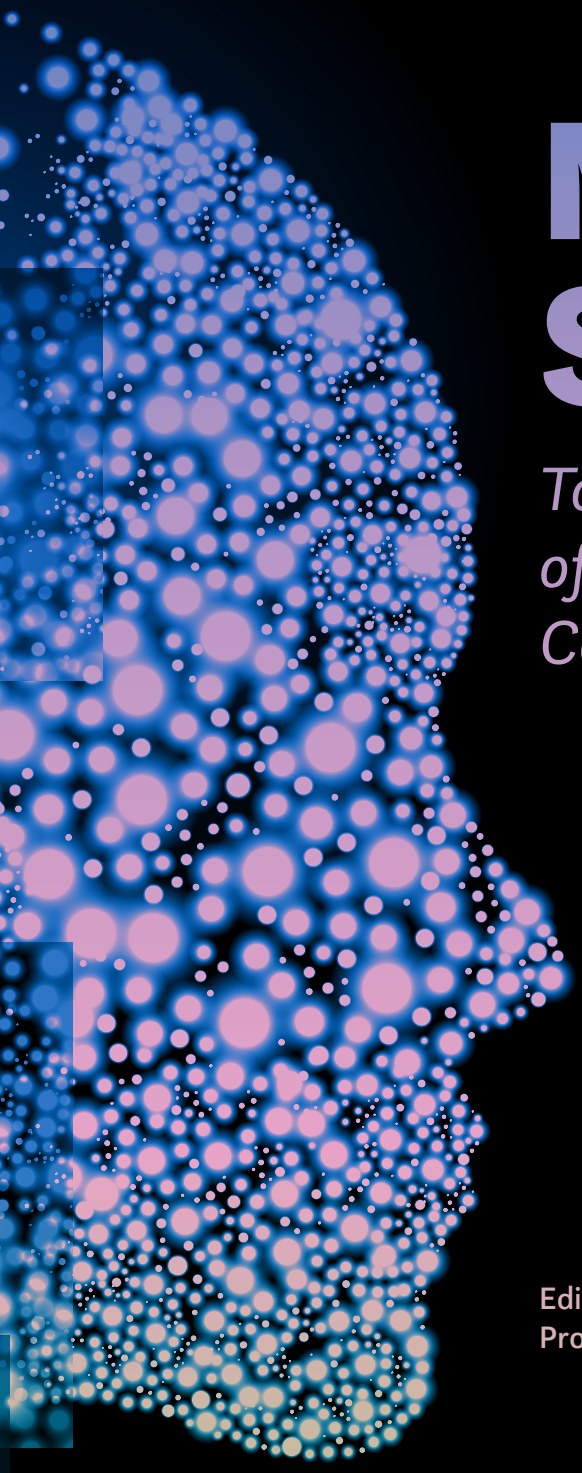
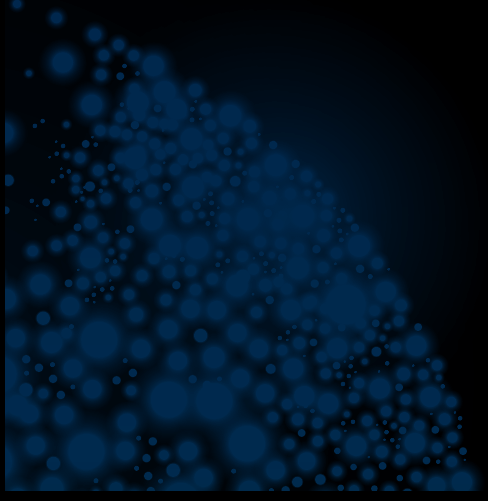


Meta Science

Towards a Science of Meaning and Complex Solutions



Editors:
Prof. Andrej Zwitter and Prof. Takuo Dome

University of Groningen Press

Meta-Science

Towards a Science of Meaning and Complex Solutions

EDITORS ANDREJ ZWITTER AND TAKUO DOME

University of Groningen Press

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INTRODUCTION
META-SCIENCE AS SCIENCE OF MEANING AND COMPLEX SOLUTIONS

ANDREJ ZWITTER AND TAKUO DOME

The human condition is facing concrete complex and nested challenges from climate change to economic decline and to negative aspects of digitalization. These extraneous strains exacerbate another aspect of the human condition that contemporary and specifically Western societies have lost sight of. It becomes increasingly clear that the fundamentally meta-scientific question of the meaning of life and the nature of good life is by no means answered by the current dominant scientific method. Worse yet, much of the contemporary sciences are emphasizing in a neo-positivist perspective that these questions are not real questions at all. They argue that investigations as to the answers of such questions are irreplicable and not objectively measurable, nor are the concepts concretely definable. At the same time, such an approach forgets that

answers to the nature of the human condition (Immanuel Kant's fourth question of "What is man?") are intrinsically tied to Kant's third question of "What may I hope for?" (A805/B833). An attempt at answering these two questions would profoundly impact what world we need to create to attain flourishing and well-being (Kant's second question of "What must I do?").

Since the Enlightenment period, forces such as secularization, scientism and individualization have led to a progressive loss of a perceived universal meaning provided by shared religious and spiritual worldviews. These developments, paired with an increased reliance on technological and technocratic solutions,[1] further led to an increasing separation of the human being from nature. The questions of the meaning of life, as well as of individual and collective purpose, have been reduced to the material aspects of survival. This reduction to material minimum standards of survival can be seen for example in the Sustainable Development Goals (SDGs). With secularization, together with collective practices, metaphysical explanations for human existence in a meaningful universe had been discredited and left to ever retreating religions. Scientism,[2] with its dominant focus on a material and mechanistic ontology, has placed the human as "biological robot in a meaningless universe."[3] At the same time, individualization, while increasing perceived individual freedom, has also led to increased isolation of the very same individual. While being digitally connected with more people than ever, the global Corona pandemic has illustrated the isolation of individuals in an unprecedented manner. Together, these factors have resulted in a variety of nested crises and reduced collective capability due to a lack of common ontological ground. The human condition of the twenty-first century is affected by a variety of forces with unprecedented results.

Looking at the human condition within the contemporary scientific framework from the perspective of the three original Kantian questions

1 It is almost astonishing to observe that in the search for human development and flourishing, a common contemporary trend is the digitalization of society for better cybernetic management of society – a so-called 'smart' society.

2 We take "scientism" to mean the uncritical adoption of a materialist world view paired with the scientific method as quasi-theological belief system.

3 Adrian David Nelson, *Origins of Consciousness: How the Search to Understand the Nature of Consciousness Is Leading to a New View of Reality* (Nottingham: Lulu.com, 2015).

illuminates the problem. Nowadays, the first Kantian question "What can I know?" is generally answered by the sciences. The second Kantian question "What must I do?" concerns ethics and its societal extension, politics. These two questions are considered intertwined.[4] The socio-economic and political conditions of agency are determined by a dominant materialist and mechanistic scientific framework and are measured in terms of success through bureaucratic and quantitative means (e.g., GDP, stock markets etc.) rather than by qualitative measures such as well-being and flourishing. Attempts to rectify this, such as Bhutan's Gross National Happiness index as measure for the countries' well-being, remain insulated outliers.[5] It then surprises little, that Thomas Jefferson's phrase "the pursuit of happiness" included in the US Declaration of Independence is often interpreted as the pursuit of wealth in the sense of John Locke's "life, liberty and estate (property)" rather than, as many legal scholars might argue, the attainment of human flourishing or *eudaimonia*.[6] An approach that focuses on money as a quantitative substitute measure of happiness, renders the third Kantian question ("what can we hope for?") obsolete.

The human condition, however, is not only about the complexity of the challenges that the individual and societies are facing. It is also about the

4 Aristotle, *Politics: A Treatise on Government*, trans. William Ellis, 2004, https://www.gutenberg.org/ebooks/6762. From Ellis' introduction: "The Politics of Aristotle is the second part of a treatise of which the Ethics is the first part. It looks back to the Ethics as the Ethics looks forward to the Politics. For Aristotle did not separate, as we are inclined to do, the spheres of the statesman and the moralist. In the Ethics he has described the character necessary for the good life, but that life is for him essentially to be lived in society, and when in the last chapters of the Ethics he comes to the practical application of his inquiries, that finds expression not in moral exhortations addressed to the individual but in a description of the legislative opportunities of the statesman. It is the legislator's task to frame a society which shall make the good life possible. Politics for Aristotle is not a struggle between individuals or classes for power, nor a device for getting done such elementary tasks as the maintenance of order and security without too great encroachments on individual liberty. The state is "a community of well-being in families and aggregations of families for the sake of a perfect and self-sufficing life." The legislator is a craftsman whose material is society and whose aim is the good life."

5 Richard Kammann, Marcelle Farry, and Peter Herbison, "The Analysis and Measurement of Happiness as a Sense of Well-Being," *Social Indicators Research* 15, no. 2 (August 1, 1984): 91–115, https://doi.org/10.1007/BF00426282.

6 Carli N. Conklin, "The Origins of the Pursuit of Happiness," *Washington University Jurisprudence Review* 7 (2015 2014): 195.

complexity of human experience embedded in nature or "life as a whole" (Japanese: *Inochi*). Non-material aspects (love, beauty, compassion) are as much part of the human condition as the material conditions for survival. In this sense, a New Enlightenment agenda, which drives the quest for understanding the human condition in the twenty-first century, needs to reassess the sufficient conditions of physical survival just as much as the necessary conditions of human flourishing in its complexity. Questions of sustainability (e.g., the United Nation's SDGs), that focus on the material conditions of survival, can therefore not be accepted at *prima facie* sufficient conditions of flourishing without a critical reflection and examination from different cultural and philosophical perspectives. As such, meta-science needs to approach human flourishing and well-being (eudaimonia) also from its non-material side of human experience and its embeddedness in nature. What is important to note, however, is that as a political commitment, the SDGs emphasize a very important aspect: "Leave no one behind!"

While these questions sound metaphysical at first, answers to these questions can lead to very concrete and implementable outcomes. For example, changing the economic focus from increasing material wealth towards what Prof. Dome calls an "Economy of Sympathy" in the service of human flourishing,[7] requires new economic incentive structures and governance mechanisms. These implementable outcomes can take the shape of new policies and governance mechanisms that recognize the complexity of the human condition, the need for human dignity as well as the importance of individual and collective purpose as part of the metaphysical concept of *Inochi*. Morioka assigns to *Inochi* six defining properties: (1) irreplaceability, (2) being part of the circle of birth, life and death, (3) being beyond the power of humans, (4) mutual interdependency and support of all living things, i.e., beings in *Inochi,* (5) each being in *Inochi* has personality, and (6) an intimate connection to warmth and breath.[8] As such,

7 See chapter 11 and Prof. Dr. Takuo Dome, "Hoping for a Mutual Aid Society Supported by Sympathetic Capitalism," Mini-Symposium Commemorating the 20th Anniversary of the Osaka University – University of Groningen Agreement "Meta-Science – Towards a Science of Meaning and Complex Solutions," free webinar on 7th of November 2022, https://sdgs.osaka-u.ac.jp/news/1575.html.

8 Masahiro Morioka, "The Concept of 'Inochi': A Philosophical Perspective on the Study of Life," *Japan Review*, no. 2 (1991): 83–115.

Inochi is a concept that implies transcendent and metaphysical dimensions, while at the same time staying rooted in the immanent and physical.

Therefore, the question of what constitutes the "human" in human development and, by extension, what is "human flourishing," requires a renewed inquiry inclusive of non-Western cultures and non-materialist philosophies. While the nature of the human condition has evolved over millennia, the ontological frameworks aiming to explain it have undergone many dramatic changes throughout the last centuries. From natural philosophy to theological conceptions of the human as part of creation, and from idealism to materialism, the answer to the question of the human condition and its place in nature has changed drastically. In western academic and political discourses, modern scientism has emerged as the dominant ideology, informing policy frameworks of human flourishing. This perspective focuses on the material conditions of survival, and its ontology and methodology has informed the design and formulation of the SDGs.

This perspective on the human condition and its role and place in nature, however, hardly captures the complexity of human experience (*Lebenswelt* – German: life world) across the world and across different cultures. Alternative conceptions, such as Bhutan's Gross National Happiness, the modern idealist turn in the hard sciences, or conceptions of a New Enlightenment,[9] illustrate a change in the contemporary scientific world view. This shift posits a transition towards an ontology that is more inclusive of different cultures and philosophical world views, as well as one that is more attuned to a holistic view of human nature as a subset of nature itself.

The general conception of the term meta-science as the science of science (*Wissenschafts-Wissenschaft*) understands itself as the application of scientific tools to the study of the sciences. Meta-science encompasses the systematic investigation of the scientific process itself, aiming to understand and improve the methods, practices, and outcomes of scientific research. Its core tenets revolve around rigorous and transparent study design, replicability, and generalizability of findings, fostering open and collaborative research environments, addressing biases and conflicts of interest, and promoting robust statistical analyses and reporting standards. Meta-scientific inquiry involves assessing the reliability and validity of scientific studies, identifying

9 Markus Gabriel et al., *Towards a New Enlightenment – The Case for Future-Oriented Humanities* (transcript publishing, 2023).

sources of bias and error, exploring factors influencing research outcomes, and developing best practices to enhance the credibility and integrity of scientific knowledge. This view on meta-science carries along a certain precept of what is science and what is not. In other words, the ontological worldview often adopted implicitly and without further reflection informs the epistemic framing of questions when applying the scientific method. If, however, meta-science is indeed a scientific investigation of science, in order to be un-biased, it would need to assume a position that is ontologically agnostic to the content of sciences, whether or not materialism or idealism apply and regardless of what subjects can be studied and which might be "taboo." This is not the case in most of the current applications of meta-science. What is ontologically acceptable is often pre-supposed by an implicit materialist, mechanist, or physicalist world view. What is then considered the "scientific world view" is a very specific world view, often a linear, materialist "cause and effect"-based world view, which is commonly shared amongst Western educated scientists but reflects only a very small minority of people and societies. "Non-scientists" experience many different "Lebenswelten" (lived experiences). Many of these Lebenswelten include some sort of religious, mystical, or spiritual experiences or conceptions that, while being no less real and causal to them, can hardly be replicated and objectified.

Throughout the book, the chapters bring together Western and Eastern conceptions of what it means to be human and to experience *Inochi*. The chapters are connected by the way that different societies experience meaning and aim to provide solutions for societal problems. Part 1 (chapters 1 to 4) concerns the question of how to conceptualize meta-science as a science of meaning, and it provides a theoretical grounding for the chapters that follow in Part 2. Chapter 1, by Zwitter, discusses the evolution of the scientific method towards a materialist ontology and the emergence of a scientism that permeates Western academic and policy environments. It tries to create an opening where "meaning" next to facts and evidence becomes a relevant epistemic factor. In the second chapter, Deguchi brings together Western individualism and Eastern collectivism, and expands these concepts even further through the theory of incapabilism. He demonstrates how humans are incapable of achieving anything without them being aided by others, their environment and nature as a whole. As such, incapabilism has a profound impact on meta-science, as it illustrates how the connectedness of all that is alive in *Inochi* changes how we need to conceptualise law, economy and society as a whole. Incapabilism

changes how meaning both individual as well as collective, both subjective as well as objective is relevant in a world that faces seemingly unsurmountable challenges. From a phenomenological and ethical standpoint, Hölzl explores the distinction between choice and decision and emphasises the importance of time in decision-making processes in Chapter 3. He highlights that choice and decision are separate but interconnected social phenomena within the context of meta-science, and that the ethical implications of making decisions under time constraints also affect how we conceptualise rationality. In Chapter 4, Kita highlights the importance of *Inochi* (Life) as the crucial element to be inherited from the past to the future, amidst major societal changes. *Inochi* is not only associated with individual life but also extends to communities and their interconnectedness.

Part 2 of the book describes different perspectives on an iteration of the third Kantian question "What can we hope for?" by asking what society we can hope for. This section combines academic chapters with practitioner perspectives (chapters 7, 9, 10). Chapter 5, by Grad and van der Zande, discusses the need for higher education institutions to shift their focus from Civic Engagement to Global Engagement and Global Citizenship, in order to prepare students for success in a globalised society. The authors argue that all students should be equipped with extensive knowledge of different cultures and the ability to work in an international environment. Barrett's chapter 6 changes the direction of inquiry of meta-science. He explores how and why scientists turn from cold facts to meaning by finding cause and incentive in climate science to become activists. In chapter 7, Buith describes the sustainability journey that public and private actors have to face on the road to 2030, when the current iteration of the Sustainable Development Goals of the United Nations comes to an end. Mulqueen's chapter 8 argues for the integration of procedural justice with the concept of *Inochi*, which promotes equal treatment and inclusivity in policing. It explores how *Inochi*, a way of living characterized by inner calmness, simplicity, and the loss of power, can contribute to a meaningful practice of procedural justice. This approach goes beyond traditional sociological boundaries by drawing on Eastern and Western spiritual traditions, emphasizing the importance of love and understanding in achieving deep equality and fair criminal justice outcomes. In chapter 9, Saidléar reflects on the concept of meaning, particularly in relation to her work in addressing sexual violence. She explores the disjuncture between the metrics used to measure impact and the deeper meaning attached to her profession, highlighting the challenges faced

by the NGO sector in engaging with academia and the pressures to conform to measurement frameworks. Chapter 10 represents the practitioner's perspective of a society of coexistence (theoretically further developed in chapter 11) and the work of KNOCK ON THE DOOR Inc. with patients and their families who deal with uncertainties when facing intractable diseases. Finally, Dome's chapter 11 discusses how sympathy, as conceptualised by Adam Smith, can lead to a new conception of economy, an "Economy of Sympathy," that puts the vulnerable rather than the powerful in the centre and realises the idea of the SDGs to leave no one behind.

As a whole, the book is not to be understood as a complete theoretical analysis and practical application of the conception of meta-science as a science of meaning. Much more, it is to be understood as a first exploration of how meaning and meanings can help shape and direct the soft and the hard sciences towards a common goal to solve complex problems and provide solutions that leave no one behind.

BIBLIOGRAPHY

Aristotle. Politics: *A Treatise on Government*. Translated by William Ellis, 2004. https://www.gutenberg.org/ebooks/6762.

Conklin, Carli N. "The Origins of the Pursuit of Happiness." *Washington University Jurisprudence Review* 7 (2015 2014): 195.

Gabriel, Markus, Christoph Horn, Anna Katsman, Wilhelm Krull, Anna Luisa Lippold, Corine Pelluchon, and Ingo Venzke. *Towards a New Enlightenment – The Case for Future-Oriented Humanities*. transcript publishing, 2023.

Kammann, Richard, Marcelle Farry, and Peter Herbison. "The Analysis and Measurement of Happiness as a Sense of Well-Being." *Social Indicators Research* 15, no. 2 (August 1, 1984): 91–115. https://doi.org/10.1007/BF00426282.

Morioka, Masahiro. "The Concept of 'Inochi': A Philosophical Perspective on the Study of Life." *Japan Review*, no. 2 (1991): 83–115.

Nelson, Adrian David. *Origins of Consciousness: How the Search to Understand the Nature of Consciousness Is Leading to a New View of Reality*. Nottingham: Lulu.com, 2015.

PART 1

WHAT IS META-SCIENCE?

1
META-SCIENCE: FROM A SCIENCE OF THINGS TO A SCIENCE OF MEANING

ANDREJ ZWITTER

INTRODUCTION

Human society has always been in search of meaning. Whether this meaning expressed itself in the will of gods, in the purpose of life according to religious doctrines, or in the external expressions of the subconscious mind, meaning stood centrally to the human endeavor. In contemporary Western society, however, this seems to have fundamentally changed. While meaning remains the subject of many a discipline ranging from the social sciences to the humanities and even to some degree surfacing in the hard sciences, what the term *meaning* refers to changes from discipline to discipline and from theoretical framework to theoretical framework. In psychology, meaning could be seen as what the conscious mind projects onto the external world. In this view, the mind is a meaning-making machine throwing meaning at anything it

encounters. In the social sciences, social constructivism would denote that meaning is a negotiated agreement that establishes itself through discursive action. And in the neurosciences, meaning might derive from automated processes in the brain that are tasked with assignments such as pattern recognition and cognition in the wider sense. It may almost seem as if the term *meaning* has lost its very own meaning, that is, at least one that is objectively valid or at least widely agreed upon.

For the individual such a reductionist view on what *meaning* could possibly mean might have tremendous effects. For the overall question of one's purpose in life in contemporary Western society, dominated by material values,[1] the individual is left to its own devices. To Aristotle, the purpose of life is in the pursuit of happiness as flourishing and well-being.[2] However, when we look up the term "pursuit of happiness" we are inevitably led to the American Declaration of Independence. Thomas Jefferson's phrase "the pursuit of happiness" is predominantly interpreted as the "pursuit of wealth." This might not surprise, as Jefferson likely took inspiration from John Locke's "life, liberty and estate (property)."[3] Money, however, is a very poor measure for happiness.

As already indicated in the introduction to this book, contemporary society is facing a complex of nested crises, all of which might nowadays be further accelerated by the multiple first and second order effects of the climate crisis. However, there seems to be another crisis at the heart of all crises, expressed in the growing alienation of people from each other, growing populism, a growing feeling of senselessness amongst youth, an increased appetite for war, and a society that is desperately clinging on short-term causes paired with a willingness to use violence to attain them. In essence, Western society seems to be experiencing a *crisis of meaning*. Religious meanings have been discredited and discarded in many a Western society, in a post-structural society any

1 I refer here to material values as socio-economic values in contrast to materialist ontologies which denote a primacy of the physical over the mental and the world of ideas, i.e., in contrast to philosophical idealism.

2 Aristotle, *Nicomachean Ethics*, trans. Roger Crisp (Cambridge: Cambridge University Press, 2000).

3 Arthur M. Schlesinger, "The Lost Meaning of 'The Pursuit of Happiness,'" *The William and Mary Quarterly* 21, no. 3 (1964): 326, https://doi.org/10.2307/1918449.

spiritual meaning is strictly a personal affair and is often viewed as a lifestyle choice.[4]

I am aware that this is not a scientific diagnosis but rather a subjective assessment. At the same time, contemporary scientism (that is, the widely held belief that science with a materialist ontological bias is the only valid way of knowledge generation) seems to be a poor benchmark for assessing the potentially metaphysical root of a society's experience of crisis. If anything, as this chapter argues, contemporary scientism is at the root of a societal meaning-crisis. If such a diagnosis has validity, we need to better understand how materialism and the scientific method of measurement by numbers have become the dominant ontology in science to the almost zealous exclusion of non-materialist hypothesis. In short, how did science become scientism?

To compensate for this scientism and to open the scientific discourse to metaphysical questions and how they relate to our immanent experiences, we are introducing the concept of "meta-science" as a science of meaning. The reason why we chose meta-science to stand for a science of meaning, rather than only for a science of science, is that in our debates in the Society of Meta-Science, we frequently concluded that even material science is bound to touch upon questions of meaning and the fundaments of ontology. For example, quantum physics is currently at the forefront in the discussion of the role of consciousness with regard to the question of what is causing the "collapse of the wave function" and the establishment of matter and mind, e.g., the quantum mind. It would go too far to unpack this debate in any detail,[5] but let it be said that it is rather surprising that the search for consciousness (a term that has replaced in the past decades words such as mind, and, before that, spirit and soul) is being led by physicists rather than psychologists and other social scientists. Quantum physics, in this way, seems to be leading the charge towards a new philosophical idealism.

4 Religious institutional power structures, whose corrosive effects have surfaced in so many outrageous crimes against the innocent, have given its followers ample cause to discard them, together with the metaphysical belief system often at the core of philosophical arguments of the meaning of life.

5 For an excellent summary and the implications of quantum theory on social science see: Alexander Wendt, *Quantum Mind and Social Science: Unifying Physical and Social Ontology* (Cambridge: Cambridge University Press, 2015), https://doi.org/10.1017/CBO9781316005163.

Our understanding of the need for *meta-science* as a science of (objective) meaning rests upon the premise that as human beings we perceive the world as nerve impulses through our senses. These nerve impulses are put together to form a more or less consistent image and impression of the world around us. Imagination is thus central to our perception of the universe and imagination by necessity implies some sort of "sense making" or meaning. Thereby, nothing in this perceived world is devoid of meaning. Meaning is what makes the perceived world and all the particles that inhabit it intelligible in the first place. Meaning by that implicit definition is then by no means purely subjective or solely societally negotiated. It is to some degree the same sort of meaning that is perceived by all living organisms and might be considered inherent in the make-up of objects and the universe as a whole. Meaning is subsequently part of every thing's essence in analogy with Aristotle's Metaphysics,[6] or it can be considered as a relationship between an object and its platonic forms and solids and their archetypal associations.[7] Meaning is thus derived from the objective quality of an object as it is perceived and interpreted in our imagination of it and how it relates to the observer. From that perspective, we are not biological robots in a meaningless universe.[8] And we are not randomly throwing meaning at every object and entity we are perceiving, as some psychological theories would argue.[9] Rather, in such an interpretation of cognition as imagination, the universe is full of meanings through associations to which our mind adds through imagination subjective interpretation of how specific meanings relate to us.

Such a view of the world full of meaning has fundamental effects on the role that physics, philosophy, and theology should take on in society. The question of (1) "what is consciousness" (quantum physics) then needs to be connected

6 "Aristotle, Metaphysics, Book 12, Section 1072b," accessed March 20, 2023, http://www.perseus.tufts.edu/hopper/text?doc=Perseus:abo:tlg,0086,025:12:1072b.

7 There is also an interesting relationship to be explored with the five basic *tattvas*, also known as the Pancha Tattva or Mahabhuta in Indian Philosophy.

8 Adrian David Nelson, *Origins of Consciousness: How the Search to Understand the Nature of Consciousness Is Leading to a New View of Reality* (Nottingham: Lulu.com, 2015).

9 Peter Hagoort, "The Meaning-Making Mechanism(s) Behind the Eyes and Between the Ears," *Philosophical Transactions of the Royal Society B: Biological Sciences* 375, no. 1791 (December 16, 2019): 20190301, https://doi.org/10.1098/rstb.2019.0301.

with the questions of (2) "why are we here" (metaphysics); (3) "what society would we therefore want to create" (political science); and (4) "what should our relationship with our environment and planet be" (e.g., sustainability science, future of the Sustainable Development Goals, etc.). Such a view further indicates that mind is not merely an epiphenomenon of brain activity but stands on equal footing to matter. As such, mind would be *a priori* given and related to a domain of archetypal forms and principles neutral to the mental and the physical divide – a so-called psycho-physical neutral. This interpretation of the relationship between mind and matter via the psycho-physical neutral is termed dual-aspect monism by Atmanspacher and is reflected in neo-Platonism and the correspondence of Jung and Pauli.[10] The implications are many and it would go too far to unpack them all in this short contribution.

