.

4 In Lieu of a Conclusion: The Wild Goose, Love, and the Meaning of Life

As the book comes to a close, Orlando is brought to the present. Woolf chooses this present very carefully. It is October 11, 1928, the day she delivers her book to Vita Sackville West. In *Orlando*, Woolf crystallizes her own realization of a complete gesture, the fulfilment of which is accomplished by the act of sharing her book with Vita. *Orlando* is a joke, a farce, but also a biography, that of Vita. Woolf can only return it to the very person that gave birth to the possibility of its existence in the first place. In her eyes, it is impossible to separate ourselves completely from others and the world; we are part of a totality whose qualities we carry within us. Just as for Peirce, so too for Woolf: we are an integral part of the flow of reality and, given this, our relationship with others and the world is what gives rise to the possibility of understanding our own self. As is beautifully written in Woolf's *A Sketch of the Past*, "one's life is not confined to one's body and what one says and does; one is living all the time in relation to certain background rods and conceptions" (1985, 73).

It is in this line of thought that the perspectivist character of the identity we have traced takes its most distinct form. Woolf's ontology suggests that the emergence of our identity takes place in becoming and is always the result of a series of associations. The same can be said for her as well. Writing about Vita, she writes about their relationship and herself. She writes about all that she becomes through Vita, but also about all that she fails to become, about the limitations and possibilities of her own life, or rather their own life. What we are, what we become, is not within us, but it certainly does not belong completely to others either. It is always in the small space in-between. And it is precisely this small space that Woolf fills with *Orlando*, giving it material existence. She recognizes Vita and

thus recognizes herself. As Bernard states in Woolf's *The Waves*, "I need the illumination of other people's eyes, and therefore cannot be entirely sure what is my self" (2000, 64).

Hence, two synthetic gestures take place: that of *Orlando's* writing by Woolf and that of *The Oak Tree's* writing by Orlando, both leading to the recognition of their identities. These gestures are not only useful in describing the very process of the emergence of the heroine's identity, but also support a synthetic turn in the way we perceive writing as a practice in general. A turn that serves literature since, as Maddalena notes in his *The Philosophy of Gesture*, "literature 'naturally' relies on complete gestures as its usual way to represent and therefore comprehend experience" (2015, 118).

But let us go back to October 11, 1928, "the present moment," according to Woolf.

[A]s she was thinking this, the immensely long tunnel in which she seemed to have been travelling for hundreds of years widened; the light poured in; her thoughts became mysteriously tightened and strung up as if a piano tuner had put his key in her back and stretched the nerves very taut; at the same time her hearing quickened; she could hear every whisper and crackle in the room so that the clock ticking on the mantelpiece beat like a hammer. [. . .] Ten times she was struck. In fact it was ten o'clock in the morning. It was the eleventh of October. It was 1928. It was the present moment. (*Orlando* 2014, 199–200)

For Orlando, this realization is terrifying but, at the same time, necessary since an identity is realized only in a present that finds the possibility of its birth in the past and the promise of its fulfilment in the future. They have to fight to hold on to the "plank of the present" without falling into the "raging torrent" that flows below (*Orlando* 2014, 200). Their identity must be realized as a continuum within another continuum of this "raging torrent" of perpetual becoming.

Orlando has one more day to complete the gesture of their existence. All of the accounts they have open with the past must indeed be closed. The present turns into a strange simultaneity of all those events that marked them and which will, in turn, determine their future. Sasha's reappearance, the trip down memory lane, are all part of the same tough negotiation that takes place as Orlando is one step away from recognizing their identity. Each strike of the clock invites them to realize this fulfilment. A very capable driver, Orlando shoots, swings, squeezes, and slides, ending up in Old Kent Road "on Thursday, the eleventh of October, 1928" (*Orlando* 2014, 205). Woolf reminds us that Orlando is in the present, and their path takes them right there in the middle of it.