This chapter rather aims to build the bases of understanding how we came to the point of almost taking for granted that all that exists is matter or at least has matter at its origin (what I term foundational materialism). To elucidate this process, I will first explain how the contemporary disciplines act as guardians of a materialist conception of the world – i.e., how disciplines discipline their scientists. I will then sketch a rough and selective account of a history of ideas of science and the mind. This account will take the Enlightenment as a pivot point that indicates a transition towards a materialism that is inextricably linked with humanism. This transition is also connected with the formation of the modern canon of disciplines. Forth following, we will explore the foundations and consequences of scientific reductionism and why meaning as an objective idea and idealism have little space in contemporary scientism, which claims with religious zeal that materialist physicalism has all-encompassing epistemic primacy.

DISCIPLINES AND PUNISHMENT

The canon of disciplines that we consider for the most part conclusive and final is, as a matter of fact, not very old. The disciplines have evolved over the past millennia starting with philosophy, the mother of all science, theology and

10 Harald Atmanspacher, "Dual-Aspect Monism a La Pauli and Jung," *Journal of Consciousness Studies* 19, no. 9–10 (January 1, 2012): 96–120; Harald Atmanspacher and Dean Rickles, *Dual-Aspect Monism and the Deep Structure of Meaning* (Abingdon, New York: Routledge, 2022).

mathematics. These were enriched with astronomy and astrology, ethics, and politics (or statecraft) ever since the pre-Socratic philosophers. The emergence of the universities in the Middle Ages can be seen as the real origin of the idea that science can be divided into the sciences in the sense of different disciplines. Although mathematics was part of the faculty of Arts, theology and philosophy (and empirical sciences in general) only really began to gradually separate from the 13th century onwards.[11] Specifically, the social sciences in their modern form can look back at a rather short history and, paired with a yearning to be a systematized science of objective validity, they adapted the methods of nineteenth century physics and with it the ever-growing materialist physicalism of that era.

Sociology in its modern and institutionalized form is little more than 200 years. In the 1830s, Auguste Comte proposed to study the science of all human activity as a collective and synthetic science termed "sociology." The first department of sociology was established in 1892 at the University of Chicago by Albion W. Small. Rene Worms founded the *Institut International de Sociologie* as the first platform of international collaboration on the subject. This was followed only shortly after in 1895 with a department of sociology at the University of Bordeaux founded by Emile Durkheim. And in 1919, Max Weber founded the department of sociology at the Ludwig Maximilians University of Munich.[12]

Similarly, Psychology is a rather young science. To qualify as a science of empirical study separate from Philosophy, proponents needed to show that studying the content of the mind empirically, rather than investigating the objects of thought through rational thought and logics, was a separate form of study. The Leipzig professor Gustav Ferchner theorized in 1854 that it would be possible to study sensory experiences empirically and experimentally through statistical means. This preceded Wilhelm Wundt's Leipzig laboratory for psychological research. At the turn of the century, in parallel, Sigmund Freud established a separate line of thought called psychoanalysis. The empiricism of the mind as well as psychoanalysis were not without critique. Mental processes,

11 "Condemnations of 1210–1277," in *Wikipedia*, accessed March 12, 2023, https://en.wikipedia.org/w/index.php?title=Condemnations_of_1210%E2%80%931277&oldid=1144247507.

12 "Sociology | Definition, History, Examples, & Facts | Britannica," accessed March 28, 2023, https://www.britannica.com/topic/sociology.

a newly emerging theoretical stream called *behaviorism* would argue, were best studied through observing the behavior as an object of study. Most of the twentieth century was dominated by this stream of thought. Only in the last decades cognitive science has focused on the mind again as a subject of investigation. It thereby opened up new possibilities, such as the use of linguistics and computer science and applications to artificial intelligence.[13]

Also, neuroscience as a discipline emerged only in the late nineteenth century. Amongst other preconditions, neuroscience was fundamentally dependent on the invention of the microscope and the development of staining procedures by Camillo Golgi in the late 1890s that allowed the identification of single neurons. In addition, the emergence of neuroscience required an understanding of the role of electricity in the nervous system. Such a theoretical framework was formulated by Galvani, Aldini, Legallois and others in the second half of the eighteenth century. However, it would take until the middle of the twentieth century for neuroscience to be recognized as a separate discipline rather than a subset of the study of physiology. Amongst the early proponents of neuroscience were Kenneth Cole and Eric Kandel. The Austrian-born American Kandel received the 2000 Nobel Prize in Physiology or Medicine for his work on memory storage in neurons.[14]

And even today the disciplines are in flux. New topics and insights are forming new disciplines over time. Furthermore, fields are specializing increasingly and with specialization comes a specific jargon that renders collaboration in adjacent fields quite difficult at times. Although the different disciplines are in flux, it helps to conceptualize the disciplines on a meta-level. On this level we can distinguish between larger clusters of disciplines that focus on certain study objects. Together they can almost be viewed as a continuum from dense matter to mind. There are the sciences of matter, the sciences of society and behavior, and the sciences of the mind or humanities. Within disciplines such as psychology or philosophy there are proponents who might consider themselves more closely related to another category. For example, many cognitive psychologists work more closely with neuroscience, biology and chemistry than social psychologists do. Depending on the scholar, political

13 "History of Psychology," in *Wikipedia*, accessed March 26, 2023, https://en.wikipedia.org/w/index.php?title=History_of_psychology&oldid=1146757485.

14 "History of Neuroscience," in *Wikipedia*, accessed March 23, 2023, https://en.wikipedia.org/w/index.php?title=History_of_neuroscience&oldid=1146241618.

philosophy might be considered more closely related to the sciences of society and political science specifically. Conceptualizing the disciplines as a continuum from matter to society to mind, however, gives us also a good idea of the underlying ontological framework and the objects of studies that are accepted in the different disciplines (see Figure 1).

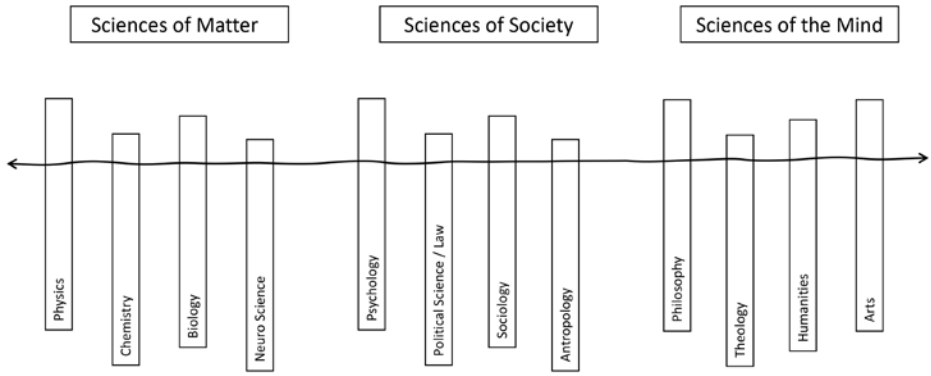

Figure 1: Disciplines as Continuum

Categorizing knowledge and methods into disciplines is certainly useful. It helps formalizing a certain subject by establishing a set of accepted practices and methods, by unifying terminology, and by establishing a framework of theories that are defining the outer edges of acceptable ontologies within the study of the subject. These sets of foundational theories can be viewed like the pillars of a world view. In the study of international relations, for example, there are a few canonical theories that demarcate the outer edges of the field. Amongst the most important are realism, liberalism, and constructivism. There are a few more niche theories that have also found their following, such as post-modernism, Marxism, gender-theory etc. However, when it comes to the ontological assumptions of what exists in the world of international relations, the three canonical pillar theories are quite determinant. In the world of international relations, scholars deal with actors such as states, international organizations, international non-governmental organizations, some non-state actors, sui generis entities such as the Holy Sea or the ICRC, and multinational cooperations. There is little space for individuals, small businesses, artists and other entities that have little effect on the conduct of international affairs. And even though cyberspace and actors controlling the digital domain as well as inhabiting it have become increasingly important for peace, security and trade,

international relations theory still treats cyberspace as a minor side subject in the overall debate.

When applying these thoughts to the sciences as a whole, the term "discipline" takes on a double meaning. On the one hand, it denotes the concept of scientific sub-fields, and on the other hand it describes their function, namely reining in the outliers to conform to the confines of the foundational theories or, more precisely, its accepted range of ontology. In *Discipline and Punish*, Foucault argues that a given frame of reference, in this case a discipline's own ontological presumptions, determines categorically what *cannot* be, irrespective of evidence to the contrary.[15] This bias of an ontological framing of any and all research problems encountered by scholars of a discipline historically created 'locked-in' attitudes, which effectively prohibit alternative explanations and, ultimately, objective assessments. In 1973, for instance, Rosenhan established that the validity of a given perspective is strongly predetermined by a set of assumptions imposed by the environment. In his famous article "On Being Sane in Insane Places," he elaborates on how persons who are signed in as patients in a psychiatric hospital cannot prove to doctors treating them that they are not insane (even if they are psychologists themselves).[16] As Foucauldian truth regimes dictate what can and what cannot exist, disciplines are also there to discipline and punish scientists who do not adhere to their objects of study, who deviate from the discipline's mainstream ontology, epistemology and methodology. Disciplines and the sciences, however, are not stable monoliths in and of themselves, as we have just seen. New disciplines and sub-disciplines emerge over time. Also, within the disciplines new concepts and ideas emerge that challenge prevalent ontological frameworks. Such a development can for example be seen in the scientific revolution, the Enlightenment and the subsequent scientific reductionism that experiences its own countermovement at present with conceptions such as the New Enlightenment and new idealism.[17]

15 Michel Foucault, *Discipline & Punish: The Birth of the Prison* (New York: Vintage, 1995).

16 D. L. Rosenhan, "On Being Sane in Insane Places," *Science* 179, no. 4070 (January 19, 1973): 250–58, https://doi.org/10.1126/science.179.4070.250.

17 Markus Gabriel et al., *Towards a New Enlightenment - The Case for Future-Oriented Humanities* (transcript Verlag, 2022), https://doi.org/10.1515/9783839465707; Bernardo Kastrup, *The Idea of the World: A Multi-Disciplinary Argument for the Mental Nature of Reality* (Winchester, Washington D.C.: Iff Books, 2019).

FROM NOUS TO COSMOS - THE SCIENTIFIC REVOLUTION

The dominant underlying world view of science is constantly changing. We call such a world view in the philosophy of science an ontology. This ontology determines what we consider real, existing and, therefore, a potential subject of our scientific study of the world.[18] This scientific world view has changed tremendously over the past millennia. It has determined which questions would make sense to ask (we call that epistemology, or the "what can we know") and the means of investigating these questions and coming to definitive answers. The latter we call methodology or the "how can we know." Together ontology, epistemology and methodology form the scientific trinity. Ontology determines what exists, epistemology is concerned with the questions that we can ask within this ontology, and methodology determines the tools and strategies that can be employed to answer our questions. If the ontology changes, so do the others.

The fundamental socio-scientific ontologies have changed and are under constant revision. An excellent example is the question of the location of planet Earth – the transition from the geocentric to the heliocentric model.[19] According to early theological accounts, the earth was distinguished from the heaven in a biblical fashion. The firmament was seen as a cupola that would exhibit the most beautiful effects. When the sun was wandering across the sky, it was hard to get to the nature of this cupola, but at night things became clearer. Small pinholes appeared, the stars. These pinholes gave a glimpse behind the curtain. Through the pinholes humans could see the light of God and behind the cupola the world of man gave way to the world of spirit. This world was inhabited by the celestial creatures, the thrones, and powers, by the seraphim and cherubim, the angels and archangels and by God the almighty creator (see Figure 2). Formulated by the Alexandrian astronomer and mathematician Ptolemy about 150 CE, the Ptolemaic world view placed the earth firmly in the center of the universe. Surrounding it were revolving spheres that would explain the linear

18 Thomas Hofweber, "Logic and Ontology," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta and Uri Nodelman, Spring 2023 (Metaphysics Research Lab, Stanford University, 2023), https://plato.stanford.edu/archives/spr2023/entries/logic-ontology/.

19 Bernard R. Goldstein, "Copernicus and the Origin of His Heliocentric System," *Journal for the History of Astronomy* 33, no. 3 (August 1, 2002): 219–35, https://doi.org/10.1177/002182860203300301.

motions of stars and planets. This world view, which came to be known as the geocentric system, would dominate the sciences as well as religion and society up until the 1600s.

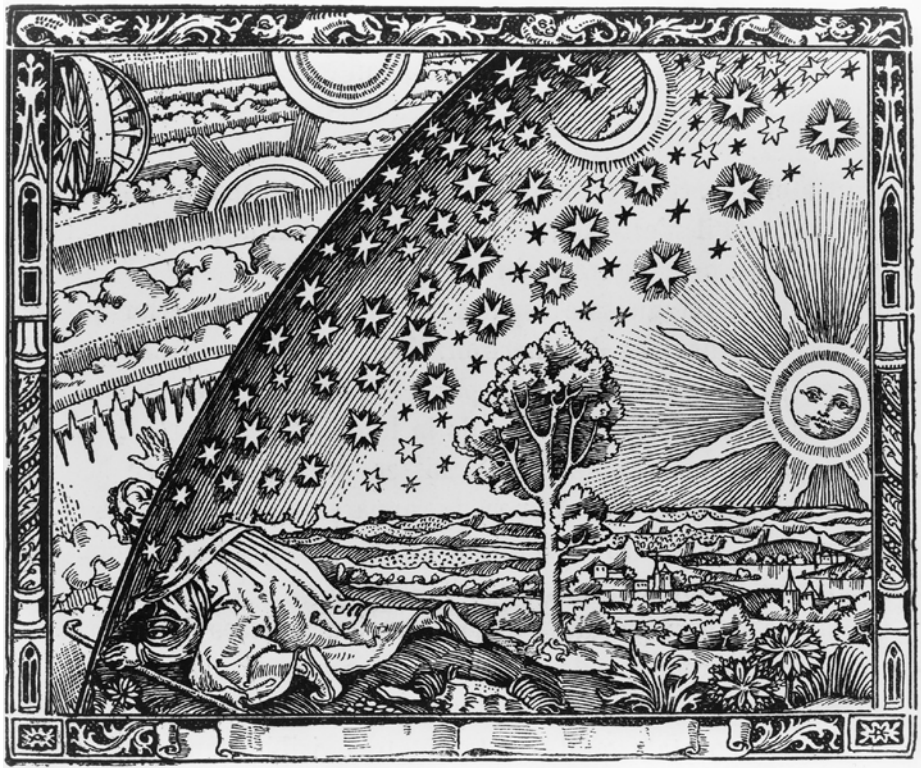

Figure 2: Camille Flammarion's 1888 book L'atmosphère: météorologie populaire ("The Atmosphere: Popular Meteorology")

Flammarion, a nineteenth to twentieth century astronomer, recounts the tale of a missionary who on his travels to the edge of the world finds a hole in where the firmament touches the earth. When peeking through the hole, the missionary encounters the spiritual realm (see Figure 2). The illustration, which was found in later editions of his book *L'atmosphère: météorologie populaire* (1888), was likely made upon instruction by Flammarion. Flammarion, a scientist of great repute, nevertheless was intrigued by the scientific study of paranormal phenomena. The depiction of the monk, if indeed based on his instructions, shows on the one side the material realm and on the other the metaphysical. The material realm knows mountains, plants, cities, and celestial bodies. The metaphysical realm is represented by the different spheres or

heavens, the metaphysical or principal representations of the celestial bodies and a multidimensional wheel that represents the *ophanim* or Thrones, one of the highest order of angels. The depiction carries an interpretation that is particularly relevant for a discussion of meta-science in this book and for scientism in this chapter, namely that of a separation of the metaphysical from the physical realm and a subsequent rejection of the metaphysical as irrelevant because inaccessible.

However, it is evident the metaphysical was thought to be foundational to the physical in the view of pre-Enlightenment philosophy. Pre-Socratic philosopher Anaxagoras differentiated between *nous* and *cosmos*. In cosmos he saw the realm of matter that can be infinitely divided, whereas in nous he saw the indivisible, infinite and self-ruled.[20] While nous and cosmos where of a different nature, they were inextricably linked. Nous, while not being mixed with cosmos, represents the first principle.[21] Aristotle understood it as the mind/intellect partaking in God: "For the actuality of thought is life, and God is that actuality; and the essential actuality of God is life most good and eternal."[22] In Aristotle's view, which remained in essence part of pre-Enlightenment, Western philosophy and theology, it is through the mind that we partake in the nous that is God. Moving into the twelfth century AD, Aquinas argues that through reason we can access the natural law, which is nature partaking in eternal law.[23]

The complex and fundamental interaction between scientific ontology and social ontology must not be underestimated. The historical accounts of the scientific discovery that the earth revolves around the sun and not the other way around are most often told from an anachronistic perspective. This perspective portrays the church as the carriers of religious dogma and superstition that stood in the way of "real science." These accounts tend to ignore that theology

20 "Anaxagoras: Nous," accessed March 20, 2023, https://www.ellopos.net/elpenor/greek-texts/ancient-greece/anaxagoras-nous.asp.

21 "For it is the thinnest of all things and the purest, and it has all knowledge about everything and the greatest strength; and Nous has power over all things, both greater and smaller, that have <soul>. And Nous had power over the whole revolution, so that it began to revolve in the beginning." "Anaxagoras."

22 "Aristotle, Metaphysics, Book 12, Section 1072b."

23 James Fieser, "The Logic of Natural Law in Aquinas's 'Treatise on Law,'" *Journal of Philosophical Research* 17 (1992): 147–64.

was until the early modern era considered the queen of science.[24] Many of the great Western philosophers of the post-Socratic era, such as Saint Augustine and Saint Aquinas, had been church fathers as well as philosophers. Thus, when Nicolai Copernicus' six books *De revolutionibus orbium coelestium - On the Revolutions of the Heavenly Spheres* were published in 1543 in Nuremberg, a friend of Copernicus, the Lutheran theologian Andreas Osiander, accompanied the books with an anonymous foreword. The foreword stated that the book should be viewed as mathematical thought experiment and hypothesis rather than a statement of truth.[25] After all, the claims Copernicus made were considered in contradiction with the prevalent Ptolemaian scientific model that seemed to confirm the Old Testament. By no means did Copernicus cause his contemporary scientists to throw overboard their scientific convictions. As Thomas S. Kuhn described in *The Structure of Scientific Revolution,* the hypotheses of Copernicus initially did not produce better or more accurate results. And most of his contemporary scholars disagreed with his hypotheses.[26] It took a hundred years and the fearless work of Galileo Galilei, Giordano Bruno, Johannes Kepler and ultimately Isaac Newton as well as many names of lesser fame to bring about the paradigmatic shift that would capture the whole of the sciences and eventually also permeate society and religion. This shift became known as the scientific revolution in the period of Enlightenment.

As in any revolution, its children have little love left for the ideology and thoughts that came before. Therefore, it is of little surprise that history would term the period of the emergence of rationalism, materialism and the scientific method as Enlightenment period. It is as if before then, humanity lived in utter darkness, devoid of reason in a state of superstition haunted by spirits and an unknowable, impersonal creator God. Enlightenment and humanism meant that finally it was possible to reconceive of nature and of the role of humans in it. If the earth is not in the center of creation, it was only fair to ask whether God placed the human on the apex of His creation or whether humanity got there by

24 Avihu Zakai, "The Rise of Modern Science and the Decline of Theology as the 'Queen of Sciences' in the Early Modern Era," *Reformation & Renaissance Review* 9, no. 2 (May 1, 2007): 125–52, https://doi.org/10.1558/rrr.v9i2.125.

25 Malcolm Oster, *Science in Europe, 1500-1800: A Primary Sources Reader* (New York: Bloomsbury Publishing, 2020), 28.

26 Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996), 68.

its own devices. Was there even a God to speak of? The revolution that Copernicus had triggered bore one specific trade; it was a revolution of what observations where valid and how to draw conclusions from it. The ontology of this scientific revolution determined that empirical, independently verifiable observations mark the reality of things. In terms of possible questions to be asked, the epistemology, this world view meant that questions could only be reasonably answered if they were built on a firm empiricism (i.e., empirical quantification, calculation and measurement), with statistical methods at their core. This marked a tremendous shift away from a God-given spiritual universe. The individual spiritual experiences of saints and prophets, their revelations and ultimately the most mysterious of all books, the Bible and its revelation, could no longer be at the fundament of knowledge. The methodology of being able to empirically measure, quantify, calculate, and subsequently predict observations to infer conclusions about the nature of the world had taken precedence over God's word as written in the Bible. Nature as creation of God became readable in its own right, a turn in science that was initiated Kepler and Galilei.[27] And with it spread a sense of liberation from a dependence on the church and its authorities. It was no longer up to a select few that could see behind the veil of reality to determine what existed. The scientific revolution in many ways could be seen as a sort of democratization of our empirical experiences and their interpretation. The human suddenly stood in the center of human endeavors where once God had stood. This humanism was paired with a new materialism. And since the empirical, quantitative methods of physics proved to be excellent in explaining the material realm, in the nineteenth and twentieth century the social sciences too would adopt the methods of the hard sciences, in an attempt to emulate the scientific rigor of their older siblings. But with that same motion, the social sciences also reduced their ability to see behind the veil of the material.

THE ONSET OF MATERIAL REDUCTIONISM

One of the greatest minds behind the scientific revolution was Francis Bacon. In his *Novum Organum* (New Organon), the second part of the *Instauratio Magna*

27 Edmund Husserl, *Die Krisis Der Europäischen Wissenschaften Und Die Transzendentale Phänomenologie*, Husserliana - Ergänzungsband Texte Aus Dem Nachlass 1934—1937, VI (Dordrecht: Springer, 1993), https://link.springer.com/book/9780792313076.

of 1620, he laid the foundation of the modern scientific and the experimental method. At its core, the scientific method is the intentional reproduction of effects observed with the aim to establish a hypothesis about the underlying causes and effects. This hypothesis of cause and effect can then be further deconstructed into smaller elements and subsequently studied again empirically through experimentation.

> There remains but mere experience, which, when it offers itself, is called chance; when it is sought after, experiment. But this kind of experience is nothing but a loose fagot; and mere groping in the dark, as men at night try all means of discovering the right road, while it would be better and more prudent either to wait for day, or procure a light, and then proceed. On the contrary, the real order of experience begins by setting up a light, and then shows the road by it, commencing with a regulated and digested, not a misplaced and vague course of experiment, and thence deducing axioms, and from those axioms new experiments: for not even the Divine Word proceeded to operate on the general mass of things without due order.[28]

Francis Bacon, who ironically did not support the ideas of Copernicus and Kepler and was an avid believer in the geocentric system, established his idea of the method of experimentation to break out from the eternal debates of scholars that would rather discuss the subject of their study than actually test the truth value of their axioms against reality. In doing so, however, Bacon firmly placed material observation and hence measurable and observable matter at the center of scientific inquiry. He thereby further embedded in the scientific belief-system what I term here the "science of things." Up until that point, namely, the world and its sciences where for most of their parts always an issue that involved both nature and its meaning in the larger context of creation. In essence, with every new discovery, one needed to wonder what different or new meaning and intention God had behind creating the universe as it presented itself. The *what* was inextricably linked to the *why*. Equally, in the context of the evolution theory, *Naturphilosophen* like Lamarck, Chambers, Spencer, and others saw the evolution of species as a goal-directed process. The

28 Francis Bacon, *Novum Organum*, ed. Joseph Devey (New York: Collier, 1902), 60, http://archive.org/details/baconsnovumorganoobacouoft.

very idea of evolution of man, flora and fauna must have sprung from an intelligent creator's mind.[29]

In 1883, Friedrich Nietzsche published the first of four volumes of *Thus Spoke Zarathustra.* In it he defended the nihilist theory that God and with it all metaphysics are dead. Metaphysics represented to him the dusk of Western philosophy that would rather philosophize about truths and realities than take empirical reality as starting point. According to Nietzsche, traditional metaphysics, which posits the existence of absolute and transcendent truths, is based on a flawed logic that objective knowledge is possible and that it seeks to impose order on a chaotic and meaningless world.[30] In *Gay Science* he argues that "[t]he total character of the world [...] is in all eternity chaos—in the sense not of a lack of necessity but a lack of order, arrangement, form, beauty, wisdom, and whatever other names there are for our aesthetic anthropomorphisms."[31] He also argues that we should "face [...] up to the beautiful chaos of existence and den[y] it all providential reason and goodness."[32]

Charles Darwin represented a similar rejection of the metaphysical and divine when he formulated the concept of natural selection by the laws of variation in his landmark publication *The Origin of Species*.[33] Gripped by a similar frustration with the previous epochs' blind belief in a literal biblical creation, which was also at the heart of Nietzsche's argument, he proclaimed with a view to a creator God:

> To admit this view is, as it seems to me, to reject a real for an unreal, or at least for an unknown, cause. It makes the works of God a mere mockery and deception; I would almost as soon believe with the old and ignorant

29 Kuhn, *The Structure of Scientific Revolutions*, 171.

30 Christoph Cox, *Nietzsche - Naturalism and Interpretation* (Berkeley, Los Angeles, Oxford: University of California Press, 1999), 206, http://ark.cdlib.org/ark:/13030/ft5xonb3sz/.

31 Friedrich Wilhelm Nietzsche, *Die fröhliche Wissenschaft ("la gaya Scienza"),* (Leipzig: E. W. Fritzsch, 1887), para. 109, http://archive.org/details/bub_gb_s5QvAAAAYAAJ_2.

32 Nietzsche, para. 277.

33 Charles Darwin, *On the Origin of Species by Means of Natural Selection, Or, The Preservation of Favoured Races in the Struggle for Life* (London: John Murray, 1859).

> cosmogonists, that fossil shells had never lived, but had been created in stone so as to mock the shells now living on the sea-shore.[34]

In response, Henri Bergson tried to put forward arguments and reasons for why scientific reductionism and a mechanistic ontology are incapable of understanding the complexity of life and evolution. Rather than for a mechanistic evolution, Bergson argued for a *Creative Evolution* in the 1907 book bearing the same title.[35] At the core of his theory is the argument that Darwin and others do not explain *why* life is evolving through variation, failing to grasp the connection between generations of species. To Bergson this indicates a deeper metaphysical drive at play that, rather than distinguishing between individual lives, concerns life as a whole – "a consciousness without being itself an individual consciousness" that creatively evolves.[36] As such, evolution is tightly related to consciousness, which in part is composed of intellect and instinct. Intellect evolved to navigate the material mechanistic world, hence its proclivity to reduce life to the material cause and effect reasoning. Instinct evolved to intuit life (as a whole). As intellect evolved out of life, it is incapable of grasping the larger concept that is life and its evolution (similar to the Penrose-Lucas argument inspired by Gödel).[37]

Bergson's ideas came too late. The Zeitgeist of modern science had evolved away from metaphysical explanations. Kant had already forcefully put forward that both practical and pure reason are incapable of accessing and elucidating the metaphysical without becoming speculative. With Nietzsche, Western philosophy and science had sufficient grounds to leave behind dusty ideas about metaphysics and concentrate on the physical and the logical alone. The dominant philosophical streams that would follow accompanied the ascent of modern science in the first half of the twentieth century; Neo-positivism and Scientific Reductionism would follow this path further. Neurath describes its logic as "characterized by the reduction through logical analysis of the meaning of sentences to the simplest statements about something empirical. Scientific

34 Darwin, 167.

35 Henri Bergson and Elizabeth Grosz, *Creative Evolution*, trans. Donald Landes, 1st edition (Abingdon, New York: Routledge, 2022).

36 Bergson and Grosz, chap. 1.

37 Roger Penrose, *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics*, Oxford Landmark Science (Oxford, New York: Oxford University Press, 2016).

knowledge thus derives from experience which in turn rests on what is immediately given. From this point of view, metaphysics and apriorism are rejected since both lack the necessary basis in the experience of positively given empirical objects and states of affairs."[38]

Together these streams of thought perpetuated and propagated a mechanistic view of the universe, one that is still prevailing. Contemporary philosophy of science borrows heavily from computer technology. The brain has been (inadequately) described as a computer with the neurons being transistors and the networks of neurons being emulated by digital neural nets – questions arise whether we live in a simulation[39] – and consciousness is reduced to computing functions, while AI and sentience are being discussed as if consciousness is a matter of complexity of intelligence. This trend is not dissimilar to the trend of the time following the Enlightenment. The ideas emerging around the Industrial Revolution described the body as an engine with food being the fuel, etc. And mechanical marvels like the Mechanical Turk inspired the popular imagination. It then comes as little surprise that the world view adopted in this period is a mechanistic one that reduces life and consciousness to causally intertwined sub-components. Their complexity is formed by trial and error alone and result in the desired function by coincidence and eradication of false paths.

The essence of this revolution would place dead matter and anonymous processes without meaning or providence, i.e., a mechanistic view of the universe, in the core of its ontology. The science of meaning became a separate domain that would later be found in the social sciences and humanities, and the science of things would become the hard sciences of Sciences with a capital S.

CONCLUSION: META-SCIENCE AND MEANING

As illustrated above, the disciplines themselves as well as science are in constant transitions from one foundational ontological framework to another. Particularly the period of the past two to three centuries has been dominated by a mechanistic and materialists ontology. Nevertheless, questions of the nature of consciousness and whether it is caused by or the cause of matter,

38 Gerard Delanty and Piet Strydom, *Philosophies of Social Science: The Classic and Contemporary Readings* (Open University, 2003), 18.

39 Nick Bostrom, "Are We Living in a Computer Simulation?" *The Philosophical Quarterly* 53, no. 211 (April 1, 2003): 243–55, https://doi.org/10.1111/1467-9213.00309.

throughout this whole period, have come up in different disciplines, be it philosophy, psychology, neuroscience, physics and more. In order to make discourses surrounding metaphysical concepts such as the soul palpable to the ontological framework that is materialism, scientists and philosophers have come up with different terms such as mind, cognition, consciousness, sentience etc. To some degree it is then surprising that the discipline connected the most with the material universe, namely physics, is involved in generating ideas concerning consciousness (e.g., panpsychism, dual-aspect monism, etc.).[40] Objective meaning, however, cannot be derived from insights from physics, as the methods of the intellect, as Bergson has indicated, are able only to dissect life but not to contemplate it as a whole. We can, however, see a trend in all disciplines towards a new idealism, a search for meaning and an understanding of a universe that is more complex than a materialist and mechanist world view allows us to comprehend.[41]

If indeed there is such a connection between matter and consciousness, as we have seen in the philosophies of the past three centuries as well as in the onset of modern quantum physics, then central to all human mental endeavors needs to be the question of meaning. As illustrated above, the assignment of meaning to our sensory inputs, although apparently automatic, is not benign. The mind associates and makes sense of sensory inputs and places the observer in a relationship with the observed. Ontological philosophies that see mind and matter as dual aspects of a psycho-physically neutral subsequently must depart from the assumption that meaning that derives from the archetypal realm is primordial and universal, rather than merely projected and individual. A similar such observation was made by Carl Gustav Jung in his exchange with Wolfgang Pauli on the nature of synchronicities and archetypes.[42] Synchronicities represent events that are connected in time and space not by causation but by meaning. Such synchronicities cluster around archetypical meanings that are

40 David J. Chalmers, "Panpsychism and Panprotopsychism," in *Consciousness in the Physical World: Perspectives on Russellian Monism*, ed. Torin Alter and Yujin Nagasawa (Oxford: Oxford University Press, 2015), 246–76.

41 Kastrup, *The Idea of the World*; Penrose, *The Emperor's New Mind*; Wendt, *Quantum Mind and Social Science*.

42 Carl Gustav Jung and Wolfgang Pauli, *The Interpretation of Nature and the Psyche Synchronicity: An Acausal Connecting Principle* (New York: Pantheon Books, 1955), http://archive.org/details/x-the-interpretation-of-nature-and-the-psyche.

at the same time immanent and transcendent. Given this shift towards a new ontological framework that gives consciousness/mind an important role in comprehending and interacting with the material, it might come as no surprise that in our understanding the foundational idea of meta-science must be the search for objective, collective, and subjective meaning.

We see this question for meaning returning also in the disciplines: in the early and modern quantum physics through synchronicity and the observer problem; in biology and neuroscience meaning is present when it comes to cognition; psychology and the other social sciences deal with questions of meaning in manyfold ways, not least within the theoretical framework of social constructivism. Finally, the most obvious candidates for the interpretation of subjective, collective and objective meanings are the sciences of the mind and the humanities (see Figure 3 and 4). Meaning is everywhere in the disciplines.

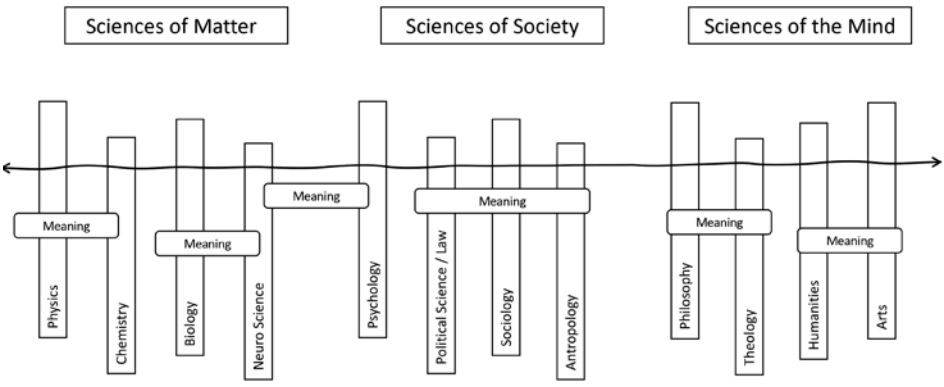

Figure 3: Locus of Meaning in the Disciplines

With Bergson the meaning of life takes on the nature of a collective consciousness that aims to move forward through the life impulse or *élan vital*. In addition to Bergson's view, Viktor Frankl theorizes the need of the soul for individual meaning. Where in his view psychotherapy has the intention to heal the soul (*seelische Heilung*), it also affects salvation (*Seelenheil*). In other words, the immanent treatment of the soul also has transcendent effect. Likewise, Frankl's view of religion as meaning-giving framework intends salvation but has immanent effect on the well-being of the soul as well.[43] Whereas in Bergson's

43 Viktor E. Frankl, *Der Mensch Auf Der Suche Nach Sinn: Zur Rehumanisierung Der Psychotherapie* (Freiburg im Breisgau, Basel, Vienna: Herder, 1976), 73.

view the locus of meaning is predominantly found in a metaphysical *abstractum*, to Frankl a lack of meaning in society leads in the individual to desperation and depression as it cannot find fulfillment in the material domain only.[44] A similar view of such a crisis of meaning was put forward by C. G. Jung during the interwar period, in 1933. His view of the shortcomings of the materialist disenchantment that preceded the Second World War rings eerily familiar to modern day's ears:

> The modern man has lost all the metaphysical certainties of his mediaeval brother and set up in their place the ideals of material security, general welfare and humaneness. But it takes more than an ordinary dose of optimism to make it appear that these ideals are still unshaken. Material security, even, has gone by the board, for the modern man begins to see that every step in material "progress" adds just so much force to the threat of a more stupendous catastrophe.[45]

Saint Augustine, considering the meaning of human nature, saw humanity on a pilgrimage from the *Civitas Terrena* (the earthly city) towards the *Civitas Dei* (the city of God). This pilgrimage would lead to universal peace (*pax universalis)*, an individual and collective, immanent and transcendent peace.[46] From the perspective of a convergent cosmogenesis, Teilhard de Chardin pinpoints God's universal consciousness as the drive behind evolution at the core of the

44 Viktor E. Frankl, *Pathologie Des Zeitgeistes: Rundfunkvorträge Über Seelenheilkunde* (Vienna: Deuticke, 1955).

45 Carl Gustav Jung, *Modern Man In Search Of A Soul* (London: Kegan Paul, Trench, Trubner & Co, 1933), 235–36, http://archive.org/details/in.ernet.dli.2015.218430.

46 "The peace of body and soul is the well-ordered and harmonious life and health of the living creature. Peace between man and God is the well-ordered obedience of faith to eternal law. Peace between man and man is well-ordered concord. Domestic peace is the well-ordered concord between those of the family who rule and those who obey. Civil peace is a similar concord among the citizens. The peace of the celestial city is the perfectly ordered and harmonious enjoyment of God, and of one another in God." - Augustine of Hippo, *The City of God*, trans. Marcus Dods, ebook, iBooks edition (Wyatt North Publishing, 2012); Michael Hoelzl and Andrej Zwitter, "The Augustinian Legacy of Divine Peace and Earthly War," in *Peace and War - Historical, Philosophical, and Anthropological Perspectives*, ed. W. John Morgan and Alexandre Guilherme (New York: Palgrave Macmillan, 2020), 49–70, https://doi.org/10.1007/978-3-030-48671-6.

beginning (the Alpha),[47] individual consciousness and its self-reflexivity on the path and ultimately Christ's consciousness and the culmination of all consciousness at the end (a hypothesized Omega Point).[48]

Short of drawing such conclusions, it is clear that meta-science also needs to deal with the question of meaning. Meta-scientific meaning, what we can distill from above, therefore has the potential to be individual, collective, universal, imminent, and transcendent. Either of these criteria might be applicable, or even all, depending on the meaning that is sought. Meaning is, therefore, the great unifying principle in the disciplines, as it transcends the *what* and points it towards the *why* (see Figure 4). In the contemporary crisis of meaning experienced both collectively as well as individually, it becomes apparent that such seemingly abstract notions of metaphysics, consciousness and soul have immense practical importance. There are no contemporary concepts, such as Sustainable Development Goals (SDGs), human rights, or democracy and freedom, that can satisfyingly fill the void created by this crisis. A solution requires a renewed understanding of why we are here; what our individual purpose in relation to our collective direction is, and what our relationship with the planet and its manifold inhabitants should be.

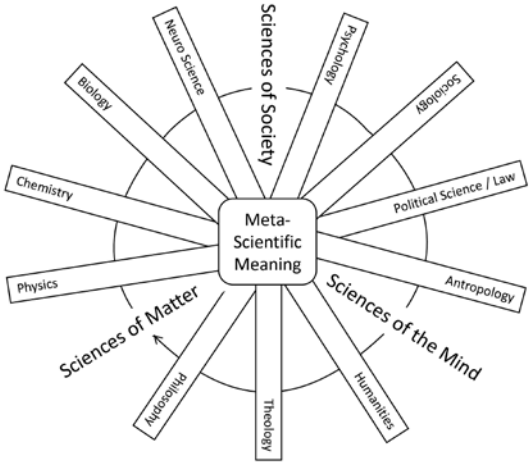

Figure 4: Meaning as central to all disciplines.

47 Pierre Teilhard de Chardin, *Christianity and Evolution* (New York: Harcourt Brace Jovanovich, 1971), 237–43, http://archive.org/details/christianityevoloooteil.

48 Pierre Teilhard de Chardin, *The Appearance of Man* (New York: Harper & Row, 1965), 248, 271–73, http://archive.org/details/appearanceofmanooooteil.

BIBLIOGRAPHY

"Anaxagoras: Nous." Accessed March 20, 2023. https://www.ellopos.net/elpenor/greek-texts/ancient-greece/anaxagoras-nous.asp.

Aristotle. *Nicomachean Ethics*. Translated by Roger Crisp. Cambridge: Cambridge University Press, 2000.

"Aristotle, Metaphysics, Book 12, Section 1072b." Accessed March 20, 2023. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:abo:tlg,0086,025:12:1072b.

Atmanspacher, Harald. "Dual-Aspect Monism a La Pauli and Jung." *Journal of Consciousness Studies* 19, no. 9–10 (January 1, 2012): 96–120.

Atmanspacher, Harald, and Dean Rickles. *Dual-Aspect Monism and the Deep Structure of Meaning*. Abingdon, New York: Routledge, 2022.

Augustine of Hippo. *The City of God*. Translated by Marcus Dods. Ebook, IBooks edition. Wyatt North Publishing, 2012.

Bacon, Francis. *Novum Organum*. Edited by Joseph Devey. New York: Collier, 1902. http://archive.org/details/baconsnovumorgan00bacouoft.

Bergson, Henri, and Elizabeth Grosz. *Creative Evolution*. Translated by Donald Landes. 1st edition. Abingdon, New York: Routledge, 2022.

Bostrom, Nick. "Are We Living in a Computer Simulation?" *The Philosophical Quarterly* 53, no. 211 (April 1, 2003): 243–55. https://doi.org/10.1111/1467-9213.00309.

Chalmers, David J. "Panpsychism and Panprotopsychism." In *Consciousness in the Physical World: Perspectives on Russellian Monism*, edited by Torin Alter and Yujin Nagasawa, 246–76. Oxford: Oxford University Press, 2015.

"Condemnations of 1210–1277." In *Wikipedia*, March 12, 2023. https://en.wikipedia.org/w/index.php?title=Condemnations_of_1210%E2%80%931277&oldid=1144247507.

Cox, Christoph. *Nietzsche - Naturalism and Interpretation*. Berkeley, Los Angeles, Oxford: University of California Press, 1999. http://ark.cdlib.org/ark:/13030/ft5x0nb3sz/.

Darwin, Charles. *On the Origin of Species by Means of Natural Selection, Or, The Preservation of Favoured Races in the Struggle for Life*. London: John Murray, 1859.

Delanty, Gerard, and Piet Strydom. *Philosophies of Social Science: The Classic and Contemporary Readings*. Open University, 2003.

Fieser, James. "The Logic of Natural Law in Aquinas's 'Treatise on Law.'" *Journal of Philosophical Research* 17 (1992): 147–64.

Foucault, Michel. *Discipline & Punish: The Birth of the Prison.* New York: Vintage, 1995.

Frankl, Viktor E. *Der Mensch Auf Der Suche Nach Sinn: Zur Rehumanisierung Der Psychotherapie*. Freiburg im Breisgau, Basel, Vienna: Herder, 1976.

Frankl, Viktor E. *Pathologie Des Zeitgeistes: Rundfunkvorträge Über Seelenheilkunde*. Vienna: Deuticke, 1955.

Gabriel, Markus, Christoph Horn, Anna Katsman, Wilhelm Krull, Anna Luisa Lippold, Corine Pelluchon, and Ingo Venzke. *Towards a New Enlightenment - The Case for Future-Oriented Humanities*. transcript Verlag, 2022. https://doi.org/10.1515/9783839465707.

Goldstein, Bernard R. "Copernicus and the Origin of His Heliocentric System." *Journal for the History of Astronomy* 33, no. 3 (August 1, 2002): 219–35. https://doi.org/10.1177/002182860203300301.

Hagoort, Peter. "The Meaning-Making Mechanism(s) Behind the Eyes and Between the Ears." *Philosophical Transactions of the Royal Society B: Biological Sciences* 375, no. 1791 (December 16, 2019): 20190301. https://doi.org/10.1098/rstb.2019.0301.

"History of Neuroscience." In *Wikipedia*, March 23, 2023. https://en.wikipedia.org/w/index.php?title=History_of_neuroscience&oldid=1146241618.

"History of Psychology." In *Wikipedia*, March 26, 2023. https://en.wikipedia.org/w/index.php?title=History_of_psychology&oldid=1146757485.

Hoelzl, Michael, and Andrej Zwitter. "The Augustinian Legacy of Divine Peace and Earthly War." In *Peace and War - Historical, Philosophical, and Anthropological Perspectives*, edited by W. John Morgan and Alexandre Guilherme, 49–70. New York: Palgrave Macmillan, 2020. https://doi.org/10.1007/978-3-030-48671-6.

Hofweber, Thomas. "Logic and Ontology." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta and Uri Nodelman, Spring 2023. Metaphysics Research Lab, Stanford University, 2023. https://plato.stanford.edu/archives/spr2023/entries/logic-ontology/.

Husserl, Edmund. *Die Krisis Der Europäischen Wissenschaften Und Die Transzendentale Phänomenologie*. Husserliana - Ergänzungsband Texte Aus Dem Nachlass 1934—1937, VI. Dordrecht: Springer, 1993. https://link.springer.com/book/9780792313076.

Jung, Carl Gustav. *Modern Man In Search Of A Soul*. London: Kegan Paul, Trench, Trubner & Co, 1933. http://archive.org/details/in.ernet.dli.2015.218430.

Jung, Carl Gustav, and Wolfgang Pauli. *The Interpretation of Nature and the Psyche Synchronicity: An Acausal Connecting Principle*. New York: Pantheon Books, 1955. http://archive.org/details/x-the-interpretation-of-nature-and-the-psyche.

Kastrup, Bernardo. *The Idea of the World: A Multi-Disciplinary Argument for the Mental Nature of Reality*. Winchester, Washington: Iff Books, 2019.

Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 3rd ed. Chicago: University of Chicago Press, 1996.

Nelson, Adrian David. *Origins of Consciousness: How the Search to Understand the Nature of Consciousness Is Leading to a New View of Reality*. Nottingham: Lulu.com, 2015.

Nietzsche, Friedrich Wilhelm. *Die fröhliche Wissenschaft ("la gaya Scienza")*. Leipzig: E. W. Fritzsch, 1887. http://archive.org/details/bub_gb_s5QvAAAAYAAJ_2.

Oster, Malcolm. *Science in Europe, 1500-1800: A Primary Sources Reader*. New York: Bloomsbury Publishing, 2020.

Penrose, Roger. *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics*. Oxford Landmark Science. Oxford, New York: Oxford University Press, 2016.

Rosenhan, D. L. "On Being Sane in Insane Places." *Science* 179, no. 4070 (January 19, 1973): 250–58. https://doi.org/10.1126/science.179.4070.250.

Schlesinger, Arthur M. "The Lost Meaning of 'The Pursuit of Happiness.'" *The William and Mary Quarterly* 21, no. 3 (1964): 326–27. https://doi.org/10.2307/1918449.

"Sociology | Definition, History, Examples, & Facts | Britannica." Accessed March 28, 2023. https://www.britannica.com/topic/sociology.

Teilhard de Chardin, Pierre. *Christianity and Evolution*. New York: Harcourt Brace Jovanovich, 1971. http://archive.org/details/christianityevol0000teil.

Teilhard de Chardin, Pierre. *The Appearance of Man*. New York: Harper & Row, 1965. http://archive.org/details/appearanceofman0000teil.

Wendt, Alexander. *Quantum Mind and Social Science: Unifying Physical and Social Ontology*. Cambridge: Cambridge University Press, 2015. https://doi.org/10.1017/CBO9781316005163.

Zakai, Avihu. "The Rise of Modern Science and the Decline of Theology as the 'Queen of Sciences' in the Early Modern Era." *Reformation & Renaissance Review* 9, no. 2 (May 1, 2007): 125–52. https://doi.org/10.1558/rrr.v9i2.125.

2
FROM INCAPABILITY TO WE-TURN

YASUO DEGUCHI

INTRODUCTION

This chapter aims to propose a philosophical view called *We-turn* as a trial of meta-science. The We-turn is the assertion that the subject or unit of important matters or values, such as doer of somatic action, self, responsibility, rights, and freedom, should shift from an individual "I" to a multi-agent system "We" that includes the "I."

THE INCAPABILITY OF SINGLE ACTION

Let us first claim that a human individual or "I" has, at least, two fundamental and universal incapabilities, i.e., those of single action and of full control of other agents. More precisely, the first thesis, i.e., that of the incapability of single action, says that an individual "I" cannot perform any somatic action

alone, without the affording of a multi-agent system. The second thesis, i.e., that of the incapability of full control, states that an individual "I" cannot fully control any other agents that are resources for its own somatic action. Among those two theses, this chapter will concentrate on the first one. Let us show how the first thesis can be asserted.

A human individual or "I" has many fundamental and universal incapabilities or things he or she cannot do *in principle*. For instance, "I" cannot fly like a bird, nor live forever. On top of that, let us add our observation on the human condition, i.e., fundamental and universal incapability of single action or the fact that "I" can't do anything alone, without affordance by a system that consists of numerous and various agents.[1]

It's obviously the case that an individual or "I" cannot do a lot of things alone. There are many actions that cannot be performed by a single individual agent. Among them are so-called joint or collective actions, in which more than two persons should participate, e.g., a team sports play and a chorus. Needless to say, "I" can't play a baseball game and sing in a chorus alone. But are there also numerous "single actions" that can be done by an individual person? For instance, it *appears* that you run and sing solo on your own. Really, would it? We claim that even so-called single actions cannot be done by any single individual. Let us examine the example of cycling, which *seems* to be a single action.

A smooth and successful carrying out of riding a single-seater bicycle requires the proper operations of the bicycle, the construction, and maintenance of roads, signaling systems, and other traffic infrastructures, the invention, manufacture, and distribution of bicycles, the appropriate oxygen levels in the air, the atmospheric pressure, the gravity field, etc. For it, alongside the intention and action of "I," assistance, support, or affordance (whether intentional, unintentional, counter-intentional, or non-intentional) by various agents (intentional actors or causal effectors), such as humans, other organisms,

1 J. J. Gibson, "The theory of affordances" in *Percieving, Acting, and Knowing: Toward an Ecological Psychology*, edited by R. Shaw & J. Bransford (Hillsdale: Erlbaum, 1977). The term 'affordance' was introduced by J.J. Gibson to environmental psychology. He defined it as "what it [the environment] offers animals, what it provides or furnishes, either for good or ill." It is also characterized an interaction between an animal and its environment. But there is a difference between the affordance mentioned here and the Gibsonian original: the latter has to be perceived by the animal while the former not.

artifacts, inanimate objects, social entities, and environmental factors, are indispensable.[2]

It should be the case that all somatic action needs this sort of support or affordance from various agents including natural environments. So, let us make a general claim that there isn't any somatic action whatsoever that can be carried out by a single individual agent.

MULTI-AGENT SYSTEM

As argued, for any somatic action, affordance from many agents is needed. But many agents alone are not enough. To carry out any action, in addition to them, the whole system of those agents is needed.

For instance, suppose that bicycling is afforded by many agents of traffic infrastructures, but not by natural agents such as the atmospheric sphere and the gravity field. Under such circumstances, the bicycling cannot be performed successfully. What is needed is not merely the affordance of some agents that are necessary for a somatic action, but of all of those necessary agents. In other words, what is needed is the affording from agents that are necessary and sufficient for the action.

But the mere affordances from the necessary and sufficient agents are still not enough. Those affordances must be appropriately structured or coordinated in a way that makes the action possible. For instance, if the components around the bicycle tires are not well matched to the conditions of the road, smooth cycling is not possible. Thus, every part of the necessary and sufficient agents is well-structured or coordinated. In other words, unless a structure or coordination holds among all parts, a smooth execution of bicycling is impossible.

What is needed is the structure or the structured system as a whole of necessary and sufficient agents. Let us call such a structure as a multi-agent system of necessary and sufficient agents for somatic action, or simply a *multi-agent system*.[3] Whenever and wherever a somatic action is performed, a multi-agent system takes place to make it possible.

2 Due to space limitations, we cannot explain it here, but it is our position that "I" is actually not an individual or indivisible agent, but a partial multi-agent system that consists of various and many agents.

3 Any entity can be an agent and a patient at the same time. In other words, it can

Affordance for somatic actions is not an activity that each part performs separately. It is an activity performed by the multi-agent system as a whole, in which the affordances of each part are coordinated and structured. In this sense, affordance is not a local but a global activity. Let us call it as multi-agentive activity.

What is the ontological status of the multi-agent system? Like other systems such as ecosystems or traffic systems, it is an abstract entity that lacks some physical properties such as weight and color and all mental properties. Like ecosystems and traffic systems, the multi-agent system also has causal power or efficacy. The ecosystem, for instance, has a global causal efficacy to sustain many species and lives within them. Likewise, the multi-agent system has a global causal efficacy to afford a somatic action.

WE-TURN OF DOER

Then let us proceed to the first We-turn, that is, the We-turn of the doer or the subject of somatic action. This We-turn presupposes, among others, *doer-externalism*, as we call it, according to which the doer of a somatic action should *not* be always aware or conscious of his doing that action. Its anti-thesis is *doer-internalism* which says that the doer of a somatic action should be always aware or conscious of his doing it.

Let us call an agent (or doer) such as an antique wall clock, a stone or a multi-agent system that lacks a mind or consciousness and therefore can never be aware of its doing an action as an external agent (or doer). In contrast, we can call an agent such as a human that has a mind or consciousness and therefore can be aware of its doing an action as an internal agent.

Doer-externalism is a position that has been committed, more or less implicitly, by some proponents of the idea of the man-machine system. For example, Licklider, who is considered one of the fathers of the Internet, describes a type of man-machine system that he calls man-computer symbiosis as follows.

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have both agentive and patientive sides: while exercising its agency, it can react passively to another agent's agency directed to itself. Some entities are more agentive, while others more patientive. In extreme cases, some can be pure agents without any patiency, whereas others pure patients with no agency. Let us call an entity that has such a double aspect an agent/patient. Precisely speaking, the multi-agent system consists of such agents/patients.

> The resulting partnership [between human brains and computing machines] will think as no human brain has ever thought and process data in a way not approached by the information-handling machine we know today.[4]

Thus, he envisions a future in which the subject will be neither human nor computer, but a man-computer "partnership," which for him is synonymous with a system, that thinks and data-processes. Here, the man-machine system, an abstract entity that is an external agent without a mind or consciousness, is the subject of the acts of thinking and data-processing (that these are somatic actions will be discussed later). Licklider was a doer-externalist.

If you are happy with Licklider's idea and go on to take, for example, the subject or doer of a car driving as neither the driver nor the car, but a system consisting of both, then you are a doer-externalist.

Of course, you can prevent the over-inflation of subjectivity and doerhood which makes the meteorological system of a typhoon the subject of doer of storming, for example, by applying your doer-externalism only to systems that inevitably involve human somatic actions.

Next, let us introduce another assumption that the doer or the subject of somatic action should be a necessary and sufficient agent. Now suppose that there are two agents and that only two of them are necessary for the performance of a somatic action, and that they are actually involved in and therefore relevant to that action. In other words, those two are the only necessary agents for the action. Who, then, is the doer of the act? Clearly, each agent alone is not sufficient as a doer. In other words, the mere necessary agents may be a part of or share in the subject of the action, but they are not the subject as it is.