The city is breaking Orlando into fragments. The biographer wonders how they are still alive after having undergone a disorganization of their very identity, which is nevertheless salvaged a little later, as they move away from the urban en-

vironment and are surrounded by familiar figures. As when Orlando visits the graves of their ancestors, however, this is not enough to ground the emergence of their identity, since such an event constitutes what Maddalena (2015) calls an *incomplete gesture*. Despite the fact that the event functions both on an indexical level (they experience spatio-temporal contiguity to material objects) and on an iconic level (they grasp the relationship of similarity with images from the past, feeling familiarity), Orlando does not manage to reach the level of generalization. All in all, then, their gesture has a certain synthetic power, but as we read from Woolf, only enough to give them the illusion of some coherence (*Orlando* 2014, 206).

After a few minutes, however, their request for self-constitution becomes explicit. They hesitantly call “Orlando?” (*Orlando* 2014, 206). But given that within each of us, as Woolf writes, two thousand and fifty-two selves may co-exist, this “is not altogether plain sailing” (*Orlando* 2014, 206), since each of them presents itself under different circumstances. Orlando can call “the boy who sat on the hill” or “the young man who fell in love with Sasha” or “the ambassador” or “the woman” or “any one of them” for that matter (*Orlando* 2014, 207).

But they do not call upon any of these selves. They are looking for “what some people call the true self, and it is, they say, compact of all the selves we have it in us to be; commanded and locked up by the Captain self, the Key self, which amalgamates and controls them all” (*Orlando* 2014, 207). What is required is a self that, through a synthetic judgment,¹⁰ can recognize its continuity as it passes from one subjectification to another, recognizing the common qualities that govern them as part of the same narrative. Each individual self or subjectification is an aspect of the “true self” while at the same time carrying it within itself. The “Key self” is nothing more than a self that, in the Peircean sense, has deliberate or self-controlled habits—that is, through its knowledge of its individual habits and the ways in which they change, it can create beliefs.

Orlando, therefore, directs their question to this specific self. They wonder what they are, who they are, setting off on a trip down memory lane. All the subjectifications, all the ways in which they have existed flood in, overwhelming them and leading them to their relationship with writing, the most self-constitutive gesture of their existence:

“Haunted!” she cried, suddenly pressing the accelerator. “Haunted! ever since I was a child. There flies the wild goose. It flies past the window out to sea. Up I jumped (she gripped the steering wheel tighter) and stretched after it. But the goose flies too fast. I’ve seen it, here—there—there—England, Persia, Italy. Always it flies fast out to sea and always I fling after it

¹⁰ According to Maddalena (2015, 43), “[a] synthetic judgment (and reasoning) is a judgment (and reasoning) that recognizes identity through changes.”

words like nets (here she flung her hand out), which shrivel as I've seen nets shrivel drawn on deck with only seaweed in them; and sometimes there's an inch of silver—six words—in the bottom of the net. But never the great fish who lives in the coral groves." (*Orlando* 2014, 210)

Through writing, they seek their self-realization and perhaps an answer to their longed-for question of the meaning of life. However, words have been failing at this most critical point for years. The wild goose keeps eluding Orlando, just, like the meaning of life.

Moving away from an essentialist position and faithful to her perspectival and pluralistic view on the self and the world, Woolf undermines biography as a carrier of truth by revealing to us that words that are thrown like nets to the deep sea bring back seaweed, sometimes a piece of silver, but never the big fish at the bottom of the sea. However accurate a biography may be, however worthy of truth, it is in the very nature of words "not to express one simple statement but a thousand possibilities" (*Death* 1942, 199–200).¹¹ They are unable to locate a substance at the bottom of the sea simply because this substance is nothing more than the power that our own self-realization has to give birth to new possibilities that can guarantee our continuity.

It is at this moment, when Orlando is lost in these thoughts, that their "true self" emerges:

The whole of her darkened and settled, as when some foil whose addition makes the round and solidity of a surface is added to it, and the shallow becomes deep and the near distant; and all is contained as water is contained by the sides of a well. So she was now darkened, stilled and become, with the addition of this Orlando, what is called, rightly or wrongly, a single self, a real self. And she fell silent. For it is probable that when people talk aloud, the selves (of which there may be more than two thousand) are conscious of disseverment, and are trying to communicate, but when communication is established they fall silent. (*Orlando* 2014, 210)

The polyphony of their individual selves has been woven into a single voice, composed into a single narrative. Orlando recognizes their identity and thus, safe and settled, they can sink into silence, they can end the negotiation. Now they possess the deep sense of continuity, which is nested within the continuity of the world of which they are part. Orlando's "mind had become a fluid that flowed round things and enclosed them completely" (*Orlando* 2014, 211). Everyday language and every movement that would otherwise seem insignificant now receives its essential content. Orlando's realization gives meaning to their existence, bringing them to an immanence with the world of things, while allowing them to grasp the

11 For more on the issue of Woolf's relationship to words, see Colapietro (2001).

multi-prismatic nature of reality but also the nature of their thinking, which oscillates between light and darkness, between consciousness and the unconscious.

Orlando heads for the oak tree, the landmark of their life, which has stood thriving at the same spot since 1588, spreading its rhizomes. As they lay on it, the poem slips out of their leather jacket and lands in front of them. They consider their intention to bury it, they have also prepared a speech, but quickly recognize that such a move would be in vain since praise and fame are probably things incompatible with poetry. For Orlando, poetry is “a voice answering a voice” as secret as

the intercourse of lovers [. . .] the stammering answer she had made all these years to the old crooning song of the woods, and the farms and the brown horses standing at the gate, neck to neck, and the smithy and the kitchen and the fields, so laboriously bearing wheat, turnips, grass, and the gardens blowing irises and fritillaries. (*Orlando* 2014, 217–218)

Having recognized their identity, Orlando is now able to reflect on their practices. They choose to throw their poem onto the soil, dropping it into the stream of becoming from which it was born. Their whispered response to the melodious call of reality has no place buried deep in the soil, for the soil is shallow and what happens around them and within them is born right there before their eyes, where subjective consciousness meets reality and each of us invents the world from scratch by breaking the boundaries between that around and that within. Orlando flows into the world, and the world flows into them.

Their existence, just as in the case of Woolf, finds its meaning in their relationship with the world and others, and so their poem *The Oak Tree*, just like Woolf's book *Orlando*, is the complete gesture that makes this encounter possible, filling that little space between. Orlando gazes upon the landscape, trying to recognize their image in it. All that they had become is there: their land, their castle between the downs, the moor that reaches almost to the sea, the bare mountains of Turkey, but also the raucous voice of old Rustum, the gypsy who wonders about the need for property in the face of the nature (*Orlando* 2014, 218).

At this moment, however, the striking of the clock forces the landscape to disappear, only for the present to take its place again. Night falls and Shel is reflected in the dark lake of their mind, returning safe from his endless journeys. In Shel, the idea of a future fulfilment of a promise is condensed, since he constitutes the potential—that is, what always guarantees new worlds and realities—but just as every possibility declares itself present through its absence, and its nature is still unclear. “You're a woman!” Orlando tells him (*Orlando* 2014, 168). Shel is the happy coincidence in Orlando's life that makes their existence possible, since through their marriage Orlando manages to win their negotiation with the spirit of the age without sacrificing their desires. It is “the illumination of other people's eyes” that

Bernard refers to in *The Waves* and that is why his name falls “beautiful, glittering [. . .] out of the sky like a steel-blue feather” (*Orlando* 2014, 219).

But now we have reached the end of the book and as the clock strikes midnight “[t]he cold breeze of the present brushed her face with its little breath of fear” (*Orlando* 2014, 220). An airplane emerges from the clouds circling above them. “‘Here! Shel, here!’ she cried, baring her breast to the moon (which now showed bright), so that her pearls glowed like the eggs of some vast moon spider” (*Orlando* 2014, 220). And as Shelmerdine jumps to the ground to return to them, the coveted goose is yanked from his head. October 11, 1928, comes to an end, and with it, Orlando, the heroine and the book alike. The goose chase is over and Orlando’s identity is realized.