Now, take the third agent, which is unnecessary and irrelevant to the action. The unit comprising all three agents would not be a doer of the action either. The unit is a sufficient agent for the action that contains the subject of the action, but it is not the subject of the action itself. In contrast, the doer or the subject of the action should be the unit consisting of only the two necessary agents. The unit consisting of the two necessary agents, and only them, is a necessary and sufficient agent for the action. The subject of the action, the doer, must be the necessary and sufficient agent of the action.

4 J. C. R Licklider, "Man-Computer Symbiosis," *IRE Transactions on Human Factors in Electronics* 1 (March 1960): 4.

Now we are in a position to derive the We-turn of doer from the three assumptions introduced so far. First, according to the first incapability thesis, the individual "I" cannot perform any somatic action without the affordance of a multi-agent system. It was also confirmed that the multi-agent system, not individual agents including "I," is the necessary and sufficient agent of somatic action. Based on the assumption that only the necessary and sufficient agent is the doer of the action, the multi-agent system, rather than "I" and other individual agents, is the doer or the subject of the somatic action.

This means that it is the multi-agent system, first and foremost, that has the agency or the subjectivity of the somatic action. On the other hand, the multi-agent system is, as the name suggests, a system that structures and coordinates a large number of agents. The agency of somatic actions possessed by the system is divided or distributed among these numerous agents in a structured and coordinated manner. The system is a distributor of the agency of somatic action, and each agent is a distributee. This also means that each agent, including "I," as a mere necessary agent of somatic actions, is not its doer, but a partial doer, a partial subject, or a sharer of action, or only so.

MULTI-AGENT SYSTEM AS AN EXTERNAL DOER

The multi-agent system, the distributor of the agency, on the other hand, does not have any mental or psychological properties such as intention, will, consciousness, or phenomenology. It is merely an abstract entity that performs an affordance for somatic action in the form of an agency distribution. Can such an abstract entity be called a subject of action, a doer, or an actor?

As mentioned with regard to the man-machine system, as long as we adopt doer-externalism, there is no problem in regarding an abstract entity as an actor. A doer-externalist can take a multi-agent system as a doer of somatic actions as long as it is, as a result, or as a matter of fact, a necessary and sufficient agent for the affording of somatic actions.

The same is true for an individual agent who is a partial doer. From the standpoint of doer-externalism, as long as an individual agent within a multi-agent system is, in fact, participating in an action, even if it has no conscious intention or awareness of performance, it is an external partial doer. For example, in the case of bicycling, artifacts such as a bicycle and a road, and natural environments such as the atmosphere are external partial doers. Even

an intentional agent which does not intend to afford a certain action, but as a result, does so, can also be called an external partial doer.

A MULTI-AGENT SYSTEM AS "WE"

So, if we refer to such a multi-agent system by a pronoun, by which pronoun should it be called? It is a system of innumerable agents that afford the action of the "I". The "I" is also among the afforders of that action. So, the system must necessarily include "I" as one of its members. Then, the appropriate pronoun for the system should be something that contains "I." It cannot be "you," "he," "she," "it," or "they." It must be the first-person pronoun: "I" or "We."

On the other hand, the multi-agent system is the subject, not the object of action. It should be expressed by the nominative case, which represents the subject of the action, not the objective nor possessive case. So, it should be denoted by "I," not "me," "my," or "mine," or by "We," not "us," "our," or "ours."

Then, is it "I" or "We"? The answer should already be clear. What is called by "I" has only singularity, not plurality. On the other hand, a multi-agent system has those two aspects: singularity and plurality. It is plural in that it always includes more than one agent. It is also unitary and singular in that it structurally unifies these multiple agents into a single system. Simply put, it is a single system, not multiple systems.

Similarly, what is called "We" also has both singularity and plurality. It is plural in that it necessarily includes more than one member. And the fact that those multiple members can be called "We" means that they do not simply exist in pieces, but are bound together or united in some way. "We" as a unit of its members has a singularity. Thus, the multi-agent system should be called a "We" that has both singularity and plurality, rather than an "I" that has only singularity.

FROM "I DO X" TO "WE DO X"

From the above, it follows that the subject or unit of all somatic actions is not an individual agent, "I," but a system consisting of all afforders of the action, including "I," as partial doers. In other words, the subject of action or doer is a multi-agent system as "We." As far as one endorses the three assumptions, i.e., the first incapability thesis of a single action, doer-externalism, and doer as the

necessary and sufficient agent, the doer or subject of the somatic action shifts from "I" to "We." Thus, the first We-turn, that is, the We-turn of the doer, occurs.

Given the We-turn of doer, any somatic action, X, should be formulated as "We do X," rather than "I do X." The action that "We," not "I," performs is not a single action, but a collective one. The We-turn of action or doer implies that all somatic actions are, in fact, collective rather than single.

So, there should be collective actions in broader and narrower senses. In the broader sense, all somatic actions, as just argued, are collective. Some of them are also collective in the narrower sense such as team sports play and chorus.

MIND-BODY CAUSAL UNISOLABILITY

Our basic observation about the mind-body relation is that mental activity is influenced by bodily conditions *in many cases.* It is a widely accepted fact in brain pathology that brain lesions affect cognition and emotion. It is also known that changes in brain state caused by alcohol or drug intake also have a significant effect on cognition and emotion. Similarly, lesions and damage not only to the brain but also to various parts of the body have an integral and negative effect on the mind and body or psychosomatic syndromes. Even in non-pathological, healthy cases, it is widely noted that physical conditions such as those of respiration, posture, and pulse, for example, have a steady and constant influence on the mental state.[5]

By necessitating this observation about the causal unisolation of the mind from the body in many cases, let us now make the following assumptions: mental activity is always, or rather necessarily, causally influenced by somatic conditions; in other words, it is necessarily connected to the body, and there can be no mental activity that is causally separate from the body. In other words, the causal influence from the physical condition is constitutive of mental activity, and mental activity is causally unisolable from the body. So without causal influence from the body, no mental activity exist. Thus, the possibility of mental activity that is causally independent of or isolated from the bodily condition is blocked. In this sense, mental activity is embedded in the body or embodied.

The inevitable causal non-independence of mental activity from the somatic conditions means that it cannot exist without the bodily state causally affecting

5 E.g., A. Damasio, *Descartes' Error: Emotion and Reason and the Human Brain* (New York: Vintage Books, 2006, first published in 1994).

it. Whenever a certain mental activity occurs, there is always a bodily condition that exerts a certain causal influence on it. In other words, the mental activity and the somatic conditions that affect it are always and necessarily causally connected with each other. Hence, they form a single causal conglomerate; i.e., psychosomatic activity.

For a mental activity, there should be always a corresponding psychosomatic activity that includes it as a mental part. Mental activity is only a part or the tip of the iceberg of psychosomatic activity. So, it is a narrow-sightedness to describe thinking as a merely mental activity.

WE-TURN OF "MENTAL" ACTIVITY

The so-called mental activity is a part of the psychosomatic activity. And the psychosomatic activity is a sort of somatic action. As argued above, the somatic action is a part of a multi-agentive activity performed by a multi-agent system that contains not only mental and bodily agents but also artificial, natural, and social agents that lie outside the body. So, the so-called mental activity is just the tip of the iceberg; i.e., the multi-agentive activity. Taking mental thinking as psychosomatic thinking is still narrow-sighted. We should mention multi-agentive thinking rather than merely mental or psychosomatic thinking, for instance.

Now, as argued, the subject or doer of somatic action is a multi-agent system or a "We" rather than an individual agent "I." Therefore, the subject or doer of the psychosomatic activity or so-called mental activity is a multi-agent system or "We" rather than "I." Here is the We-turn of so-called mental activity, that is, the shift of the subject or doer of the so-called mental activity from "I" to "We." Sorry, Descartes, the proper formulation of thinking is "We think (*cogitamus*)," rather than "I think (*cogito*)."

As mentioned, it is our assumption that thinking is inevitably influenced by bodily conditions. But it is also affected by many other factors such as the opinions of others, information from mass or social media, social and cultural values, the language in terms of which it is expressed, and so on. There is no such thinking that is immune from the influences of other factors. There is no thinking that occurs in a vacuum. But many have been taking only "I" as the thinker while dismissing other factors as mere influencers to this unique thinker.

Anyway, it should be widely admitted that those influencing factors are necessary for thinking. This means that the agent "I" is also a necessary agent

for thinking, but not a sufficient one. According to our premise, a mere necessary agent cannot be the subject of bodily actions in general, including thinking, and only a necessary and sufficient agent of thinking, that is, a "We" composed of all necessary agents, can be the subject of thinking or thinker. The thinker should be a multi-agent system or "We" consisting of all necessary agents.

Of course, the multi-agent system as an abstract entity and many non-intentional agents within it are merely external agents, and thus not aware that they are thinking what "I" is thinking. However, as long as doer-externalism is adopted, these external agents can also be subjects or partial subjects of thinking.

Even if the subject of so-called mental activities such as thinking is given over to the multi-agent system as "We," the "I" still occupies a unique position among the agents that make up the system. The "I" pertains to thinking of "We" to which it belongs and always and invariably knows, in real-time, that it is pertaining to the thinking. This means that the "I" is necessarily an internal agent for the thinking. And importantly, no other agent can be a *necessary* internal agent. Only "I" is the inevitable, indispensable, or necessary internal agent of thinking. "I" has a monopoly on the status of the inevitable or necessary internal agent. "I" is a unique agent in that "I" possesses a property that no other agent possesses, that of being the necessary internal agent.

Although "I" may be the only necessary internal agent of thinking, it cannot be its subject unless it is a necessary and sufficient agent. The view that takes "I" as the subject of thinking or thinker should result from a confusion of the only necessary internal agent of thinking with the subject of thinking.

WE-TURN OF INTENTION

The same can be said for intention and decision-making. The intention is constitutive for action. Without an intention held by an intentional agent, it would be a mere activity. As with thinking, there can be no such thing as intention in a vacuum. It cannot escape the influence of various agents and factors. In other words, without a variety of agents, no intention can take place. "I" is a necessary agent of intention, but not a necessary and sufficient agent. The necessary and sufficient agent of intention is none other than the multi-agent system that is "We." An upshot is the shift of the subject of intention, or the intender, from "I" to "We," that is to say, the We-turn of intention.

The "I" is the only inevitable or necessary internal agent for the intention as well. However, even the only necessary internal agent, unless it is a necessary and sufficient agent, cannot be qualified as the subject of intention. So taking "I" as the subject of intention or the intender is merely a confusion of the only necessary internal agent of intention with its subject.

WE-TURN OF DECISION-MAKING

Decision-making, or determination, is a type of intention. This is because while decision-making is always accompanied by the intention to make a decision, it is also possible to dare to intend not to make a decision. Thus, like intention, decision-making is always under the influence of various agents and factors. The "I" is a necessary agent of decision-making, but not a necessary and sufficient agent.

On the other hand, it is as certain as ever that the "I" is the only necessary internal agent for decision-making. However, even if "I" is the only necessary internal agent, it can no longer be the subject of decision-making when it is not a necessary and sufficient agent. On the other hand, the necessary and sufficient agent of decision-making is also a multi-agent system as "We." As a result, "We decide," not "I decide," is the correct formulation of decision-making. Thus the shift of the subject of decision-making from "I" to "We," the We-turn of decision-making, occurs.

In addition to the singularity of "I"'s being the only inevitable or necessary internal agent in intention, especially in decision-making, it has another singularity that was not so much foregrounded in thinking, namely, that of being the only standing arbiter, terminator, and final decision-maker.

When thinking is taken in its broad sense that includes even vague thinking or subconscious thinking, it is a constant and steady action in so-called mental activity, like breathing. Intention, on the other hand, is incubated at a certain occasion in such a way that the previous nonintentional state is cut off and terminated. It has an abruptive and terminative nature. Of course, this termination or finality is only provisional and always revocable.

This abruption and finality of intention are more foregrounded in decision-making, which is a kind of intention. In decision-making, on a certain occasion, the undecided state of a "We" is broken off and terminated, and some sort of choice is made. The "I" is always present on the occasion where the intention or decision-making occurs, and always and inevitably plays the role of the

chooser, the terminator, and the final decision-maker who judges and terminates the previous state of affairs.

In the case of co-decision-making, which is a collaborative action in the narrow sense, other intentional agents besides "I" also play the role of judge and terminator, and final decision-maker. However, in the case of (so-called) single-decision-making, it is only "I" who plays the role of judge, terminator, and final decision-maker. In any case, if "I" does not play the role of the judge, the terminator, and the final decision-maker, there can be no intention- or decision-making in the first place. As a result, there is only "I" who is the inevitable, indispensable, and necessary judge, terminator, and final decision-maker of intentions and decisions.

Let us call the "standing" or "permanent" judge, terminator, and final decision-maker the indispensable or necessary presence on the occasion of intention- and decision-making. "I" is the only standing judge, terminator, and final decision-maker. In the case of intention and decision, as in the case of thinking, the "I" has monopolized the position of necessary internal agent. In addition, "I" also occupies the position of the standing judge, terminator, and finalizer in the case of intention- and decision-making.

Again, the "I" does not have a monopoly on the subjecthood of intention- and decision-makings. All intention-initiation and decision-making are collaborative actions in the broad sense, and the subject of these actions is "We" as a multi-agent system. In this sense, "I" cannot be the exclusive decision-maker. "I" does not have the exclusive right or power to hold intentions or to make decisions. On the other hand, however, "I" is the sole standing judge, terminator, and finalizer of intention- and decision-making.

SELF AS DOER

The question "What is the self?" is a major theme in philosophy, both ancient and modern, Eastern and Western, and various answers have been proposed to it. Some claimed the no-self thesis that the self does not exist, while others accepted the existence (in some sense) of the self. When the existence of the self is acknowledged, it is often seen as the subject or doer of some activity. In other words, to the self, the subjecthood or the nominative character that is represented as a nominative case of the personal pronoun, such as "I" or "We," is often ascribed.

For instance, the self has been taken as the subject of consciousness, awareness,

or perception. Even in such cases, opinions are divided. Take perception as an example: some claim that the self is an interferential subject that actively constructs the perception,[6] while others say that it is a minimum and non-intrusive subject that only passively witnesses the perception.[7]

The self is sometimes characterized as the subject of self-awareness, self-consciousness, or self-recognition. According to this characterization, the self is an agent that is aware or conscious of itself. If one takes such a self-consciousness view of self, opinions are still divided.

If one takes self-consciousness as constitutive, one should adopt self-internalism according to which the self is always or necessarily aware or conscious of itself, and therefore within the realm of, or internal to consciousness. Some philosophers such as Kant, Hegel, and Heidegger, even claimed that the self is nothing but self-consciousness. For those self-internalists, the self is the internal self.[8]

On the other, if one doesn't take self-consciousness as constitutive, one should adopt self-externalism according to which the self is not always or necessarily aware or conscious of itself, and therefore can be without the realm of, or external to consciousness. This means that the self can exist even when it is not aware or conscious of itself or anything else. For instance, Nietzsche and Freud took self-externalism, claiming that the self or at least one of its layers lies outside of the realm of consciousness, the flesh for the former and the unconscious for the latter.[9] For them, the self is like a silent organ, but its influence is profound and inescapable. For those self-externalists, the self is the external self.

Another subjecthood or nominative character that is often ascribed to the self is the subject of somatic action or doer. For example, in cognitive psychology,

6 E.g., I. Kant, *Kritik der reinen Vernunft* (Hamburg: Felix Meiner Verlag, 1956, first published in 1781).

7 E.g., D. Zahavi, *Self and Other: Exploring Subjectivity, Empathy, and Shame* (Oxford: Oxford University Press, 2014).

8 Kant, *Kritik der reinen Vernunft*; G. F. W. Hegel, *Phänomenologie des Geistes* (Hamburg: Felix Meiner Verlag, 1952, first published in 1807); Heidegger, *Sein und Zeit* (Tübingen: Max Niemeyer Verlag, 1979, first published in 1927).

9 F. Nietzsche, *Also Sprach Zarathustra* (Munich: Wilhelm Goldmann, 1979, first published in 1883); S. Freud, *Das Ich und das Es* (Vienna, Leipzig, Zürich: Internationaler Psychoanalytischer Verlag, 1923).

the self is understood as an embodied actor. The "embodied actor" here is none other than what we call "the subject of somatic action."[10]

Let us adopt this view of self, i.e., the self as the subject of somatic action or the doer, taking the subjecthood of somatic action as the fundamental property of the self. This doesn't mean that we reject the other attributions of the self. We are happy to attribute other properties such as the subjecthood of perception or self-awareness to it as far as they are compatible or derivable from the fundamental property of the self, i.e., doerhood. For instance, as far as perception or self-awareness is taken as a sort of somatic action, one can also characterize the self as the subject of perception or self-awareness.

WE-TURN OF SELF: SELF-AS-WE

Now we take the self as the doer or the subject of somatic action, including so-called mental activities. On the other hand, we have already committed the We-turn of doer, i.e., the idea that the doer or the subject of somatic action is the multi-agent system "We" rather than "I." From these two claims, it is derived that the self is the multi-agent system as "We." Here is a We-turn of the self, i.e., the shift of the self from an individual "I" to a multi-agent system "We." or the shift from Self-as-I to Self-as-We. The idea of Self-as-We is derived from the basic assumptions so far introduced such as the first incapability thesis, doer-externalism, the thesis of the doer as the necessary and sufficient agent, the claim of the mind-body causally unisolability, and the view of the self as the doer.

As far as those assumptions are endorsed, the self is no longer confined to an individual "I." Rather it breaks through the shell of individuality. It is extended to a multi-agent system as the necessary and sufficient agent of bodily actions that necessarily includes an individual "I" as one of its members. For example, the self as the subject of bicycling extends from an individual "I" riding on a bicycle, but also to the bicycle, the social infrastructure, the industrial history of the bicycle, the ecological system, and the celestial system in the Earth's neighborhood.

Needless to say, the multi-agent system as Self-as-We is an abstract entity, without any mental attributes such as consciousness. Therefore, it isn't conscious of itself as a self. On the other hand, the case of "I," which has mental attributes such as consciousness, is a different story. It is quite possible for the

10 U. Neisser, "Five kinds of self-knowledge." *Philosophical Psychology* 1, no. 1 (1988): 35.

"I" to be aware of the multi-agent system to which it belongs as an agent, as a "self."

Whenever "I" is aware of the multi-agent system as "self," it should be aware of itself not as "self" but as "a member of self." Let us refer to this "I"'s self-awareness of "I" as "a member of self" as *"I"'s* self-awareness instead of mere self-awareness. So, our formulation of the relation between "I," "We" and self is that "I" ∈ "We" = self and not "I" = "We" = self as in Hegel.[11]

However, as long as we accept the assumptions that we have set up so far, such as the first incapability thesis, subject as necessary and sufficient agent, doer-externalism, mind-body causal unisolability, and self as doer, Self-as-We is established as a consequence, whether or not "I" has the self-awareness of being a member of the self. To put it another way, whether or not each of us actually has such a view of self, or such an "I"'s self-consciousness in a first-person manner, we are forced to approve conceptually or logically of the idea of Self-as-We.

By committing to the existence of such an unconscious self, we are adopting self-externalism. This self-externalism is a consequence of the two of our assumptions; i.e., the doer-externalism and the self-as-doer. As long as we adopt self-externalism, it does not matter if Self-as-We is outside the consciousness of some of its members.

Of course, self-externalism does not exclude the possibility that "I" becomes aware of the Self-as-We, in other words, that "I" has "I"'s self-consciousness of being a member of the Self-as-We. So, there are two versions of Self-as-We: external and internal ones. It is the external Self-as-We that has been discussed here.

The external Self-as-We can be called a silent self. This silent self has a profound and deep effect on the "I," just as the silent organ (such as the liver or spleen) does. Above all, it is the only subject of every somatic action including "mental" activities.

The We-turn of the self does not mean that the "I" as an individual ceases to exist. It only means that the "I" does not exist as an agent independent of the "We," but always, already, and necessarily exists as a member of the "We." The individual as a member of the Self-as-We can be described as "I" and the individual as an isolated agent as 'I.' In the shift from 'I' to "I," some characteristics of an individual remain the same while others change. Like the

11 Hegel, *Phänomenologie des Geistes*, 140.

'I,' the "I" *exclusively* occupies the body, consciousnesses, perceptions, emotions, and wills (they are still "my body," "my consciousness" etc.). Unlike the 'I,' the "I" cannot exclusively occupy an agency of somatic action. The agency of somatic action is exclusively occupied by the "We" as a whole and distributed to various agents including the "I." Unlike the 'I', the "I" is not conscious of itself as a self, but as a member of the self, when it comes to be conscious of Self-as-We.

Whenever an action is done, a different "We" as a multi-agent system emerges at each time. But as long as an "I" lives and continues to act, the "I" is always acting as a member of one or another "We." In this sense, "We" is inescapable for "I." The "We" is not like a removable costume but inescapable for an "I." The 'naked "I"' that can exist even if an individual takes off the whole costume of "We" is just an illusion or a myth.[12]

WE-TURN OF RESPONSIBILITY

Based on the first incapability thesis and other assumptions, we have derived the We-turn on matters such as doer of somatic action and self. From such We-turns, we can derive We-turns about important value concepts such as responsibility, rights, and freedom, i.e., the shift of their subjects and units from "I" to "We."

Next, let us look at the We-turn of responsibility. Before the We-turn, the subject or unit that is responsible for a somatic action is usually understood to be the subject or unit of that action, and the latter is first and foremost the individual "I." It is also widely shared that a subject responsible for an action is limited to a subject who has demonstrated autonomy in the state of triggering the action, or an agent who has autonomously performed the action. It is also understood that the degree of responsibility for the action of a subject varies according to the degree of autonomy of that subject. In any case, the responsible entity for a somatic action is said to be autonomous "I."

Then what is the autonomy that is attributed to an individual agent including "I," or individual autonomy? A characterization or definition of the individual autonomy can be made, we claim, in terms of the zero-sum game over it among individual agents.

The zero-sum game over autonomy means a situation in which the more autonomy the other person exercises, the more the autonomy of "I" is restricted

12 As for the inseparability of "I" from "We", see chap. 11 of this book.

and diminished, and therefore the less autonomous or more heteronomous the "I" is. Let us call such an idea of individual autonomy as zero-sum gamic autonomy. Thus before the We-turn, the subject of responsibility is a zero-sum gamically autonomous "I."

Now let us proceed to the We-turn of responsibility. We agree with the standard idea that the responsible subject of the action is the acting subject. However, since we have already dared to make the We-turn of the somatically acting subject, the responsible subject should also be "We" rather than "I."

Moreover, in light of the We-turn of doer, all actions should be collective actions in the broad sense, and "I" and others, whether they intend it or not, are in a relationship of collaborating in the broad sense and in effect jointly affording a somatic action. In this sense, "I" and others are cooperating in the broad sense as members of "We."

Then what is such collaborative relationships among agents? One of its characterizations can be that it is the relation in which the zero-sum gameic situation over autonomy doesn't take place among agents. "I" and others are cooperative in that they are not engaging in the zero-sum game over autonomy. Collaboration means that agents of all parties get out the zero-sum game.

So, by endorsing the We-turns through the claim that all actions are collective actions where agents are collaborating with each other, we reject effectively the very idea of the zero-sum gamic autonomy. Hence, while the "I"-ness of the subject of responsibility has already been rejected, its zero-sum gamic autonomy is also negated. After the We-turn of responsibility, the subject or unit of responsibility is no longer zero-sum gamically autonomous "I." This means that the concept of responsibility should be shifted from the zero-sum gamic autonomous responsibility of "I." Then to what?

Here let us seek an alternative to an autonomous view of responsibility according to which the presence, absence, or degree of responsibility is determined by the manner of each agent's involvement in the initial and triggering stage of action such as autonomy or heteronomy. Instead, let us adopt a consequentialist view of responsibility, which holds that the presence, absence, or degree of responsibility is determined by the consequences of an action. Then, after the We-turn, it is "We" as a whole rather than "I" that is responsible for the consequences of "our" actions. An upshot is the We-turn of responsibility from the zero-sum gamically autonomous responsibility of "I" to the responsibility of "We" for the consequences of our actions.

Again, all members of "We" are not exempt from this "We"'s responsibility for

consequence, regardless of what kind of agent they are. But this responsibility should not be uniformly placed on all members. Each member's responsibility should be weighted according to the type of agency it has and how much agency it exerts in the action.

For example, suppose a stranger commits a crime in a neighboring town. In such a case, the agent who bears the heaviest responsibility is usually the offender. However, as a member of the same society as the offender, "I" cannot be exempt from the responsibility of trying to improve the society so that such a crime will not happen again. For example, if the crime was caused at least partially by poverty, "I," as a citizen, has a civic responsibility to address the problem of poverty in society in some way.

Let us also consider the case of a bicycle accident in which a pedestrian is injured. In this case, the responsibility for the consequences also falls on all members of the "We" as the subject of the bicycle-riding. However, it goes without saying that the heaviest responsibility is borne by "I" as the rider, who is both the intentional and the moral agent.

However, if a defective bicycle part was a contributing factor to the accident, the part will be replaced or, in some cases, discarded. If the bicycle's hitting a stone on the road was a contributing factor to the accident, the stone must be removed from the road. Thus, there is some "accident responsibility or liability" for agents other than intentional ones, and they must be held accountable, for example, in the form of being discarded or eliminated.

In weighing these responsibilities, as discussed above, it does not matter whether or not or to what extent the individual agent was autonomous in the starting state of the action, since the zero-sum gamic autonomy itself is rejected in the first place. Rather, the question is to what extent and how the agent affected the outcome of "our" action. Here, too, what matters is the consequential responsibility that "I" or other agents share, as a member of "We," for the outcome of "our" action.

WE-TURN OF RIGHTS

Next is the We-turn of rights. Let us restate that "We" is the subject of somatic action, and "I" as a member of "We" is a necessary agent of the action. Rights are nothing but attributes possessed by such "We," "I," and other members of "We." As a consequence, it is not the case that an entity apart from the somatic action exists and has certain rights. Only an agent involved in a somatic action

can be an entity that has rights or the right-holder. There are no rights apart from somatic action. Here, the rights are not merely "collectivized" but also "enactivized" by being regarded as a property of the somatic agent.

As mentioned above, rights and responsibilities are inextricably linked: only those who have a responsibility also can have rights. It has been claimed that the subject of responsibility is first and foremost "We." This naturally means that the subject or unit of rights is first and foremost not "I" but "We." The rights must also be We-turned. Rights are "our rights" rather than "my rights." This is also in line with the trend towards an "emphasis on collective (community) rights" in the Declaration of Human Rights in today's non-Western world, e.g., in the African Union.[13]

The responsibility for the consequences of "We"'s action extends to all members, no matter what kind of agent they are, at least in some form and to some degree. Then, the rights that "We" has should also be shared by all members, regardless of the type of agency, although in different forms and to different degrees. As a result, not only humans but also other animals, artifacts, and the natural environment have certain rights. Let us call these rights, which are shared by all agencies, fundamental We-rights.

Of course, just as responsibility is weighted, the basic We-rights allocated to all agents must also be weighted according to the role they play in the action and the type of agency they have. What matters in the weighting includes whether agents are moral or not. For instance, moral human agents are entitled to heavier rights, while animals, artifacts, and natural objects that are not moral agents are entitled to lighter rights.

WE-TURN OF FREEDOM

Next is the We-turn of freedom, i.e., the shift of the subject or unit of freedom from "I" to "We." Let us first carry out two preparatory tasks.

The first is to identify the necessary conditions that must be satisfied by the concept of freedom in general, whether it is "my freedom" before the We-turn or "our freedom" after that. This task will be accomplished by identifying three

13 African Charter on Human and Peoples' Rights, accessed on 30 August 2023, https://au.int/sites/default/files/treaties/36390-treaty-0011_-_african_charter_on_human_and_peoples_rights_e.pdf.

different concepts of "my freedom" from different cultural spheres and philosophical traditions and extracting their common features.

The second task is to propose neo-Romanticism, which embraces "the unity of the three values of goodness, happiness, and freedom" in order to substantialize our freedom.

First, let us examine three different "my freedoms"; i.e., autonomous freedom in the West and two Asian concepts of freedom, "*ishvara*" freedom in Mahayana Buddhism and "saunter" freedom in Daoism.

To simplify the discussion, we will extract two necessary conditions common to these concepts of freedom, namely, "emancipation from bad constraints" and "relation to action," and proceed by confirming that each "my freedom" satisfies these conditions in its own way.

The first condition of emancipation from bad constraints can be restated as follows: Freedom must be spared from constraints that are, in some sense, bad. And what constitutes a bad constraint varies from one culture to another. As a result, freedom is a culture- and thought tradition-relative concept.

The second action-relatedness condition is that freedom must be somehow related to action. How it is related to the action depends on each concept of freedom. As a result, there are multiple concepts of freedom.

FREEDOM AS AUTONOMY

The first of the three "my freedom" is the standard one in Western medieval, modern, and contemporary philosophy: freedom as autonomy, which holds that freedom is the zero-sum gamic autonomy mentioned earlier. The bad constraint in this freedom is the determinedness of my actions by another agent, that is, a determiner who determines my actions.

Various agents have been assumed as determiners, such as the Judeo-Christian God, deterministic and necessary physical laws, other people, and social conditions. For example, an omnipotent God or deterministic physical laws have been posited as candidates for a super-determiner who would deprive me of all capacities of self-determination of my own actions.

This determinedness as determination of my actions by others has been held to be unquestionably bad in that they are violations of my autonomy. Moreover, also an extreme case of autonomy violation, the total deprivation of my capacity of self-determination by a super-determinant has been considered even worse in the sense that it renders morality meaningless. Thus, freedom as autonomy

is nothing other than being exempt from such bad constraint of determinateness, i.e., *undeterminedness*.

Such freedom as *undeterminedness* is related to action in terms of the mode of initiation or activation of action. It problematizes how an action is activated or initiated, sets up a zero-sum gamic situation between the autonomy of "I" and the heteronomy of the other, and then regards the exercise of "I"'s autonomy in a way that pushes away the autonomy of the other as my freedom.

This concept of autonomous freedom has become the global de facto standard today and can be found, for example, in the United Nations' Universal Declaration of Human Rights and the SDGs. But in fact, this is not the only freedom of mine. We can find at least two other "my freedom" in Asia.

FREEDOM AS ISHVARA

The first Asian concept of my freedom is derived from the Sanskrit word *ishvara*, which means master, god, or other powerful beings, and can be found in the idea of "the Eight Great Ishvara Selves of the *Mahāparinirvāṇa Sūtra* of Mahayana Buddhism. It is also called *zìzài* or *jizai* in Chinese or Japanese.[14]

For this concept of freedom, the bad constraint is the limit or boundedness of the capacity to perform an action. Freedom as emancipation from this bad limitation means, therefore, the *unlimitedness* or *unboundedness* of the capacity. Buddha is said to be such an unlimited capacity and therefore to have true freedom. Moreover, in this *ishvara* freedom, the mode of initiation of action is not questioned, but rather the bounded or unbounded nature of the capacity to carry out an action is at issue.

FREEDOM AS SAUNTER

The second Asian concept of my freedom is the concept of freedom as saunter in Daoism. This concept of freedom can be found especially in the concepts of "play (遊)" and "saunter (逍遥)" in the Zhuangzi.[15]

14 Takakusu J., and Watanabe K., eds., *Taishō Shinshū Daizōkyō (Mahāparinirvāṇa Sūtra),* vol. 12 (Tokyo: 1924).

15 O. Kanaya, *Souji* [*Zhuang-Zí*] vol. 1 (Iwamami-shoten, 1971), 38, 185, 233; O. Kanaya, *Souji* [*Zhuang-Zí*] vol. 2 (Iwamami-shoten, 1975), 202; O. Kanaya, *Souji* [*Zhuang-Zí*] vol. 4 (Iwamami-shoten, 1983), 55.

Here, the bad constraint is being governed or regulated by rules. So, freedom here means not being regulated by rules, i.e., anti-rule governance, flexibility and spontaneity.

Also, the freedom of saunter is concerned not with the actions' initial condition, nor with the capacity to action, but with the interim mode of its performance: being rule-governed or not.

"My freedom" is not at all limited to these three. We can find many more concepts of freedom by looking at different cultures and traditions of thought. In any case, even if we limit our discussion to "my freedom," we can easily find multiple concepts that straddle different cultures and philosophical traditions. Therefore, the view that freedom is nothing other than autonomy unfairly absolutizes and privileges autonomous freedom, which is only a one-of-them concept.

Anyway, the lesson here is that "our freedom" must also be in some sense emancipation from bad constraints and related to the action in some way.

NEO-ROMANTICISM

As a second preparatory task for identifying our freedom, let us introduce what we call *neo-Romanticism*. As is well-known, Romanticism was a cross-disciplinary movement in the late eighteenth and early nineteenth centuries, not only in philosophy but also in literature and other artistic genres. One of the diverse claims made there is the thesis of the unity of various values, sometimes called the unity of truth, goodness, and beauty. This thesis asserts that the ontological and epistemological value of truth, the ethical value of goodness, and the aesthetic value of beauty are not separate from each other, but are at least ultimately identical, or coincide.[16]

From this standpoint, the ugly is not real at least ultimately and the evil beauty is not possible. We do not take this position. Ugliness, moral or aesthetical, is unfortunately so abundant in the world that there seems no hope that it will be wiped away at the end of the day. Also, we do not deny the possibility of vicious beauty. Instead, we would like to adopt here the following more modest thesis about the unity of values. That is, the thesis of the unity of goodness, happiness (or wellbeing), and freedom. We shall call this position neo-Romanticism.

16 F. Beiser, *The Romantic Imperative: The Concept of Early German Romanticism* (Cambridge: Harvard University Press, 2006).

According to neo-Romanticism, freedom, happiness, and goodness are by definition identical. Therefore, if one of them is defined, the other two definitions are obtained at the same time. Moreover, the realization of one of these three values is also the realization of the other two. Of these three values, the one that is relatively easy to define is the good. Therefore, we will first review the definition of good in the We-turns, and then, by way of a side-step, we will look at the definitions of wellbeing and finally freedom.

WE-TURN OF GOODNESS

Let us first look at what goodness means after We-turn. Earlier we referred to the idea that "our responsibility" takes place with regard to the results or consequences of our actions. This implies that ethical goodness and badness are also features that must be attributed first and foremost to the consequences of our actions. Some consequences of our actions are good while others bad. Accordingly, a "We" that brings about a good consequence, is good, while another that is responsible for a bad consequence, is bad. Thus, the object of attribution of good and evil is "We," not "I." Good and evil are first and foremost the feature of "We." Of course, this does not mean that the "I" has nothing to do with good or evil. "I" becomes a bad "I" only by being a member of a bad "We." The same is true for the good. Here is the We-turn of goodness; i.e., the primary subject of good and evil or the primary object of attribution of those properties, shifts from "I" to "We."

HARD WE

What, then, is the goodness of "We"'s actions, and what is a good "We?" This question seems to be more easily answered by inverting it and asking what the badness of "We"'s actions is, or what a bad "We" is. Because, unfortunately, our world is not short of notable examples of bad "We," even more so than good "We."

A prominent and undisputable example of bad "We" would be, we claim, the totalitarian "We." It is a widely accepted idea, we believe, that totalitarianism is a bad social and political system. There are many versions of totalitarianism. For example, the Orwellian dystopia described by George Orwell in his *1984* is well-known as a socialist or communist version of totalitarianism. An example of a capitalist version of totalitarianism is the postmodern dystopia unitarily

governed by efficiency depicted by Jean-François Lyotard in his *The Postmodern Condition*.[17]

Bad characteristics common to those totalitarian dystopias are external exclusivism and internal oppressionism. The exclusive society excludes alien or dissident members and demonstrates hostility toward its outsiders. The oppressive society exercises excessive peer pressure on its internal members. Corresponding to these two aspects of totalitarianism, there are two versions of "We"; i.e., the exclusionary "We" and the oppressive "We." These two totalitarian "We" mutually enhance each other. They are two sides of the same coin.

A common characteristic of both sides is the "hardness" of the "We." What is the "hardness of exclusionism"? "We" is a concept that anticipates and implies the existence of "you" or "they" who are not "We." "We" is a being that has an outside. It is a chronic disease of "We" because "they" are often easily turned into "busters" or "enemies" and are at risk of being considered as beings without which "We" can exist and therefore on which missiles can be dropped. Exclusionism is precisely this kind of situation in which "they" become "busters."

To take an exclusionary and aggressive attitude toward the outside, the "exclusionary We" should first identify its outsiders, or "they," clearly and fixedly distinguished from itself, and then treat it as a target, virtual enemy, or "buster." This attitude presupposes a clear and fixed distinction between "We" and its outside. If such a distinction is not clear, the "exclusionary We" loses its virtual enemy and in effect its exclusiveness. For the "exclusionary We" to be viable, the wall separating its inside and outside must be made high and thick, and the fluidity between its inside and outside must be seriously reduced. The "shell" of "We" should be hardened.

The "oppressive We" is also a hard "We" in another sense. It is a "We" that imposes certain interests, values, and ideals on its members, and by suppressing opposition to them, it straight-jackets or hardens its members. The 'oppressive We' is hard in that it forces its member to serve particular interests and values.

Thus, even under the We-turns, "We" can and does deteriorate into a hard and totalitarian We. Just as there is a good "I" and a bad "I," there is a good "We" and a bad "We." The We-turned "We" is not a utopia, nor a perfect society or community. "We" must always avoid a dystopia of bad "We" by making itself good, better, or the best if possible.

17 J.F. Lyotard, *La Condition Postmoderne* (Paris: Les Éditions de Minuit, 1979).

SOFTENING WE

To make itself better, "We" must have a clear vision of what "our goodness" is in the first place. So what is "our goodness"? Since "our badness" is totalitarianism, or more specifically, exclusionism and oppressionism, "our goodness" should be the exact opposite of those qualities, namely, anti-totalitarianism in the sense of being anti-exclusionist and anti-oppressionist. If we call such "our badness" hardness, as we have done, then making "We" better can be described as "softening" such hardness. Our goodness is softness, and a good "We" is a softened "We."

As suggested earlier, even after the We-turn of goodness, it is still meaningful to talk about "my goodness" and "my badness." My badness is nothing other than being a member of a totalitarian or hardened "We," or making the "We" to which "I" belongs more totalitarian. In contrast, my goodness is to be a member of a non-totalitarian or softened "We" and or to soften the "We" to which "I" belongs by making it less totalitarian.

OUR WELLBEING

As mentioned earlier, from the standpoint of neo-Romanticism, the goodness of "We" (and "I" as a member of it) is nothing but the wellbeing of "We" (and "I"), and the realization of our (and my) goodness is nothing but the attainment of wellbeing of "We" (and "I"). The wellbeing of "We" (and "I") means to be (and be a member of) a non-totalitarian or softened "We," or in short, to be softened.

Furthermore, for us, "We" is above all the subject of somatic action, and "I" is one of the necessary agents of that action. Thus, the meaning of "our" or "my" wellbeing should also be understood in relation to the subjectivity or agency of somatic action. It should be rephrased not in terms of a passive state of enjoyment but rather as an active state of performance of action. So, the wellbeing in active performance should be, among others, smoothness of execution of the performance of somatic action. Our wellbeing can be accompanied by a feeling that the action is going as planned or even better than expected. In other words, the wellbeing is not merely being softened, but rather, "We"'s smooth action to soften itself, and "I"'s participating in such a smooth softening action.

OUR SOFTENING FREEDOM

From the standpoint of neo-Romanticism, as in the case of wellbeing, our freedom can be defined in terms of our softening. Simply put, our freedom means "being softened" or "softening itself" in the sense of not being totalitarian or making itself less totalitarian. And my freedom means that "I" is a member of this kind of "We," or "I" is making the "We" to which it belongs less totalitarian. Let's call such freedom "our (or my) softening freedom."

Let us see how this "our softening freedom" would satisfy the two conditions of freedom mentioned earlier. The "bad restraint" in this case is the hardness of "We," that is, its totalitarianism consisting of exclusionism and oppressionism. It is the "hardness" of the shell that separates and fixes the inside and the outside of "We," and the "hardness" that confines the members of "We" to certain interests and values. Softening freedom means, as mentioned, escaping from such "hardness," attempting to escape from it, or making "We" less totalitarian.

What matters for this softening freedom is neither the situation of the action's initiation, nor its capacity to act, nor the interim mode of its performance. What matters here is the result, purpose, or intention of the action. No matter how our actions are initiated and carried out, actions that make "We" more hardened, that is, more totalitarian are not free actions. Here, for the sake of argument, we can again invoke the zero-sum gamic autonomy of the action, which we denied earlier, and say that even if an action is initiated by the exercise of the actor's autonomy, if it intends totalitarianism or results in totalitarianism, it is no longer a free action.

The realization of our softening freedom is no longer a matter of exercising the autonomy of the agent or subject of an action. It means that "We" acts to make itself less totalitarian, and that "I," as a member of the "We," contributes to this end. The upshot is the We-turn of freedom from "my (zero-sum gamic) autonomous freedom" to "our (less-totalitarian, less-exclusive, and less-oppressive) softening freedom."

WE-TURNS AND META-SCIENCE

Finally, we see that the We-turns can be a meta-science in Dome and Zwitter's sense. Dome and Zwitter characterize meta-science as a transdisciplinary inquiry that tries to answer the question "[w]hat do we need to know in order to direct our intellectual activities on earth [i.e., science] in the direction of

'good'?"[18] According to them, the main question of meta-science can be concretized into the Kantian questions "What can I know?", "What must I do?", "What may I hope for?", and "What is man?", and some related ones such as "What is good?".

In an earlier draft, they also rephrased those questions as "[h]ow can we reconnect science, the study of facts, and metaphysics, the study of values, in a way that does not eliminatively reduce one to the other, nor leave them in an indifferent parallel relationship with one another?" Unlike Kant, we believe that there can be never only one correct answer to these questions, and that only plural and more or less plausible proposals can be given for them. So the main question would be further rewritten as: What should we propose (not: what should we know) in order to reconnect science and metaphysics? Either way, the reconnection matters for the meta-science.

Let us try to reconnect science and metaphysics in our own way by focusing on artifacts of science and technology or their combination, i.e., *technoscience*, and asking what good or bad artifacts, their designs, their usage, and their relation to humans are.[19]

Many have tried to answer those questions by applying the freedom criterion, as we call it, according to which an artifact, its design, usage, or relation to humans is good (or bad) if and only if it protects or advances (or damages or hinders) freedom. Given the plurality of freedoms, there should be many variants of the freedom criterion.

Take "my autonomous freedom." Then the criterion should be rewritten as that an artifact is good only if it protects or advances a human individual's autonomy.[20] But after the We-turn of freedom that advocates "our softening

18 Dome, T. and A. Zwitter, "Introduction," in Meta-Science as Science of Meaning and Complex Solutions, ed. A. Zwitter (Groningen: Groningen University Press, 2023), 7-14.

19 A root of the idea of technoscience can be traced back to the works of G. Bachelard, e.g., G. Bachelard, *Le Nouvel Esprit Scientifique* (Paris: Les Presses Universitaires de France, 1934).

20 P. P. Verbeek, *Moralizing Technology: Understanding and Designing the Morality of Things* (Chicago: The University of Chicago Press, 2011). Verbeek, too, can be interpreted as accepting such an autonomous freedom criterion while adopting the concept of freedom as "relative autonomy" that is always constrained by various conditions. (Verbeek himself describes "relative autonomy" as "*Some* degree of freedom" [p. 59]). Verbeek considers technology or technological artifacts to be a kind of constraint on

freedom," this criterion is to be modified as that an artifact is good only if it softens "We" that includes both humans and the artifact, or makes it less totalitarian. So even if an artifact is used in a way that protects the user's autonomy, the usage should be dismissed as bad as far as it results in a more totalitarian "We." What matters is not the user's autonomy but rather less totalitarian results.

In such a way, our 'metaphysical' proposal has a consequence for the criterion of goodness or badness of technoscientific artifacts. This is also our proposal on how to reconnect science and metaphysics. In short, this is our proposal for meta-science.

BIBLIOGRAPHY

African Charter on Human and Peoples' Rights. Accessed on 30 August 2023. https://au.int/sites/default/files/treaties/36390-treaty-0011_-_african_charter_on_human_and_peoples_rights_e.pdf

Bachelard, G. *Le Nouvel Esprit Scientifique*. Paris: Les Presses Universitaires de France, 1934.

Beiser, F. *The Romantic Imperative: The Concept of Early German Romanticism*. Cambridge: Harvard University Press, 2006.

Damasio, A. *Descartes' Error: Emotion and Reason and the Human Brain* (first published in 1994). New York: Vintage Books, 2006.

Dome, T., and A. Zwitter. "Introduction." In *Meta-Science as Science of Meaning and Complex Solutions*, ed. Andrej Zwitter. Groningen: Groningen University Press, 2023, 7-14.

Freud, S. *Das Ich und das Es*. Vienna, Leipzig, Zürich: Internationaler Psychoanalytischer Verlag, 1923.

Gibson, J. J. "The theory of affordances." In *Percieving, Acting, and Knowing: Toward*

autonomy (p. 79). He then upholds that such freedom is realized when humans actively utilize technology as a constraint, perform certain actions, and form themselves as moral subjects (ibid. 60, 78, 85, 88f). In other words, his freedom as the relative autonomy is to be executed in the threefold activity of utilizing technology, performing certain acts, and forming oneself as a moral subject. Therefore, the relationship between man and technology (in his words, "associations of humans and artifacts" (p. 61)) that makes this threefold relative autonomy possible is a "good" relationship, and the relationship that does not is a "bad" one.

an Ecological Psychology, edited by R. Shaw & J. Bransford. Hillsdale: Erlbaum, 1977: 67-82.

Kant, I. *Kritik der reinen Vernunft* (first published in 1781). Hamburg: Felix Meiner Verlag, 1956.

Hegel, G. F. W. *Phänomenologie des Geistes* (first published in 1807). Hamburg: Felix Meiner Verlag, 1952.

Heidegger, M. *Sein und Zeit* (first published in 1927). Tübingen: Max Niemeyer Verlag, 1979.

Kanaya, O. *Souji* [*Zhuang-Zi*] vol.1, Iwamami-shoten, 1971.

Kanaya, O. *Souji* [*Zhuang-Zi*] vol.2, Iwamami-shoten, 1975.

Kanaya, O. *Souji* [*Zhuang-Zi*] vol.4, Iwamami-shoten, 1983.

Licklider, J. C. R. "Man-Computer Symbiosis." *IRE Transactions on Human Factors in Electronics* 1 (March 1960): 4-11.

Lyotard, J. F. *La Condition Postmoderne*. Paris: Les Éditions de Minuit, 1979.

Takakusu J., and Watanabe K. (eds.). *Taishō Shinshū Daizōkyō (Mahāparinirvāṇa Sūtra),* vol. 12. Tokyo: 1924.

Neisser, U. "Five kinds of self-knowledge." *Philosophical Psychology* 1, no. 1 (1988): 35-59.

Nietzsche, F. *Also Sprach Zarathustra* (first published in 1883). Munich: Wilhelm Goldmann, 1979.

Orwell, G. *Nineteen Eighty-Four* (first published in 1949). London: Penguin Classic, 2004.

Verbeek, P. P. *Moralizing Technology: Understanding and Designing the Morality of Things*. Chicago: The University of Chicago Press, 2011.

Zahavi, D. *Self and Other: Exploring Subjectivity, Empathy, and Shame*. Oxford: Oxford University Press, 2014.

3
TIME IS UP: DECISION-MAKING AND THE PROBLEM OF TIME

MICHAEL HOELZL

INTRODUCTION

There is a fundamental difference between choice and decision. In everyday language this difference is evident in phrases such as: "If there are no choices we/I must decide," or "there are no choices left, a decision must be taken" or in retrospect: "I had no choice, I had to make a decision." Irrespective of whether the decision is made by one person or by a collective on the basis of deliberation and exchange of arguments, two aspects of decision-making processes come to the fore. First, choice and decision are two distinctive but related social phenomena. Secondly, the problem of time matters. The problem of decision-making under the pressure of time raises significant ethical issues. This essay seeks to address the problem of time in relation to decision-making from a phenomenological and ethical perspective, in order to contribute to the project

of meta-science, located between ethics and metaphysics. The problem of time pressure in decision-making processes inevitably raises the question of meaning in the sense of the legitimation of decisions made.

CHOICE VERSUS DECISION: AN ETYMOLOGICAL AND TYPOLOGICAL APPROACH

A short survey of the social phenomenon of decision-making shows the wide field of philosophical problems associated with decision-making.[1] In a first step an etymological approach is suggested to identify the differences and similarities between choice and decision. It should be noted that an etymological analysis does not directly define the meaning of a word. This Heideggerian approach is highly contested and would be dismissed from the perspective of linguistics, especially from the standpoint of a pragmatic theory of language, according to which the meaning of a word is defined by its everyday use rather than its roots.[2] Nevertheless, for heuristic purposes an etymological analysis is still useful for our purpose. This etymological reflection is followed by the attempt to provide a systematic categorisation of six ideal-types of decision-making.

ETYMOLOGICAL DIFFERENCE BETWEEN CHOICE AND DECISION

Etymologically the word "choice," meaning selection or alternative, "is borrowed from Old French *chois*, from *choisir* to choose, from a Germanic source" and entered the English language about 1300.[3] Whereas "decision" was in use from about "1454 borrowed from Middle French *décisio*, from Latin *dēcisiōnem* [...], from *dēcīdere*."[4] This chronological difference in the use of the terms decision and choice in common language already indicates a semantic difference, that is a profound difference of meaning. This semantic difference

1 Carl von Bormann, "Entscheidung," in *Historisches Wörterbuch der Philosophie*, ed. Joachim Ritter (Basel/Stuttgart, Schwabe&Co, 1972), 2: 541-44.

2 I owe this important insight to conversations with my colleague Peter Pormann at the University of Manchester.

3 Robert K. Barnhart (ed.), "choice," in *Chambers Dictionary of Etymology* (Edinburgh: Chambers Harrap Publishers Ltd, 2004), 168.

4 Robert K. Barnhart (ed.), "decision," in *Chambers Dictionary of Etymology* (Edinburgh: Chambers Harrap Publishers Ltd, 2004), 256.

gets even more obvious when one considers the difference between *Wahl* (choice) and *Entscheidung* (decision) in German. The word *Wahl* was in use from about the ninth century and is derived from *wollen* which means to will.[5] *Entscheiden* (to decide) emerged in the fourteenth century and was primarily used to describe the passing of a verdict in legal proceedings, whenever someone had to decide which party was right and which was wrong.[6] In a legal sense, the original Latin meaning of decision is preserved. To decide means to make a cut, to separate arguments, after both parties have been heard according to the principle *audiatur et altera pars* (let the other side be heard as well), and to come to a conclusion. Bormann defines *Entscheidung* (decision) as the act by which an uncertain and ambiguous issue is finally resolved.[7] In this respect, decision is related to the Greek noun κρίσις, derived from the verb κρίνω, [8] meaning to separate, passing a judgement, coming to a conclusion or, more generally, to discern.

The semantic difference between choice and decision can also be documented by various academic disciplines that evolved from these two concepts. On the one hand, the concept of choice has been developed within economic and political sciences. In economic theory choice is a crucial concept in studies of behavioural economics,[9] rational choice theory, game theory, and in political science whenever matters of electoral behaviour are concerned, for example. On the other hand, the theological and philosophical concepts of decision and decision-making processes are central to existentialism,[10] political philosophy such as decisionism,[11] and phenomenologically orientated

5 Elmar Seebold (ed.), "Wahl," in *Kluge Etymologisches Wörterbuch der deutschen Sprache*, (Berlin/New York: Walter de Gruyter, 1999), 871.

6 Seebold (ed.), "Wahl," 224.

7 Carl von Bormann, "Entscheidung," 2: 541.

8 Franz Passow, "κρίσις," in *Handwörterbuch der Griechischen Sprache* (Leipzig: Friedrich Christian Wilhelm Vogel, 1831), 1:1350-51.

9 Richard Thaler and Cass Sunstein, *Nudge. Improving decisions about Health, Wealth and Happiness* (Yale: Yale University Press, 2008).

10 A classic example is Søren Kierkegaard, *Either/Or. The Fragment of Life* (Oxford: Penguin, 1992).

11 The concept of decisionism was coined by the controversial German jurist Carl Schmitt. In his *Politische Theologie. Vier Kapitel zur Lehre der Souveränität* of 1922 he famously states that the sovereign is the one who decides on the state of emergency.

sociology.[12] In this essay I will primarily focus on the latter, limiting the subject to the problem of decision-making under the pressure of time. Before the problem of decision-making under the pressure of time is discussed, the following systematic typology is suggested and illustrated by concrete examples for each type.

SIX IDEAL-TYPES OF DECISION-MAKING

There are at least six categories of decisions that can be ideal-typically distinguished.

- First, a decision is made *by one person* about *themselves*. Such decisions should be called **private decisions**.
- Secondly, a decision is made *by one person* that concerns *another person's life*. Such decisions should be called **intersubjective decisions**.
- Thirdly, a decision is made *by one person* that concerns the life of *many persons*. Such decisions should be called **individual political decisions**.
- Fourthly, a *collective body* makes a decision that impacts *the collective decision-making body itself*. Such a decision should be called **congregational decisions**.
- Fifthly, a *collective body* makes a decision that concerns *one person's individual life*. Such decisions should be called **judicial decisions**.
- Sixthly, a *collective body* makes a decision which impacts the life of *many others*. Such decisions should be called **collective political decisions**.