Everything betrays a happy ending which seems to fully satisfy the requirements of the age. But *Orlando* is indeed a well-written joke, and therefore all that would serve such a narrative has been carefully negated by Woolf, who deconstructs the very narrative she builds in the first place. Shel is not exactly a man and their marriage is not exactly a marriage: Orlando is not exactly a mother and so on. As Woolf writes, “everything was partly something else” (*Orlando* 2014, 216). Yet within this ambiguity, there is something that is clear: Love. The love that leads Woolf to recognize Vita, to write *Orlando*, and through this gesture to recognize herself; but also, on a metanarrative level, the love that leads Orlando to recognize Shel, and without fear to complete *The Oak Tree*, and to be led to the recognition of one’s own identity.

In light of the above, the wild goose did not burst out the head of a husband, but is born from the heart of a happy event which, as we already have shown, Shel realizes. For Woolf, the meaning of life, of self-actualization, nestles right there next to the birth of its possibility—that is, in that small space between ourselves and others, ourselves and reality. As we read from Murdoch (1959, 51): “Art and morals are [. . .] one. Their essence is the same. The essence of both of them is love. Love is the perception of individuals. Love is the extremely difficult realisation that something other than oneself is real. Love, and so art and morals, is the discovery of reality.”

References

- Chase, Cleveland B. 1928. “Orlando. Review in *New York Times*.” In Majumdar, Robin and Allen McLaurin (Eds.), *Virginia Woolf*, 230–231. London and New York: Routledge.
- Colapietro, Vincent Michael. 1988. *Peirce’s Approach to the Self: A Semiotic Perspective on Human Subjectivity*. Albany: State University of New York Press.

- Colapietro, Vincent Michael. 2001. "Woolf on words: Signification, signature, and recontextualization." In Simpkins, Scott and John Deely (Eds.). *Semiotics 2000*, 108–116. New York: Legas.
- Deleuze, Gilles and Felix Guattari. 1980, 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. Minneapolis: University of Minnesota Press.
- Gaskill, Nicholas. 2012. "What difference can pragmatism make for literary study?" *American Literary History* 24 (2): 374–389.
- James, William. 1922. *Pragmatism*. New York: Longman's, Green and Co.
- Kitsi-Mitakou, Katerina. 2017. Ορλάντο: Το έργο [Orlando: The work]. In Woolf, Virginia. *Ορλάντο: Μια Βιογραφία [Orlando: A biography]*. Translated by Argyrō Mantoglou, 451–499. Athens: Gutenberg.
- Maddalena, Giovanni. 2015. *The Philosophy of Gesture: Completing Pragmatists' Incomplete Revolution*. Montreal: McGill-Queen's University Press.
- Misak, Cheryl. 2020. *Frank Ramsey: A Sheer Excess of Powers*. Oxford: Oxford University Press.
- Murdoch, Iris. 1959. "The sublime and the good." *Chicago Review* 13 (3): 42–55.
- Peirce, Charles Sanders. 1931–1958. *Collected Papers of Charles Sanders Peirce*. 8 Volumes, edited by Charles Hartshorne, Paul Weiss, and Arthur Burks. Cambridge: Harvard University Press. [Abbreviated as CP.]
- Woolf, Virginia. 1929, 2007. *A Room of One's Own*. New York: Fall River Press.
- Woolf, Virginia. 1928, 2014. *Orlando: A Biography*. Richmond: Alma Books Ltd.
- Woolf, Virginia. 1932. *A Letter to a Young Poet*. London: The Hogarth Press.
- Woolf, Virginia. 1942. *The Death of the Moth, and Other Essays*. New York: Harcourt Brace.
- Woolf, Virginia. 1985. "A sketch of the past." In: Schulkind, Jeanne (Ed.). *Moments of Being*, 64–159. New York: Harcourt.
- Woolf, Virginia. 2000. *The Waves*. Hertfordshire: Wordsworth Editions.
- Woolf, Virginia. 2012. *Γράμμα σε Έναν Νέο Ποιητή [A Letter to a Young Poet]*. Translated by Aris Berlis. Athens: Agra Publications.

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