The idea of decisionism in its political dimension re-occurs in Schmitt's *Der Begriff des Politischen* of 1932 in which the political is defined on the existential distinction between friend and enemy. See also Hasso Hofmann, "Souverän ist, wer über, den Ausnahmezustand entscheidet." *Der Staat* 44, no. 2 (2005): 171–86 and Christian Krockow (Graf von), *Die Entscheidung. Eine Untersuchung über Ernst Jünger, Carl Schmitt, Martin Heidegger* (Stuttgart: Ferdinand Enke Verlag, 1958): 54-67 and Rüdiger Voigt (ed.), *Der Staat des Dezisionismus. Carl Schmitt in der internationalen Debatte* (Münster: Nomos, 2007).

12 For example: Alfred Schütz and Thomas Luckmann, *Strukturen der Lebenswelt* (Konstanz: UTB, 2017): 512-28.

The following chart outlines the six basic ideal-types of decision-making:

Who decides	Who is affected by the decision	Types of decision-making
one	Herself or himself	Type 1: **Private decision**
one	Another person	Type 2: **Intersubjective decision**
one	Other people	Type 3: **Individual political decision**
collective body	Themselves	Type 4: **Congregational decision**
collective body	Another person	Type 5: **Judicial decision**
collective body	Other people	Type 6: **Collective political decision**

Figure 1. Six basic ideal-types of decision-making

The two key parameters organising this schematic typology are whether a decision is made by one person or many as a collective body and whether one, or other people are affected by the decision made.

TYPE 1 AND 4: PRIVATE AND CONGREGATIONAL DECISION

The first and the fourth type, that is the private decision and the congregational decision, represent a special case. A private decision is a decision which is made by one person affecting only the decisionmaker herself or himself. A congregational decision also affects only the decision-making body and no other person. Both decisions are based on self-reflexivity, whether it be rational or emotional. A relatively trivial example of a private decision would be if someone decides to become a vegan, decides to read fiction rather than poetry, decided to improve their health regime, to further their hobbies, or to go to confession, for example. Michel Foucault famously elaborated on this type of decision in his third volume of his *Histoire de la sexualité: Le souci de soi* of 1984, published in the year of his death.[13] Foucault refers to the Greek concept of ἐπιμέλεια ἑαυτοῦ (care for the self) and shows the wider implications of what it means to decide for oneself. Key to his thoughts is how the individual body is affected in this first type of self-reflective decision-making.

Structurally identical with the first type is the fourth type, the congregational decision. A classic example of a decision where a collective body decides on themselves is a decision that is made by a religious order. In all medieval

13 See also: Michel Foucault, *Technologies of the Self: A seminar with Michel Foucault*, ed. Martin Luther et al. (Amhurst: University of Massachusetts Press, 1988).

monasteries there was one specially designed room, called chapter house, in which fundamental decisions were made by all monks or nuns. A gripping and at the same time very touching cinematic illustration of this sixth type of decision-making is Xavier Beauvois' film *Des Hommes et des Dieux* (2010). The film tells the true story of a congregation of French Trappist monks who collectively decided to stay in Algeria and to continue serving the local community, despite the death threat posed by a fundamentalist terrorist group. Finally they decided to stay and most of them were abducted and beheaded.

TYPE 2: INTERSUBJECTIVE DECISION

Examples to illustrate intersubjective decisions, the second type, in every-day life would be, for example, breaking up a relationship, deliberately missing an appointment, keeping a promise, or to give a specific order to another person to carry out a certain task. From a philosophical perspective these every-day life phenomena of various kinds of intersubjective decision-making imply a hierarchical difference of authority. It matters who can decide and who is the recipient of the decision made. In the scenario of an intersubjective decision, John L. Austin's speech act theory is instructive. In *How to do Things with Words* of 1955, pre-conditions and implications of intersubjective decisions are analysed. He distinguishes between locutionary, illocutionary and perlocutionary speech acts. Locutionary utterances simply convey information from one person to another. Illocutionary speech acts, the centre of his analysis, describe what we can do with words. For example, making a promise creates and establishes a kind of contract between two people. Whereas perlocutionary speech acts focus on the effects certain illocutionary speech acts have on the recipient. For example, if a man proposes to a woman, the reaction might be joy or embarrassment and flushing of the face.

TYPE 3: INDIVIDUAL POLITICAL DECISION

The third type of a decision subsumes decisions made by one person which affect other people. In political theory the most striking and extreme example is that of dictatorial rule by "*Führerbefehl*" in the Nazi regime, for example, or the rule by any monarchical or any other undisputed authority's prerogatives. In his groundbreaking study *The Dual State. A Contribution to the study of Dictatorship*, first published in 1941, Ernst Fraenkel distinguishes between the prerogative state and the normative state in order to analyse the rise of

totalitarian regimes, especially the rise of National Socialism.[14] This is precisely what the third type of decision-making means when it is seen from its negative consequences. There is of course also a positive form of decision-making by one person that affects others. This is the case whenever one person decides on behalf of others for their benefit or the overall common good. We will come back to this in the next section in which Helmut Schmidt, the former chancellor of Germany, is introduced. The third type of decision-making, irrespective of its positive or negative outcome, is called political because it concerns more than one person and ideally is directed towards the betterment and augmentation of the common good.

The last two types of decision have in common with the already mentioned congregational decision that the decision maker is not an in individual but a collective body who decides. The decision made by the collective body affects either a single person or a group of other people. Whenever a decision is made by a group of people affecting one person, it should be called a judicial decision. Whereas, if more than one person is affected by the decision made, it is called a collective political decision.

TYPE 5: JUDICIAL DECISION

The classic example of a judicial decision affecting one single person is the ancient Greek institution of Ostracism.[15] It was a "a mode of judgement by the people [...] especially practiced in Athens, by which persons whose presence appeared dangerous to liberty were banished for a certain period, without, however, thereby suffering any loss in reputation or property. [...] Every year the question was put to the people, whether the measure appeared necessary: if they so decided (and it was only exceptionally that there was occasion for it), the citizens who possessed franchise assembled in the market place, and each wrote upon a sherd (*ostrăkŏn*) the name of the person whose banishment he seemed desirable. The man whose name was found upon no less than 6,000 sherds had to leave the country in ten days at latest, for ten or (later) five years. He could, however, at any time be recalled by a decree of the people; and the

14 Ernst Fraenkel, *The Dual State. A Contribution to the Theory of Dictatorship* (New Jersey: The Lawbook Exchange, 2010).

15 Franz Passow, "ὀστρᾰκίζω," in *Handwörterbuch der Griechischen Sprache* (Leipzig: Friedrich Christian Wilhelm Vogel, 1831), 2: 390.

question, as before, was decided by no less than 6,000 votes."[16] A more recent example is Ferdinand von Schirach's experiment based on his 2016 play *Terror,* which was recently turned into a TV production and went global. At first glance the plot of the play appears to be a very sophisticated variant of the well-known trolley problem. As stated on the back cover of the English translation, the play poses a moral dilemma to the audience and reads as follows:

"Guilty or not guilty? Enter the courtroom, hear the evidence, make your judgement. A hijacked plane is heading towards a packed football stadium. Ignoring orders to the contrary, a fighter pilot shoots down the plane killing 164 people to save 70,000. Put on trial and charged with murder, the fate of the pilot is placed in the audience's hands."[17]

The originality of this fictional moral dilemma situation is that the jury court is not a selected body of lay judges who collectively make a decision and pass the verdict. The novelty of the experiment is the extension of the "jury court" to the public. Both the audience that attended the play on stage as well as the audience watching it on TV were asked to make their judgment. This experiment has been staged and televised in various countries around the world. The public's vote has been recorded and mapped online which has made a global comparison possible. Interestingly, the result of this ongoing project shows a remarkable tendency to opt for a utilitarian decision, that is, it is *better to kill* 164 people *rather than risk* the lives of 70,000.[18] Both examples illustrate the same ideal-typical case of collective decision-making, despite their historical and contextual differences.

TYPE 6: COLLECTIVE POLITICAL DECISION

The difference between a judicial decision and a collective political decision is the fact that a collective political decision is a decision made by a collective body which affects not one single person but a many other people, as shown in the chart above. In the vision of perfect democratic decision-making to guarantee ultimate freedom of a people, Abraham Lincoln's Gettysburg Address of 1863 is often cited. In the concluding sentence he famously states: "[…] that

16 Oskar Seyffert, *A Dictionary of Classical Antiquities: Mythology, Religion, Literature & Art* (New York: The Macmillan Company, 1891) [from the German revised and edited, and with additions by Henry Nettleship and J.E. Sandys], 439.

17 Ferdinand von Schirach, *Terror* (London: Faber&Faber, 2017).

18 See: https://terror.theater/map. Accessed 12 April, 2023.

we here highly resolve that these dead shall not have died in vain -- that this nation, under God, shall have a new birth of freedom -- and that government of the people, by the people, for the people, shall not perish from the earth." [19]

In the Gettysburg Address the type of collective political decision-making comes close to the idea of a congregational decision (type 4). The vision that governmental decisions are made "of the people, by the people, for the people" assumes "that this nation under God" forms a unity blessed by God like a religious congregation of people who decide on their fate for themselves by themselves. It would be inaccurate to understand this vision of freedom in terms of direct democracy, because the religious aspects and realities of bureaucracy inherent to every governmental system would be ignored. However, in a more practical understanding of what collective political decision-making means in everyday life, it is more accurate to call it representative democracy rather than direct democracy. In modern liberal democracies based on a constitution, it is the parliament that represents the will of the people. Irrespective of the differences between democratic parliamentary systems of government, they are all based on the same principle, which is a collective body of people deciding on the life of others and not just on the fate of one person.[20]

These six types of decision-making outlined here should be understood as ideal-types, or pure types according to Max Weber.[21] In reality they are intermingled and they change according to concrete circumstances. The suggested typology is of merely heuristic value and is designed to give some orientation in understanding the social phenomenon of decision-making. According to Weber, none of the ideal-types ever occur in a pure "ideal" form in social practice, because in social reality, they occur in combinations of two or

19 "Gettysburg Address." Accessed April 12, 2023. https://www.abrahamlincolnonline.org/lincoln/speeches/gettysburg.htm.

20 Carl Schmitt, *Die geistegeschichtliche Lage des heutigen Parlamentarismus* (Berlin: Duncker&Humblot, 1996), 42-44. In his criticism of parliamentarism, first published in 1923, Carl Schmitt dismisses, according to the suggested typology of decision-making in this essay, any collective political decision in cases of emergency and advocates the type of individual political decision, that is the decision made by one single sovereign authority rather than a collective body or a constitutionally elected assembly of decision makers.

21 Max Weber, *Wirtschaft und Gesellschaft. Grundriss der Verstehenden Soziologie* (Tübingen: Mohr Siebeck 5. Aufl. 1980), 3-4.

more ideal-types. Ideal-types are analytical tools to understand the complexity of social phenomena, such as decision-making, in our case.

The suggested systematic typology also intends to prepare the ground for the next step in the argument, which concerns the problem of time in decision-making. Irrespective of the different types – individual, intersubjective, individual political or congregational, judicial and collective political (types 1-6) – of decisions concerned, time matters. Decision and time are, poetically speaking, siblings. It is a love-hate relationship. On the one hand, a decision made under the pressure of time might have had negative consequences because there was not enough time to confer with other people, to consult and contemplate religious moral guidelines, or to reflect carefully and rationally. On the other, the pressure of time forces someone to come to a conclusion and finally make a decision because time is running out. The third strategic option is to make no decision and to wait until time has run out. Although, the paradox of decision-making is that making no decision is in itself a decision.

DECISION AND TIME

For a more detailed analysis of the complex problem of time and decision-making, I suggest focussing on a concrete example representing type 3, that is an individual political decision. n February 27th, 2007, the former chancellor of Germany Helmut Schmidt (1918–2015) at the age of 89 gave a lecture with the title: "*Gewissen und Verantwortung des Politikers*" (Conscience and Responsibility of a Politician). This lecture was delivered on the occasion of the bestowal of an honorary doctorate in philosophy by the Philipps University of Marburg, within the context of the annual Christian Wolff Lecture.[22]

In this autobiographical lecture Schmidt reflects on situations where he had to make difficult decisions during his active time as chancellor of West Germany (1974–1982). The late 1970s and early 1980s were predominantly marked by the left-wing terrorist group called RAF (Red Army Fraction), an economic crisis and the height of the Cold War. In this lecture, Schmidt illustrates the problem of political decision-making by one individual person which affects many other

22 Helmut Schmidt, Peter Janich, and Carl Friedrich Gethmann, *Die Verantwortung des Politikers* (Paderborn: Wilhelm Fink, 2008). All following English quotations of the speech have been translated by Rebecca Pohl and Michael Hoelzl. An annotated first English translation of the complete speech is forthcoming. [italics added]

people. Schmidt refers to six concrete examples and focuses on the problem of the pressure of time in decision-making processes. Right at the beginning of his lecture, he draws attention to the problem of time and decision-making when he says:

> Of course, politicians err, of course they make mistakes. They are, after all, subject to all the same failings as any other citizen, and as is public opinion. *Sometimes politicians are compelled to make spontaneous decisions. Most often, though, they have sufficient time and plenty of opportunity to solicit counsel from different sides; time to gauge possible alternatives, predictable consequences before they arrive at a decision*. The more a politician is guided by a fixed theory, a fixed ideology, or the reverse, the less he gauges all discernible factors, all consequences of his decision in any particular case, the more he is prone to errors, to mistakes, and to failures. *This risk is particularly high where a spontaneous decision becomes necessary*. But *in* any case, the responsibility is the politician's, the responsibility for the consequences, that is. And this responsibility can be absolutely oppressive.[23]

What becomes obvious in this self-reflective summary of what it means to be a politician, is the concatenation of decision: time pressure; responsibility; error or success. Ideally, one can make a decision that affects others after consultation with others and on the basis of a careful and rational evaluation of circumstances. But sometimes in reality (*Realpolitik*) the one who has the authority to make a decision cannot enjoy the benefits of time-consuming deliberation, because a concrete situation demands a swift and decisive decision. Helmut Schmidt, after having discussed three examples of his decisions made "without time pressure, decisions that were made after extensive discussion and deliberation, decisions that could be implemented," recalls three other decisions "where instantaneous action was necessary."[24]

The first example to illustrate an instantaneous decision he had to make as a politician was in 1962. Schmidt was police senator of Hamburg when "my city was ravaged by a storm tide. The whole of Northern Germany was affected.

23 Schmidt, Janich, and Gethmann, *Die Verantwortung des Politikers*, 57-8. [italics added]

24 Schmidt, Janich, and Gethmann, *Die Verantwortung des Politikers*, 63.

During the first night there had instantly been many fatalities. Which is why, without losing any more time, an international rescue operation had to be improvised. In doing this, we violated multiple laws – possibly, we even violated the Basic Law. I must admit, I never even thought about that at the time. Instead, my actions were led by the pressing moral duty to rescue people from immediate mortal danger."[25]

The storm tide of 1962 in Hamburg and Schmidt's almost immediate and decisive action laid the basis for the myth[26] of Helmut Schmidt as a pragmatic man of deeds, the problem-solver (*Macher*). In fact, as recent research has shown, Schmidt retrospectively exaggerated his engagement in this particular case of emergency in order to portray himself as the sovereign decision-maker who saved the lives of others, even if laws and, in this case, also constitutional laws were possibly breached by asking the then-occupying allied forces for support and help.[27] Nevertheless, this example shows how time is a decisive factor in decision-making, especially in emergency situations.

The second example is quite delicate because Helmut Schmidt refers to Helmut Kohl as decision-maker, who had to make a political decision under the pressure of time. The decision he alludes to is Kohl's decision in autumn 1989. Schmidt writes:

> An instance of vastly more far-reaching import was Chancellor Kohl's actions in the autumn of 1989. I only witnessed these from afar, however. Eastern Central Europe was festering; mighty liberation movements were stirring in Poland, Hungary, Czechoslovakia, and the GDR [German Democratic Republic]. The people were taking to the streets in large numbers. There was no programme, no theory, no law, nor was there an accord with the allies in the West that addressed such a situation. Kohl could have bided his time, carefully watching the situation unfold, for the mighty Soviet Union had its military forces to hand in all those states. But Chancellor Kohl made a spontaneous decision to seize the initiative. His 'Ten Points' from 28. November 1989 were decisive in pushing through the

25 Schmidt, Janich, and Gethmann, *Die Verantwortung des Politikers*, 63-4.

26 Helmut Stubbe da Luz, *Extreme Situationen, schnelle Entscheidungen: Helmut Schmidt gegen Sturmflut und RAF-Terror* (Bremen: Edition Falkenberg, 2022), 13-30.

27 Stubbe da Luz, *Extreme Situationen, schnelle Entscheidungen*, 31-104.

> international process of German reunification. It was a brilliant achievement of reason and intuition, accomplished with no time for deliberation. [...] Had his initiative ultimately failed, he would have been ravaged. That is simply the way of democracy: If a politician is successful, then he is seen as justified and his actions are sanctioned. Should he fail, however, neither his good intentions nor his efforts count for anything.[28]

Helmut Schmidt's (SPD, Socialist Democratic Party of Germany, chancellor from 1974-1982) reference to his successor Helmut Kohl (CDU, Christian Democratic Party, chancellor from 1982-1998) and his spontaneous and risky decision, guided by intuition and courage, is remarkable because of their different personal and political biographies. Schmidt was born in 1918 in Hamburg and served in the Army (*Wehrmacht*) from 1937 until the end of the war in 1945. Despite not being a pious Lutheran, he remained faithful to his Protestant tradition. Helmut Kohl was born 12 years after Schmidt in Ludwigshafen in Rhineland-Palatine into a Catholic family. He experienced the end of the war at age fifteen. But these are not the only differences between these two personalities.

In 2018 the Central European History Society of the American Historical Association published a forum "in the memory of the 'Two Helmuts'."[29] Andrew I. Port summarises in his introduction to this *Forum* how Helmut Schmidt, as a "pragmatic " and "rational" *Macher,* or problem-solver, was stereotypically juxtaposed with his successor Helmut Kohl, the chancellor of German re-unification (*Einheitskanzler),* as "someone driven by more 'emotive' consideration."[30] In the first essay of the Forum, Kristina Spohr, who has recently published a substantial monograph on Helmut Schmidt as global chancellor, corrects this stereotypical categorisation made by many historians.[31] Clay Clemens in his contribution supports the criticism of such stereotypical

28 Schmidt, Janich, and Gethmann, *Die Verantwortung des Politikers*, 65.

29 Andrew Port, "In Memory of the 'Two Helmuts': The Lives and Legacies, and Historical Impact of Helmut Schmidt and Helmut Kohl: A forum with Clayton Clemens, Ronald Granieri, Matthias Haeussler, Mary Elise Sarotte, Kristina Spohr, and Christian Wicke." *Central European History* 51, no. 2 (2018), 282-309.

30 Port, "In Memory of the 'Two Helmuts'," 282.

31 Kristina Spohr, *The Global Chancellor: Helmut Schmidt and the Reshaping of International Order* (Oxford: Oxford University Press, 2016).

juxtaposition of the two chancellors who were undoubtedly central to European and even global politics after the Second World War. Clemens states:

> The Germany that Schmidt took over in 1974 clearly differed substantially from the one that Kohl left behind in 1998. But the main contribution both men made was to preserve what they had inherited domestically and to push Europe forward along a path that had already been paved. [...] Both Helmuts nevertheless practiced a consensus-oriented pragmatism that deferred both the resolution of some problems and a serious consideration of new directions.[32]

Returning to Schmidt's reference to Helmut Kohl and his "spontaneous decision to seize the initiative," as quoted above; this second example of an individual political decision made by one person that concerns many (type 3) led finally to the re-unification of Germany. Seconding Schmidt's respect for Helmut Kohl's ability to have recognised and seized with sovereign audacity the right moment in time to make a decision, Kristina Spohr concludes that "Kohl had shown himself to be a statesman with the discernment and daring to seize the historical moment of decision."[33]

The last example Schmidt refers to is maybe that which has touched him most and which could be considered the biographical cornerstone for his reflections on decision-making in his Marburg speech. Confronted with the terror of the Red Army Faction (*Rote Armee Fraktion, RAF*), the so-called *Baader-Meinhof Gruppe*, Schmidt was pushed to the limits and had to make a decision, which challenged his conscience and responsibility as a politician. He recalls:

> My final example concerns the defense against the murderous terrorism of the Baader-Meinhof-Group, who called themselves the Red Army Faction. This was not a one-off case, but a tragedy that extended across three parliaments and consisted of many instances of dramatic acts. In what was essentially an opening act, the Palestinian-Islamist attack on the Israeli Olympic Team in 1972 in Munich had demonstrated the quality of criminal energy we were facing. [...] Three years later, when in 1975 the RAF

32 Port, "In Memory of the 'Two Helmuts'," 290.

33 Port, "In Memory of the 'Two Helmuts'," 284.

> in Berlin abducted the Berlin politician Lorenz and threatened to kill him in order to obtain the release of several imprisoned terrorists, the governments in Bonn and Berlin found themselves in a moral dilemma. The mayor of West-Berlin, Schütz, the leader of the opposition in Bonn, Helmut Kohl, and I as head of government, we together decided to save Peter Lorenz's life and to let the terrorists exit the country. In this, we followed the Munich precedent from three years before. Yet again*, neither the Basic Law nor the Bible could help us make our decision* – both possible decisions would have been admissible.[34]

And after the RAF had abducted Hanns Martin Schleyer and threatened to kill their hostage if members of the RAF group were not released from prison, Schmidt made a decision that would become an international paradigm in negotiating with terrorists. According to his view a state should never allow to be blackmailed by terrorists, even if, as in this case, his friend's life was at stake. Schmidt retrospectively reflects:

> Of course, it was natural and self-evident for Hanns Martin Schleyer's family to see Schleyer's basic right to life as the highest value outweighing all other values. And the family ultimately appealed to the constitutional court in Karlsruhe. But the court could not rule that the Basic Law should force us to reach the decision desired by the family in favour of the husband and father, and hence in favour of the terrorists. Once again, the Basic Law offered no decision-making help. *But there was no decision-making help to be found in the Bible or in philosophy either. Once again, we had to rely solely on the powers of our own reason and our own internal moral sense*.[35]

In this last example, which pushed Schmidt to his limits, one can see the dilemma that a politician in a state of emergency can face. Whenever one person has to decide on the fate of another person (type 2) and at the same time must take a responsible decision that affects many other people (type 3), then

34 Schmidt, Janich, and Gethmann, *Die Verantwortung des Politikers*, 65-6. [italics added]

35 Schmidt, Janich, and Gethmann, *Die Verantwortung des Politikers*, 67. [italics added]

one has to weigh up the lesser evil or the better good. Should Schmidt risk sacrificing the life of his friend and family father Hanns Martin Schleyer or follow a clear and strict policy according to which the state must never negotiate with terrorists in order to protect the people? In the end Schmidt opted for the latter and Hanns Martin Schleyer was murdered.

In his recollection and reflection of this traumatic experience in his Marburger speech, he frequently refers to situations of decision-making under time pressure without any legal or moral or religious banisters to guide and ultimately legitimate the final decision. "[...] *there was no decision-making help to be found in the Bible or in philosophy either. Once again, we had to rely solely on the powers of our own reason and our own internal moral sense.*" In the end, as he says, he had to rely "solely" on reason and "internal moral sense." This a very Kantian understanding of how to act in such situations. Schmidt, the pragmatist, was a Hanseatic Kantian in combination with political realism and pragmatism. In his study on the philosophical roots of Schmidt, Henning Albrecht rightly summarised in Schmidt's own words the formula for his political agency: "pragmatic action for moral ends."[36]

CONCLUSION

Of course, the problem of time in decision-making processes is not just limited to individual political decisions. The problem of time-pressure applies to all six types of decisions. Once again, it is useful to look closer at the concept of time and its etymological meaning. In classic Greek a distinction is made between the seizure of time (καιρός)[37] and the duration of time (χρόνος).[38] The former is crucial and requires the acknowledgment of the right moment when to take action, either for oneself on behalf of a person, other people, or if a collective body recognises the very moment to make a decision for themselves, pass a judgement, or decide as a collective body on the fate of many other people.

To make a choice and to take a decision are fundamentally different, but they can overlap. Although, whenever the pressure of time comes into play and the

36 Henning Albrecht, *"Pragmatisches Handeln zu sittlichen Zwecken": Helmut Schmidt und die Philosophie* (Bremen: Edition Temmen, 2008).

37 Franz Passow, "καιρός," in *Handwörterbuch der Griechischen Sprache* (Leipzig: Friedrich Christian Wilhelm Vogel, 1831), 1: 1352.

38 Passow, "χρόνος," 2: 1443.

right moment of taking action occurs, a pure choice becomes an existential decision. Time makes the difference and thus defines its meaning.

BIBLIOGRAPHY

Barnhart, Robert K., ed. *Chambers Dictionary of Etymology*. Edinburgh: Chambers Harrap Publishers Ltd, 2004.

von Bormann, Carl. "Entscheidung." In *Historisches Wörterbuch der Philosophie*, edited by Joachim Ritter, Basel/Stuttgart: Schwabe&Co, 1972.

Foucault, Michel. *Technologies of the Self: A seminar with Michel Foucault*, edited by Martin Luther et al. Amhurst: University of Massachusetts Press, 1988.

Fraenkel, Ernst. *The Dual State. A Contribution to the Theory of Dictatorship.* New Jersey, The Lawbook Exchange, 2010.

"Gettysburg Address." Accessed April 12, 2023. https://www.abrahamlincolnonline.org/lincoln/speeches/gettysburg.htm

Hofmann, Hasso, "Souverän ist, wer über, den Ausnahmezustand entscheidet." *Der Staat* 44, no. 2 (2005): 171–86.

Kierkegaard, Søren. *Either/Or: The Fragment of Life*. Oxford: Penguin, 1992.

Krockow (Graf von), Christian. *Die Entscheidung: Eine Untersuchung über Ernst Jünger, Carl Schmitt, Martin Heidegger*. Stuttgart: Ferdinand Enke Verlag, 1958.

Passow, Franz. *Handwörterbuch der Griechischen Sprache*. Leipzig: Friedrich Christian Wilhelm Vogel, 1831.

Port, Andrew. "In Memory of the 'Two Helmuts: The Lives and Legacies, and Historical Impact of Helmut Schmidt and Helmut Kohl: A forum with Clayton Clemens, Ronald Granieri, Matthias Haeussler, Mary Elise Sarotte, Kristina Spohr, and Christian Wicke." *Central European History* 51, no. 2 (2018), 282-309.

von Schirach, Ferdinand. *Terror*. London: Faber&Faber, 2017. See: https://terror.theater/map (Accessed April 12, 2023).

Schmidt, Helmut, Peter Janich, and Carl Friedrich Gethmann. *Die Verantwortung des Politikers*. Paderborn: Wilhelm Fink, 2008.

Schmitt, Carl. *Die geistegeschichtliche Lage des heutigen Parlamentarismus*. Berlin: Duncker&Humblot, 1996.

Schütz, Alfred, and Thomas Luckmann. *Strukturen der Lebenswelt*. Konstanz: UTB, ^{2}2017.

Seebold, Elmar, ed. *Kluge Etymologisches Wörterbuch der deutschen Sprache*. Berlin/New York: Walter de Gruyter, 1999.

Seyffert, Oskar. *A Dictionary of Classical Antiquities: Mythology, Religion, Literature & Art*. New York: The Macmillan Company, 1891.

Spohr, Kristina. *The Global Chancellor: Helmut Schmidt and the Reshaping of International Order*. Oxford: Oxford University Press, 2016.

Stubbe da Luz, Helmut. *Extreme Situationen, schnelle Entscheidungen: Helmut Schmidt gegen Sturmflut und RAF-Terror*. Bremen: Edition Falkenberg, 2022.

Thaler, Richard, and Cass Sunstein. *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven: Yale University Press, 2008.

Voigt, Rüdiger, ed. *Der Staat des Dezisionismus: Carl Schmitt in der internationalen Debatte*. Münster: Nomos, 2007.

Weber, Max. *Wirtschaft und Gesellschaft. Grundriss der Verstehenden Soziologie*. Tübingen: Mohr Siebeck 5. Aufl., 1980.

4
FORMS OF SPATIAL ORGANIZATION AND INHERITANCE OF "*INOCHI*" (LIFE OR LIFE FORCE)

MICHIHIRO KITA

INTRODUCTION

We are experiencing a period of dramatic change for both the world and local communities. While significant scientific and technological progress is being made, we have to cope with various complex social issues, such as falling birthrates, population ageing, the breakdown of communities, and potentially existential threats such as climate change and global pandemics. We are witnessing major shifts in the social, economic, and spatial systems that humanity relies upon.

What is the most important thing inherited from the past to the future amid this major transformation? It is *Inochi*, as we say in Japanese, which translates as life or life force. *Inochi* is not something that is lost at the moment of a

person's death. It is something that is transmitted across generations. When we define *Inochi* in this way, we can see the meaning of life and death in this world, and the significance of human interconnectedness.

I want to convey in this chapter how *Inochi,* which is said to reside in the body, also exists in space and has an organized form. *Inochi* resides not only in our individual bodies, but can also be understood as aggregating through various spatial structures, such as districts and towns. *Inochi* of individual (individual life, life force, vitality or Bergson's *élan vital*) and *Inochi* of community (ubiquitous life force, vibrant communities) are interconnected.

Chapter 2 shows the importance of building a truly open society by breaking down barriers in people's minds, with people who are considered vulnerable, such as the disabled and the elderly, taking the lead. It also explains the need to be aware that "*Inochi* in need of assistance" and "*Inochi* giving assistance" are in a mutually supportive and mutually assisting relationship, even though their positions are constantly changing due to pandemics and disasters. This chapter presents a model in which individual lives are connected to the ubiquitous life beyond their various positions for growth of the mind in an interpenetrating manner, which also explains the concept of the future society presented in Chapter 2 from a spatial perspective.

At turning points in time, when urban development that divides society and tradition is frequent, experts have always emerged who strongly advocate for an urban planning approach that values *Inochi*.[1] For example, in the early twentieth century, Patrick Geddes, a Scottish urban planner, proposed the idea of "conservative surgery" to preserve the life of the city and the importance of understanding the evolutionary process of the city as a living organism from the past to the present with citizens and reflecting it in planning. In addition, during the postwar period, when large-scale urban development spread from the U.S. to the rest of the world, Christopher Alexander, discussed in the later paragraph about the relationship between a person and a community, presented an important theory that had a major impact.

The present era is one of unprecedented transition. Marco Amati shows how Bergson's vitalism has been carried over with other related theories into the field of urbanism in Europe, and presents the importance of viewing the

1 Architectural Institute of Japan, *Area Contextual Design: Thoughts and Methods for Connecting the Past, Present, and Future of Community* (Kajima Institute Publishing Co., Ltd., 2022) (in Japanese).

principles of urban formation and evolution from the perspective of vitalism, which is "the idea that an understanding of organisms demands reference to vital forces or spirits."[2]

This chapter, in order to present an aspect of meta-science, while also making use of such a vitalistic position, assumes that there is a "large consciousness" that seeks to evolve cities from the past to the future, and presents a methodology for interpreting large consciousness from a synthesis of findings across science and metaphysics.

The inheritance of *Inochi* as a ubiquitous life force within communities occurred naturally in the past. However, for contemporary society various challenges, including new social divisions, have emerged that potentially impede this process. Therefore, in order to reconfigure society today, it may be important to consciously understand the principle of the inheritance of *Inochi*. I will begin our discussion of this theme of *Inochi* from a spiritual perspective, such as the function of the mind.

FORM ORGANIZED BY *INOCHI* OF INDIVIDUAL

IDENTITY AND SELF

People have different ways of thinking about things and people. Suppose a newcomer joins a group, such as a workplace in a certain company, a school club, or a university laboratory. Of course, the newcomer will be taught the basic operational tasks right away, but the important things the newcomer wants to know, such as the know-how to create a new project or research theme, or how to practice acquiring a special skill, may not be readily available. Let me give an example from my personal experience. My university mentor refrained from teaching anything about research to the students who were assigned to his laboratory. Students were left to seek research themes on their own. Although there are various interests, the research theme needs to be academically novel, and it also needs to have depth and potential for future development. The students had to go through a trial-and-error process in developing their research and many got lost in the process. As I later found out, my mentor believed that students needed this period of time to think about their future as members of

2 Marco Amati, *The City and the Super-Organism* (Singapore: Palgrave Macmillan, 2021).

society. This was his way of caring for and being compassionate toward the students. However, a student who is troubled might consult other faculty members. As a result, other colleagues may think that the mentor is a faculty member who neglects to provide adequate supervision to his students.

But what happens if we consider the relationship between mentors and students from the perspective of identity. Identity refers to a way of coping with the outside world, a way of thinking, and it is said that identity is established only when this is recognized as such by oneself and by the community. In this case, we can see that the mentor's not revealing how he cares about his students, and his philosophy when dealing with new students, are actually part if his identity. If colleagues perceive him to be an uncaring professor, however, then his identity is misinterpreted. Rather, it is only when colleagues perceive that his attitude is born out of compassion for the students (who find important and active roles in society) that his actual identity is reinforced.

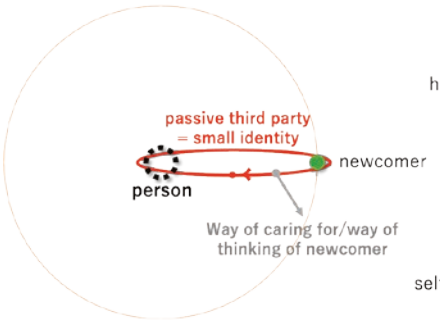
As shown in Figure 1, identity is established between people and it evolves.[3] For example, the identity of caring for students can be renewed on a daily basis by respecting their autonomy and by casual hints, rather than leaving them completely alone. This way of acting can be recognized again by the people in the community.

Here, although debatable, let me replace identity with the word "self." The Danish philosopher Søren Kierkegaard's discourse on the self is difficult to follow.[4] I would interpret it as follows. The self is not within one's own body, but is the very relation between oneself and another person. However, since there could be many others who have the same kind of relationship between self and another, it should be called a "passive third party." A person forms various relationships with many other people as shown in Figure 2, and the combination of various relationships, or "relationship of relationships," is something completely original that no one can imitate; this is the self, the "positive third party."

In other words, the way the mentor cares for the student is a passive identity, since it is not an identity that is unique to the mentor alone, and many others are considered to have the same identity. I call this a "small identity" as a simple expression. On the other hand, the mentor has various small identities for each

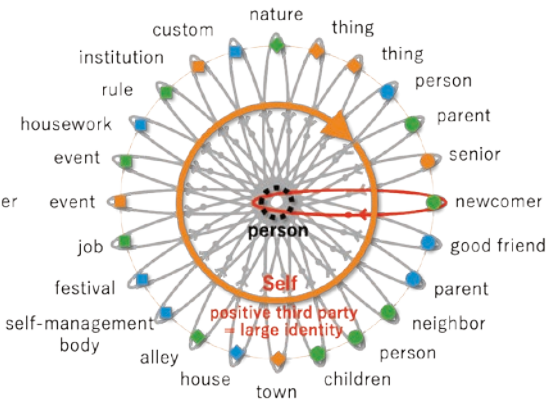
3 Erik Erikson, *Identity and the life cycle* (International Universities Press, 1959).

4 Søren Aabye Kierkegaard, *Sygdommen til Døden*, trans. S. Saito (Iwanami Shoten, 1939).



Small identity is a dynamic relationship, which is way of thinking of people, things, houses, towns, and jobs.

Figure 1. Small Identity



Small identities are integrated into a person's unique, positive, large identity, which is the self itself.

Figure 2. Large Identity (Self)

of the various students, colleagues, friends, parents, and neighbors in addition to this student. There are also small identities for physical elements and environments such as objects, houses, greenery, towns, and landscapes, as well as for social environments such as jobs, neighborhood associations, rules, and institutions, including ways of caring and recognizing. All of these are combined and integrated into a person's unique, positive, large identity, which is the self itself.

INHERITED IDENTITY

This large identity is not a single seamless structure, but a structure of several larger identities that are connected and overlap with each other. I will discuss examples of this from the perspective of inherited identities.

In the hometown of an acquaintance of mine, a very grand festival is held in the fall. The local people carry gorgeous portable shrines and parade them through the town. The route is decorated with traditional lanterns and flags along the way. The portable shrines and the scenery are brightly lit. However, my acquaintance is busy with his work at his company and can only attend the festival for a short time. So instead of participating on the day of the festival, he helps out the day before with decorations and other preparations. This is because he knows that the bustle of the festival is supported by invisible activities, and that helping with the preparations is very important for the success of the festival. The street in front of his house is also on the route for

the procession. As such, he cleans up around the entrance of his home the day before the festival. In addition, by giving sweets, which were only given to the children of older resident families, to those from new families in the community, he subtly expresses the importance of cooperation without discrimination. As shown in Figure 3, each small identity he creates between work, festival, home, and children is integrated to create an identity of "how one should contribute to the town through the festival." This is also part of his unique and large identity, which becomes a part of his self.

He inherited this identity from his boss, whom he respected. His boss's hometown is in another region and he has learned from various episodes shared by his boss. He recognized the key importance of his boss's ideas, which he incorporated into a part of his self. Material things, such as objects and buildings, will always age and are lost, but large identity is something that is passed down from person to person forever, along with the desire to be respected. In other words, it can be said that the "world of the mind" exists in a higher dimension than the three-dimensional world of matter in terms of its ability to transcend time.

As another example, let me discuss the large identity of another colleague. She runs a hospice and a serviced senior housing facility with the hope of building a model for future nursing and care. She accepts people with terminal cancer and those with dementia and works with the nursing and care staff to

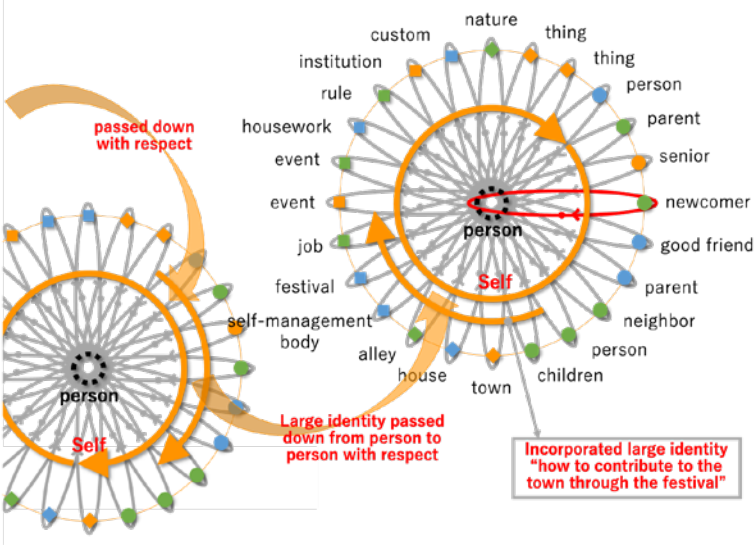


Figure 3. Inherited Large Identity

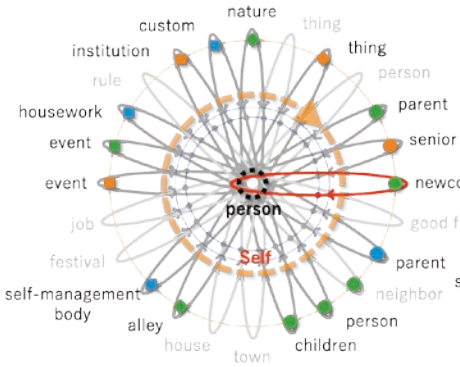
help them regain a sense of self-affirmation and to live life on their own terms. Together with her staff, she has cared for many people in their final days. In the process leading up to their death, the emotional conflicts of not only the people concerned but also their family members were eased, each of them rediscovering the value of life, and some of them awakened to a new perspective on life and death. Miracles have occurred, such as a person who was told before admission with little time left to live, became well, and returned home, and a person who had been weakened by medication, regaining her sense of self and being able to eat on her own. These miracles, however, have been realized through the invisible, daily efforts of my colleague. She believes that her relationships not only with the residents, but also with their families, staff, community members, and all other people involved with the parties are given to her by God and Buddha. She considers what meaning the current difficulties have in the process of each person's life. The small identities she has developed with these people are integrated to form large identity of "how to support the spiritual growth of people across positions" as in the case of the festival shown in Figure 3. This larger identity is about to be passed on in the selves of the people involved, and we hope that it will become a force for innovation in the way the nursing and care industry works.

What these two examples imply is that the self of a person is formed by the combination of large identities of various people with whom that person has interacted in the past and whom they respect. They, the large identities, are the driving force that works to improve our communities.

UPDATE OF SELF

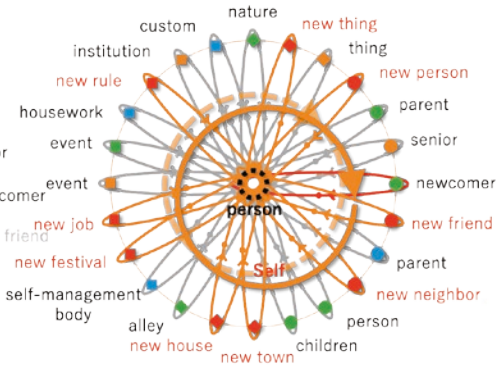
The self can be severely shaken. Earthquakes, tsunamis, and other catastrophes take away family, friends, colleagues, and other loved ones, while also causing the loss of homes, jobs, and familiar towns. Ken Miura has studied how people who lost not only their jobs and towns, but also their immediate families, rebuild their "person-environment systems" after the tsunami that struck after the Hokkaido-Nansei-oki Earthquake destroyed the fishing town of Okushiri Island.[5] People live by building relationships with their environment, that is,

5 K. Miura, H. Iwasako, and M. Kobayashi, "Survivor's Personalization in Private Space of Restration Housings Constructed after the Hokkaido South-west Offshore Earthquake – Natural disaster and environmental transition Part II." *Journal of Architecture and Planning* (Transactions of AIJ), No. 510 (1998): 109-116 (in Japanese).



When people, things, houses, towns, and jobs are lost due to disasters, many small identities and associated larger identity are diluted.

Figure 4. Diluted Large Identity (Self)



To live is updating a self by integration of existing small identities with new small ones, formed with new people, things, houses, towns.

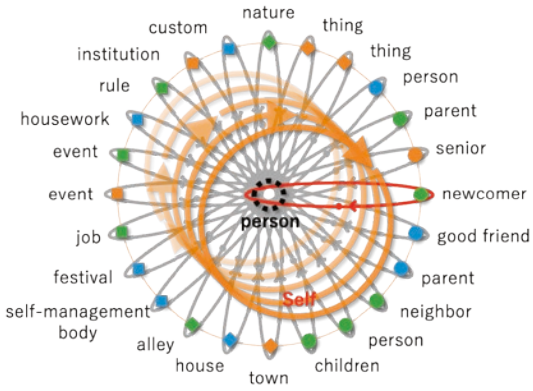
Figure 5. Updating Large Identity (Self)

person-environmental systems, with people, things, houses, towns, and jobs. Miura found that when people lose many relationships due to a disaster and their person-environment systems are destroyed, they are unable to do anything due to a sense of loss. He noted how they could only make a handmade Buddhist altar out of a box and place the tablets of their deceased family members on it. From this point on, however, he observed how they gradually meet new people and towns, and by improving the environment, they rebuild various relationships.

Earlier, I mentioned that the major identity is the self. To illustrate this with the Figure 4, when people, things, houses, towns, and jobs are lost due to disasters, many small identities that were created through relationships with these matters also disappear. As these are vanish, the larger identity, or self, is diluted.

Eventually, as they confront their current situation, meet new people, and search for their place in the new town and the scenery they like, they gradually recreate small identities, which are then integrated once again into a new self (Figure 5). I shall tentatively call this phenomenon “update.” It is not the replacement of all old elements by new ones, nor is it simply the sense of an extra new element. It is an update in the sense that the relationship between the original element and the new elements are rewritten. Updating occurs through small, daily events changing the way we greet people, we work, and we treat our friends. It can be sad and painful, while there are also times when we update large identities. To live is to continue updating in such way.

And, as represented in Figure 6, the continuum of a large identity (self) that continues to be updated repeatedly from the past to the future is the form of *Inochi* expressed in space.



Inochi expresses the form in the space of the mind, that exists between the physical body and the environment, as a continuum of a large identity updated repeatedly from the past to the future.

Figure 6. Continuum of Large Identity (Self)

FORMS ORGANIZED BY *INOCHI* OF COMMUNITY

SPACE AND PLACE

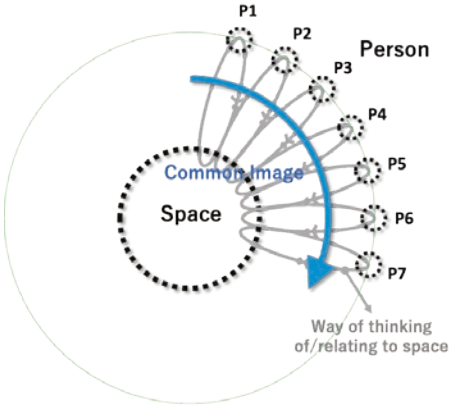
Assume a certain square-like space. Because of its good location and serenity, people nearby will use it for events, and the owner of the building facing this space will start a café. Eventually, interested people will begin discussing what kind of atmosphere the space should have. In Figure 7, a circle icon connects the space and each person. This refers to the way people think about and relate to the space, and since this way of thinking can change, the circle is drawn with arrows indicating its dynamic nature. Will it be a green space with trees planted all over? Will it be a social space with tables under a moderate amount of greenery where people can have intellectual chats? Or will the entire space be left open for large events without tree planting? Thus, each person has a different way of thinking about space. Eventually, through deliberation, people can come have a "common image" of wanting to make a space where they could create something, and everyone comes to think that a space for intellectual chats would be good for that purpose. In response, they begin to make improvements such as appropriate plantings, pavement with a warm

atmosphere, and appropriate tables and chairs. This common image is formed by integrating people's ways of thinking and is indicated by the large arrows in Figure 7. In addition, as the attractiveness of the space increases, more and more people become involved in improving the space.

As these discussions and small improvements continue, there is a turnover of people, with some people moving to other locations and new people arriving. As new people propose new ideas and discussions are repeated, improvements will probably be made to allow for large events while maintaining the common image of making creative space.

The common image that is inherited even when people are replaced is defined as "tacit knowledge" and can include wisdom, insights, experience, and intuition. If new people are not accepted, the common image may eventually become rigid and the number of members will decrease. On the other hand, if new people and their ideas are accepted, the tacit knowledge will be updated through constructive discussions. Like the self, tacit knowledge is also updated.

In this way, the state in which tacit knowledge is updated as people change and the space is gradually transformed is called a *Ba*, or "field" in English. *Ba* can be an entity that has *Inochi*, and it is sustained by the constant efforts of each one of the people who make up the *Ba*. Hiroshi Shimizu argues that "community" is the essence of *Ba*, an entity with *Inochi*. He also calls this kind of larger-than-human life "ubiquitous life," which I mentioned above, and states



The ways people think about the space individually are integrated to form a common image.

Figure 7. Forming common Image

Tacit knowledge is updated through creative discussions by existing members and new ones accepted in Place.

Figure 8. Space with *Ba* transitions to place

in his book *The Idea of Ba* that it exists on a larger scale at the town, city, national, and global levels.[6] Figure 7 has "space" in the center, while Figure 8, in contrast, has "place" at the center. This indicates that space transitions to place when space is endowed with the life force of *Ba*. In fact, the terms space and place are extremely important to the field of architectural and urban design, but their definitions vary from person to person and are vague. The definition, however, is clear based on *The Idea of Ba*.

The concept of *Machizukuri*, which is attracting worldwide attention as a methodology for environmental improvement unique to Japan, can also be explained from the perspective of *Ba*. In English, the term *Machizukuri* is sometimes translated as "placemaking" or "community-based development," which tends to emphasize physical development. In contrast, *Machizukuri* focuses on human connections, value enhancement and sustainability that result from the process, rather than outcomes such as modification to the physical environment. *Machizukuri* is even used in English literature overseas.

DECODING TACIT KNOWLEDGE OF A TOWN

The scale of "place" can be extended to the scale of a town. For example, Senri New Town, located within a short distance from Osaka University's Suita Campus represents an interesting case study.

With a planned population of 150,000, Senri New Town was the first new town in Japan to be developed by 1970, after the neighborhood unit Satakedai was opened in 1962. While large resources were invested in urban infrastructure, such as parks, a functional street system, and land use organization, the policy of cutting back on funds spent on buildings such as housing and public facilities was unavoidable. The excellent planners who were involved in the design of the housing complex were no longer able to apply their skills to the design of the residential buildings, and they had to concentrate their efforts on the layout of the spaces between the residential buildings in order to realize a "rich" living environment for the new era. With no tiles, stones, or other paving materials available, the best possible layout of the exterior space was devised using only soil and asphalt.

For example, the planners of the Osaka Prefectural Housing complex adopted the layout shown in Figure 9(a), in which an enclosed courtyard is largely surrounded by buildings with cul-de-sacs on the outside. This ensures that

6 H. Shimizu, *Idea of Ba* (Tokyo: The University of Tokyo Press, 2003) (in Japanese).

(a) Master plan "enclosed-type layout" by prefectural government

(b) Master plan "parallel layout" by Japan Housing Corporation

Figure 9. Layout Plan of Apartment Complex
Figures taken from literature (Katayose 1979) with additions.

children can play safely in the courtyard without encountering cars. The courtyard is further sub-divided into smaller open spaces for groups of several apartment block creating social groups with closer relationships. On the other hand, the Japan Housing Corporation, as shown in Figure 9(b), introduced a tower-like "point house" to eliminate landscape shortcomings, with the principle of having all residential buildings face south, and pedestrian routes integrated with the children's playground running from north to south. Osaka Prefectural Government strongly insisted that the Japan Housing Corporation adopt the enclosed layout, and a serious controversy ensued.[7]

Although the layout forms proposed by the planners from the two housing organizations were quite different, they shared the same "theme" in that they aimed for people to meet in open spaces such as courtyard and pedestrian paths, from which communities were formed.

After the construction of Senri New Town, the first generation of residents who moved into the housing complex for the first time created and nurtured playlots, festival squares, volleyball courts, paths for interaction, woods, and other facilities in the exposed soil of the open spaces. The process always involved discussion and consensus building among residents, which led to the fostering of social capital, and 30 or 40 years later, many of the most advanced

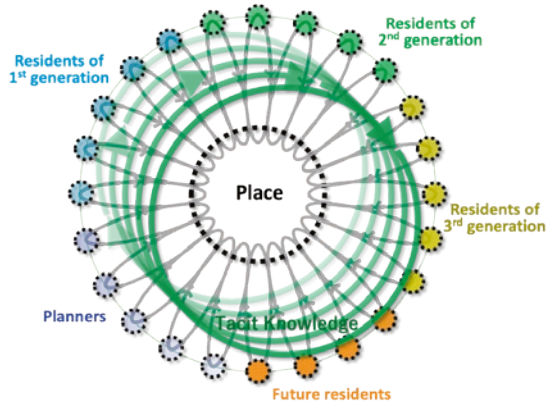
7 T. Katayose, *Study on Senri New-town – History of Construction of Planned City, Planning Technology, and Philosophy* (SANPO Publications, 1979) (in Japanese).

Machizukuri projects in Japan were born, including the establishment of community cafes and self-management of bamboo groves and streets.

The tacit knowledge inherited by the people associated with Senri New Town is the intelligence of the entity, *Inochi* of community, and encompasses the problem-solving memories that people have imprinted on the physical environment of buildings and open spaces under the common theme from past to future, of nurturing community through cooperation in the open space. It is as if each individual lives with a theme for his or her life, and the local community inherits the theme from the past to the future, both unconsciously and consciously.

We are now in the era of the second and third generation, and apartment complexes are being rebuilt. As shown in Figure 10, the continuum of tacit knowledge that has been repeatedly updated from the past to the future across generations is the form expressed by *Inochi* of community in space.

In order to inherit *Inochi*, it is necessary for the second and third generations to share the same theme in the environmental improvement. However, as a result of the completion of the rebuilding of most apartment complexes, many new apartment complexes have been built with a single plaza and the ground is covered with stones and tiles, and there is no sign of any activity or social group that seeks to improve the environment there. Currently, the theme is in danger of being lost, and my laboratory has been involved in activities to rebuild it. Some areas have been created where pedestrian spaces are organically



Ba (Community) expresses the form in space as a continuum of tacit knowledge updated repeatedly from the past to the future.

Figure 10. Continuum of Tacit Knowledge

connected beyond the site of the housing complex. The loss of the theme means that *Inochi*, vibrancy or sense of community will be lost, so it is important that the theme be carried over to the planning of apartment complexes that are about to be rebuilt.

ANOTHER FORM ORGANIZED BY *INOCHI* OF INDIVIDUAL AND COMMUNITY

EMBODIMENT ORGANIZED BY INDIVIDUAL

Above I wrote that people and communities express forms of *Inochi* in space. The "space" here is a higher dimensional space beyond Euclidean space. There is another form that is born in higher dimensional space. It is the connective relationship that arises between the physical body and the physical environment, which I would like to define by the term *Shintai* or "embodiment" in English.

Here, I will attempt to explain one person's embodiment. Now, let me ask you to imagine a state of shaking your head from side to side. Your "view" of the walls, ceiling, furniture, etc. will move to the left or right. That change in visibility contains a lot of information, for example, the angular velocity at which you are shaking your head. The angular velocity can be determined, in an extreme explanation, not by the load on your neck muscles, nor by the discomfort or pain in your head, but by the way the flowing view changes. This is what the American psychologist J. J. Gibson calls "optical flow."[8] You would also know where you are sitting. If you are in the center of the room, the change in vision is the same on both sides, but if you are at the edge of the room, there is a heterogeneity of flow: the side that changes most and the side that changes least. The side with the most change is "this side" of the room, and the side with the least change is "that side" of the room. Gibson observed outstanding Air Force pilots and found that the way the terrain and runway surface flowed itself provided information about the aircraft's altitude, speed, and direction. This is called "direct perception." In fact, we move our bodies to catch the optical flow in order to know our position and posture. The flow itself is the information of our position and posture, and is the "mind" itself.

Here is another example. Suppose you live on the seventh floor of an

8 J. Gibson, *The Ecological Approach to Visual Perception* (Boston: Houghton Mifflin, 1979).

apartment house. You come home from work or school to your apartment building and try to take the elevator up to the seventh floor, but you inadvertently and without realizing it, press the wrong button and get off at the eighth floor. The floor, walls, and ceiling of the elevator hall and hallway are the same as on the seventh floor, so you walk down the hallway as usual, and when you turn around to go to the front door of your flat, there is no door? You wonder why, and finally realize that you are on the wrong floor. I have made this mistake several times in the past in my apartment building, because my university office is on the eighth floor. Although condominiums are made up of almost the same layout from the lower floor to the upper floor, the position of doors, walls, etc. may differ slightly from floor to floor. Without realizing my mistake, I would walk down the hallway on the eighth floor; my body would "remember" the distance from the elevator on the seventh floor to the door of my flat, and I would notice the slight difference at the door. This is the one-to-one linkage between my body and the change in my vision as I repeatedly get off the elevator and walk down the hallway. The change in vision is an optical flow caused not only by the ceiling, walls, and floor of the corridor, but by the aspects of the physical environment, including the buildings and mountains seen through the corridor's railings. This system of invisible connections is structured in the "space" between the physical body and the physical environment.

Here, I attempt to define such system of connections. I recall there is a cul-de-sac where I played baseball with my friends as a child. When I visited there after a long time as an adult, I felt a strange sensation that the size of the space was so small. I think that this is because the body and the physical environment (change in appearance) at the time of the child were combined through the action of baseball, and the system of the combination was structured in the space. Here, we define the system of coupling between the body and the physical environment as the *Shintai* (embodiment) formed in space. To notice the embodiment of childhood as an adult means that the embodiment was recorded somewhere. I think that the embodiment is recorded in the changes in the visibility of the physical environment, such as houses along the cul-de-sac, townscapes, greenery, mountains, etc., that occur when the body is placed in a certain space and the body is moved. The embodiment that is formed in space by the combination of the body and the changes in scenery (what Gibson calls optical flow) caused by the body's movement, is inscribed and recorded in the physical environment, along with the thoughts and mind of the moment. What is important is that the embodiment is updated on a daily basis in accordance

with the changes of the body's own condition and the way it behaves. For example, an injury to a leg, and the way one walks to protect it, also produces an update of the embodiment. The Gulliver phenomenon is a drastic update of the embodiment. The embodiment of childhood appears in space with the feelings of that time, and is integrated into the embodiment organized in the current space, and is reborn as a new embodiment. The growth and development of the embodiment consists of the continuous integration of the embodiment of the immediate past and the embodiment of the present.

I just wrote that the embodiment is recorded together with thoughts and mind. In other words, mind is recorded in the physical environment only after the embodiment is formed, and then, it becomes memories. When one encounters the embodiment of the past in the familiar space, one's feelings and thoughts, such as what made one happy, what made one lively, and what made one sad, are downloaded. This is also the update of the self, mentioned earlier. When we look back at our past self from the perspective of our present self, we can rethink that the painful experiences of the past are valuable from the perspective of our current state of mind, which has gained a variety of experiences, and that we are the person we are today because of those painful experiences. When we ask ourselves why we need a physical environment and why we need space, we can answer that it is for the growth of each individual self.

LARGE EMBODIMENT ORGANIZED BY COMMUNITY

As I mentioned earlier on forms organized by *Inochi* of individual and community from the spiritual aspect, there is the self of each individual and the tacit knowledge of the community, both of which grow while being updated. Similarly, from the aspect of embodiment, in addition to the embodiment of each individual, there is the "large embodiment" of the social group and community.

Tsutomu Shigemura[9] is a leading authority on rural planning in Japan. He studied a fishing town and found that there were several small alleys called

9 T. Shigemura, "How the spatial structure of village should be comprehended: Separation of principle for sustainable development and modernism model," in *Modern spatial system and Japanese spatial system – 21th century of city and architecture: Reflection and prospect*; Special researching committee for modern spatial system and Japanese spatial system (Architectural Institute of Japan, 2008), 11-13 (in Japanese).

Amimichi (fishnet alley). People living in houses along each alley formed a small community where they cooperated with each other in the fishing industry. He found that the people in the small communities cooperate to deify small shrines and guardian statues to pray for the safety of the fishermen every day, forming a "spatial structure of consciousness" along the alleys. The spatial structure of consciousness is a form of mental imagery, and in this community, it is shaped along the alleys. Based on this, a "social spatial structure" is formed, and based on two types of structures, a visible "physical spatial structure" is created.

The large embodiment I am referring to seems to apply to the same level of phenomena as the spatial structure of consciousness described by Shigemura. In Japanese towns and villages, there are festivals — as I mentioned above — in which the portable shrines are moved in procession by everyone, to pray for the safety and prosperity of the town. When local people carry the portable shrines with the same feelings and go around the streets of the town, the embodiment of each individual is combined with the streetscape and scenery, along with their feelings, to form a single large embodiment along the streets.

In Japan, many annual events and rites of passage have been repeated not only in local spaces, but also in houses. There are many ways to explain this, but the main point of my own interpretation is that Japan is one of the most disaster-prone regions in the world. Originally in Japan, streets, levees, and other infrastructure were made of soil, and houses were built of wood and paper. As a result, towns and houses were lost repeatedly to earthquakes, tsunamis, typhoons, floods, landslides, fires, and other disasters. This is why it is more important to sustain large embodiment on the land and in space through the repetition of events, rituals, and other acts. When towns and houses are destroyed, new structures are rebuilt along the large embodiment formed between the people and the larger landscape of mountains and rivers. I believe that it is the meaning associated with gods and Buddha, ancestors, and life, that gives us the courage and strength to rebuild, and to rebuild into more evolved structures. This is the true principle of spatial formation of villages and cities.

The fishing town Shigemura surveyed was severely damaged by the 1995 Great Hanshin-Awaji Earthquake, which destroyed most of the houses. In order to rebuild the town, the local government redeveloped the area through land readjustment. All landowners in the area to contributed a certain percentage of their land, which is then used to widen the streets and provide new streets and parks based on the institutions of land readjustment. It is a project that involves

various consensus-building difficulties, and the efforts of the developer are worthy of respect. However, after the development, all the alleys were gone, neatly sectioned off into streets wide enough for cars to pass, and the homes of those who had formed the alley communities were dispersed to remote lots in the area. Shigemura strongly criticized the fact that even though shrines and guardians remain, they can no longer be maintained in people's daily lives, and the "spatial structure of consciousness" has disappeared. This is because the society and physical structures adapted to the local climate have been formed based on this consciousness.

On the other hand, there are cases where large embodiment is rebuilt each time, despite repeated destruction and regeneration. Tokyo has faced the crisis of having its very way of life cut off many times, such as the hollowing out of the city due to the abolition of feudal domains at the end of the nineteenth century, the damage caused by the Great Kanto Earthquake, and the destruction caused by World War II. After the earthquake and the war, there was urban development for reconstruction in each case, and the street patterns were greatly altered. Nevertheless, there are areas where urban festivals such as transferring Shinto shrines have resumed and have been handed down to the present day. Hirohisa Ito examines the mechanisms by which festivals are handed down beyond disasters in various areas of central Tokyo, such as the Kanda and Shinjuku area.[10]

The people responsible for the resumption of festivals were the people from local organizations, which have existed for a long time. The reconstruction of the city after the earthquake and war was carried out through land readjustment projects. This process widened the width of streets and substantially reshaped the street pattern, but the land owned by the landowners was set aside somewhere in the community through a procedure of land conversion. Local people remained in their original neighborhoods and continued to serve as the shrine parishioners. Mutual support was sustained in the community as people cooperated with each other in preparation for the annual festivals. On the day of the festival, even the streets, which are altered drastically due to the

10 H. Ito, "Modern period of space for festivals in cities – Acceptance of spatial-social system in modern cities," in *Modern spatial system and Japanese spatial system – 21th century of city and architecture: Reflection and prospect*; Special researching committee for modern spatial system and Japanese spatial system (Architectural Institute of Japan, 2008), 165-166 (in Japanese).

reconstruction, will be paraded with people pulling floats, visualizing the sense of unity of the community and sharing the joy of living together. No matter how many times the physical environment is renewed, the large embodiment is reconstructed and kept alive each time the rituals are repeated. The fact that the people who manage urban festivals are connected with the shrine as the nucleus is an important factor in the update of the large embodiment.

SPATIAL SYSTEMS ORGANIZED BY *INOCHI*

RELATIONSHIPS BETWEEN *INOCHI*, SPACE, AND PHYSICAL BODY

To provide a bird's-eye view of the previous discussion, Figure 11 has been prepared. From right to left, "life," "space," and "(physical) body" are arranged. Then, human is placed on the lower side and community on the upper side. As mentioned previously, Hiroshi Shimizu defines *Inochi* of the community on the upper right as "ubiquitous life" and *Inochi* of a human on the lower right "individual life."[11] The physical body of a community would refer to the aggregate or organizational body of physical elements that make up the town or settlement, such as buildings and structures.

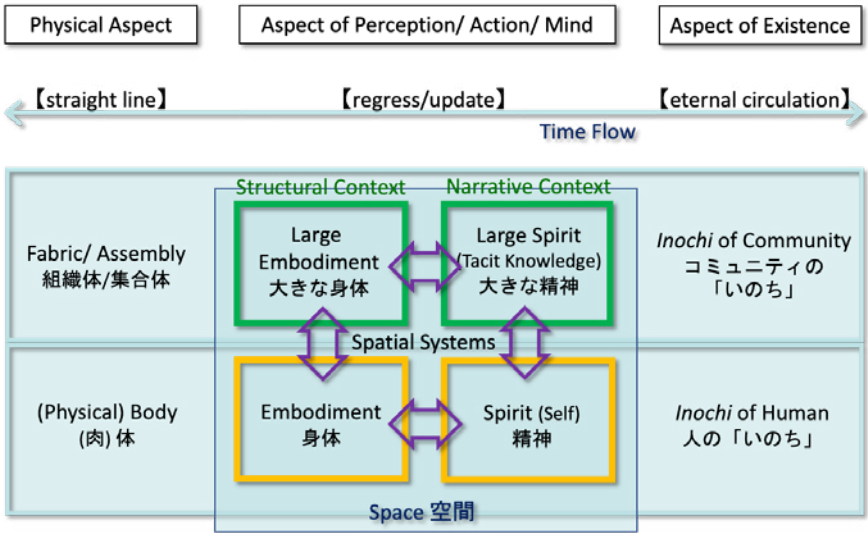


Figure 11. Relationships among *Inochi*, space, and physical body

11 Shimizu, *The Idea of Ba.*

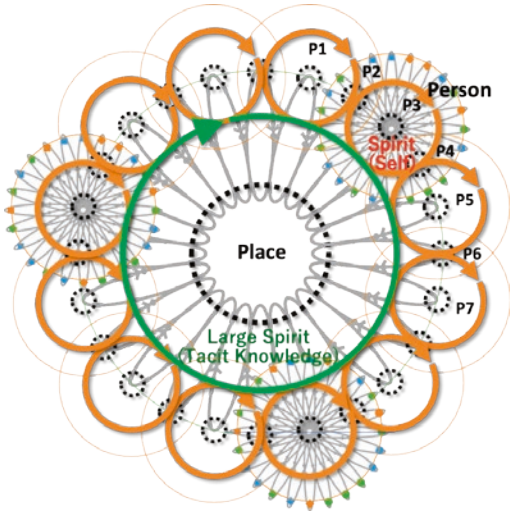
Inochi resides in the body, and its form is structured in space. The structure includes the self of a human, the tacit knowledge of a community, the embodiment of a human, and the embodiment of a community, each of which is placed in the "four windows" of space. These four forms are collectively understood as the spatial systems of *Inochi*.

Here, self and tacit knowledge are ways of thinking and sense of value sustained by updates, which I collectively replace with the term "spirit" in order to use common terminology between a human and a community. In other words, we shall replace self with *Seishin*, or spirit of a person, and "tacit knowledge" with the "large spirit" of a community.

RELATIONSHIP BETWEEN A PERSON AND A COMMUNITY

What is important here is the relationship between spirit, large spirit, embodiment, and large embodiment. Regarding the relationship between spirit and large spirit, the concept of "pattern language" introduced by architect Christopher Alexander is highly relevant.[12] "Pattern" refers to a way of designing in which each environment, such as a terrace, a room, or a street, is inhabited by existence called "quality without a name," which is inferred to be *Inochi* from the context, so that the people in it can be confident and lively in their own lives. "Language" refers to a network of relationships in which lower-level (small) environments such as entrances, windowsills, and terraces are organically linked with higher-level (large) environments such as streets, squares, and districts, and each supports the good qualities of the other. For example, the pattern of "Green Streets" and "Private Terrace on the Street" is a relationship between a higher level and a lower level. By setting the terrace at a moderate height, the privacy of the interior of the house is protected, while creating a relationship between the street and the house where people can feel each other's presence, creating "Green Streets" that are pleasant to walk on. This shows that for Life to reside in each environment, all environments from the upper to the lower level need to support each other. Pattern language is the "gene" of a town or living environment, and a good environment can be sustained by maintaining the pattern language, even when buildings are built up. This is because when a person improves one environment, the effect of the

12 Christopher Alexander, *A Pattern Language* (New York: Oxford University Press, 1977); Christopher Alexander, *The Timeless Way of Building* (New York: Oxford University Press, 1979).



The update of spirit (self) by human and the update of large spirit (tacit knowledge) by Ba are repeated synergistically.

Figure 12. Spirit is linked to Large Spirit by updating each other.

improvement spills over to other environments in the upper and lower levels, and eventually the whole environment changes. This characteristic of interlocking all environments, both upper and lower, is called the "whole." A similar relationship can be found between spirit and large spirit. As shown in Figure 12, when each person updates spirit (self), community (*Ba*) updates its large spirit (tacit knowledge) in conjunction with the updating of individual spirits. This update of the large spirit affects people, and each person updates the spirit again. The whole found in the spirit and the large spirit is a principle that allows people and society to develop together. It can be said that people who share the place grow together through *Ba* of the place.

For the relationship between embodiment and large embodiment, the concept of "organization of space" by geographer Yi-fu Tuan is instructive. A human envisages the future as being located in front of and above the body, while the past is located behind and below the body. The right and left sides of the body also create differences in strength and sacredness, respectively. As the human body occupies space, it creates such meanings above and below, in front and behind, and to the left and right, while segmenting space and giving it some kind of structure. In the dwellings of certain island communities, space is sometimes segmented according to the stages of life, from birth to death. Since ancient times, people around the world have also organized the space of

settlements and towns by linking the image of direction created by the body with the images of light and dark, cold and heat, life and death, and celestial deities in the East, North, South, and West.[13] This may explain how people, by sharing the image of direction, have coordinated their efforts to create individual embodiment in space to create a large embodiment. By collaborating in their daily activities, people living together in a building or community create a large embodiment by combining their bodies each other with the environment, along with their thoughts and images of the sacred/secular, the inside/outside, and life/death.

RELATIONSHIP BETWEEN SPIRIT AND EMBODIMENT

Up to this point, I have described the rewriting of the spirit (self) as "update." At this point, however, I would like to change the term "update" to "synchronization." This is a term often used in connection with digital devices. To ensure that the data recorded on the main unit of the PC and the data on the external device are always in the same state, the data on the external device is always rewritten to the same state as the main unit of the PC, which is called synchronization. When considering the phenomenon of a person's spirit being recorded in the physical environment (change in appearance) along with the embodiment, it is assumed that the spirit organized in space corresponds to the data of the PC itself, and the spirit recorded in the physical environment corresponds to the data of the external device. However, there is a big difference between PC and human synchronization, in that PC synchronization is a one-way function from the main unit to the external device, while human synchronization is a back-and-forth function that integrates data from the present and the past to rewrite them into new data. A human always records their own spirits in the physical environment, and downloads and integrates them into the current spirit to create a new spirit. Then, the spirit is re-recorded in the physical environment, and the downloading and integration are repeated. In other words, the spirit achieves continuous development through back-and-forth synchronization.

The same is true of the relationship between the large spirit and the large embodiment of a community. The large embodiment is formed through people's constant efforts to improve a place while respecting each other and is

13 Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis, MN: University of Minnesota Press, 1977).

recorded in the physical environment such as the townscape and landscape, along with the large spirit (tacit knowledge) of the time. It is then downloaded into the current large spirit and rewritten into new large spirit. This is the synchronization of large spirit.

PRACTICAL IMPLICATIONS FOR RESEARCH ON THE SPATIAL SYSTEM OF *INOCHI*

SIGNIFICANCE OF THE INHERITANCE OF *INOCHI*

As described above, the existence of *Inochi* continuously develops self and tacit knowledge by placing the physical body in space, organizing four spatial systems: spirit (self) and embodiment, large spirit (tacit knowledge) and large embodiment, and synchronizing each of them. *Inochi* is not a weak and vulnerable entity. As shown in the upper part of Figure 11, the physical body eventually decays according to the flow of the linear time axis, and the flow of time of embodiment and spirit is updated by synchronization. *Inochi* is something that is passed on from one person to another or continues forever through the action of *Ba* (field) by synchronization between spirit and embodiment, even if one's life is over.

The self, along with the emotion of respect, can be passed on from person to person forever, and tacit knowledge can continue to develop in a similar manner as people change places through the action of *Ba*. Moreover, the self and tacit knowledge can develop synergistically due to their "whole" relationships.

What then is development? It is to place growth of the mind (spirit) at the center of our values, to deepen and practice our desire to improve our town and community, and to make not only ourselves but also others happy. Even if the community or each individual has experienced a painful event, it is also important for the growth of the mind to overcome it, to gain awareness of the support that has been given to oneself, to be filled with gratitude, and to try to repay the favor.

The most important aspects of the relationship between human and community can be summarized from the perspective of these spatial systems as follows. Everyone who shares a physical environment becomes part of a large spirit and a large embodiment when they stand in each other's shoes and become a part of a relationship of mutual recognition. This explains the phenomenon of empathy from a new perspective.

In my laboratory, we are seeking to develop theoretical constructions and practical research to form this spatial system in architecture, in villages and in cities.

DEVELOPMENT OF NEW CARE

We operate a serviced senior housing facility, accept people with severe dementia, and are examining how to calm high agitation. Through various interviews and conversations, the identity of the person with dementia can be discovered, and when the care worker/researcher is in the same position as the elderly and shares his/her identity, the identity can be transferred to tacit knowledge. At that time, he/she will feel relief and conversely experience compassion for the care worker/researcher, who can also realize the importance of empathizing with others. *Ba* grows as each person involved grows in awareness and spiritual growth, and as *Ba* grows, each person grows as well based on "whole" relationships between spirit and large spirit. It is becoming clear that the concept of staff gaining awareness together as members of *Ba* is important for the future of nursing care. In addition, to examine what kind of mental contribution robots can make to the nursing care field, we are also applying the theory of *Ba* and conducting experiments to see how robots can "participate in conversation" as if they have intelligence.

DEVELOPMENT OF URBAN PLANNING

As shown in Figure 10, I have described the continuum in which the large spirit continuously develops from the past to the future as a form that *Inochi* organized in space. I call this continuum of form the "narrative context." In order to decipher this kind of context, it is important to find the common theme of community and urban development that local areas and cities have unconsciously and consciously shared from the past to the present. Finding such a theme is done through collaboration with people of the past and the future, and passing on the theme to the future will keep the people of the past alive in the future.

Furthermore, local areas and cities have large embodiment, and it is imperative to "read" them at the same time. To this end, we must carefully examine how images create connections between the physical environment and social relations, and bring out the structure of images. This image structure is the large embodiment, and the "organizational context" is defined as the form of the continuum in which large embodiment has changed from the past to the

future. The two contexts have repeatedly synchronized to form a continuum of valuable "story" in the space of settlements and cities. In the field of urban planning, the concept that integrates the two contexts is called the "area context." By creatively developing this context for the future, we can keep *Inochi* alive. We call this thinking and practice "contextual design." Contextual design is effective for local areas and cities with difficult histories, because it finds valuable stories and creates values for the past and the future at the same time. We are currently conducting research on informal settlements in Africa, former communist cities in Central and Eastern Europe, cities that have survived war and natural disasters, and cities that have experienced conflict in the Middle East.

BIBLIOGRAPHY

Alexander, Christopher. *A Pattern Language*. New York: Oxford University Press, 1977.

Alexander, Christopher. *The Timeless Way of Building*. New York: Oxford University Press, 1979.

Architectural Institute of Japan. *Area Contextual Design: Thoughts and Methods for Connecting the Past, Present, and Future of Community*. Kajima Institute Publishing Co., Ltd., 2022 (in Japanese).

Amati, Marco. *The City and the Super-Organism*. Singapore: Palgrave Macmillan, 2021.

Erikson, Erik. *Identity and the life cycle*. International Universities Press, 1959.

Gibson, J. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin, 1979.

Ito, H. "Modern period of space for festivals in cities – Acceptance of spatial-social system in modern cities," in *Modern spatial system and Japanese spatial system – 21th century of city and architecture: Reflection and prospect*; Special researching committee for modern spatial system and Japanese spatial system. Architectural Institute of Japan, 2008: 165-166 (in Japanese).

Katayose, T. *Study on Senri New-town – History of Construction of Planned City, Planning Technology, and Philosophy*. Tokyo: SANPO Publications, 1979 (in Japanese).

Kierkegaard, Søren Aabye. *Sygdommen til Døden*, trans. S. Saito. Iwanami Shoten, 1939.

Miura, K., H. Iwasako, and M. Kobayashi. "Survivor's Personalization in Private Space of Restration Housings Constructed after the Hokkaido South-west Offshore Earthquake – Natural disaster and environmental transition Part II." *Journal of*

Architecture and Planning (Transactions of AIJ), No. 510 (1998): 109-116 (in Japanese).

Shigemura, T. "How the spatial structure of village should be comprehended: Separation of principle for sustainable development and modernism model." In *Modern spatial system and Japanese spatial system – 21th century of city and architecture: Reflection and prospect*; Special researching committee for modern spatial system and Japanese spatial system. Architectural Institute of Japan, 2008: 11-13 (in Japanese).

Shimizu, H. *Idea of Ba*. Tokyo: The University of Tokyo Press, 2003 (in Japanese).

Tuan, Yi-Fu. *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977.

PART 2

WHAT SOCIETY CAN WE HOPE FOR?

5
CULTIVATING GLOBAL CITIZENSHIP THROUGH HIGHER EDUCATION: A REFLECTION ON THE DEVELOPMENT FROM CIVIC TO GLOBAL ENGAGEMENT

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INTRODUCTION

In the last few centuries, Civic Engagement has been promoted for its ambitious goal of individual flourishing as well as higher-level societal aims such as fostering democracy and participation,[2] with engagement and service

1 Published in: *Education Sciences*, 2022, 12(11), 766; https://doi.org/10.3390/educsci12110766.

2 The Policy Circle, "Civic Engagement – What Is Civic Engagement?" accessed April 26, 2022, https://www.thepolicycircle.org/brief/whats-whys-civic-engagement/.

considered separately.[3] While there are many definitions of Civic Engagement, they share the conception of the civic construct as, "one in which the individual would be an active and engaged citizen: an active individual is one who participates in civic activities; and an engaged individual is one who focuses more intensely on a civic enterprise."[4]

Civic Engagement is encouraged to pursue different goals within different organizational and governance structures throughout the world,[5] yet all related to the overcharging concept of citizenship. The connection is often made between Civic Engagement and a functioning democracy, as democracies require active participation by their citizens to form civil associations and social capital.[6] This conception of the civic construct is closely linked to other benefits of individual development, including educational achievements and social competencies.

Due to the strong connection between citizenship and personal development, citizenship education in higher education is often strengthened with the training of individual competencies, which ultimately leads to more engaged citizens, benefiting society.[7] Citizenship education thus combines the idea of providing students space and time for self-development activities[8] with two of

3 Elspeth Jones et al., "Global Social Responsibility and the Internationalisation of Higher Education," *Journal of Studies in International Education* 25, no. 4 (July 22, 2021), https://doi.org/10.1177/10283153211031679.

4 Deborah L. Bobek et al., "Cognitive, Emotional, and Behavioral Components of Civic Action," *Journal of Applied Developmental Psychology* 30, no. 5 (September 1, 2009): 616, https://doi.org/10.1016/j.appdev.2009.07.005.

5 Mary Alice Haddad, "Civic Responsibility and Patterns of Voluntary Participation," *Comparative Political Studies* 39, no. 10 (December 1, 2006), https://doi.org/10.1177/0010414005281937.

6 "What is Civic Engagement?"

7 Richard M. Lerner, *Liberty: Thriving and Civic Engagement* (Thousand Oaks: Sage Publications, 2004); J.F. Zaff, and E. Michelsen, "Background for Community-Level Work on Positive Citizenship among Adolescents: A Review of Antecedents, Programs, and Investment Strategies," Report Prepared for the John S. and James L. Knight Foundation (Washington D.C.: Child Trends, 2001).

8 Milan Jaros, "Leadership and methodology challenges in higher education: Integrating Personal Development, Skills and Competences in the Space of Digital Systems," *Global Journal on Technology* 4, no. 1 (June 25, 2014).

the other main tasks of higher education, namely teaching and research. It is closely connected to the third task of higher education, which can be summarized as contributing to communities,[9] which is achieved by preparing students to be active citizens in society[10] and to be successful in the labor market.[11] At present, a commonly used teaching method to teach Civic Engagement has been Service Learning. Service Learning is a pedagogical tool that is applied to engage students in, "active, relevant, and collaborative learning [...] and to enhance student learning, student development, and commitment to future civic involvement."[12]

Due to the economic and global effects of globalization, which is generally considered to be the process of the world becoming a more interconnected place,[13] the idea of citizenship and the labor market itself underwent significant changes toward being more international.[14] With this development, cross-cultural competencies became key requirements for positive credentials in the labor market and to be successful in society, which is characterized by a variety of social, economic and political challenges due to globalization.[15] With increasing internationalization in different parts of society due to globalization, engagement on a global, rather than a communal or national level, gained relevance. The need for global perspectives and cross-cultural competencies means that we are no longer talking about Civic Engagement and Citizenship, but have rather shifted to discussing Global Engagement and, related to it, Global Citizenship.

9 Jones et al., "Global Social Responsibility."

10 John Annette, "Service Learning in an International Context," *Frontiers: The Interdisciplinary Journal of Study Abroad* 8, no. 1 (December 15, 2002), https://doi.org/10.36366/frontiers.v8i1.95.

11 Janine Knight-Grofe, and Lisa Deacon, "Canada's Global Engagement Challenge: A Comparison of National Strategies." *International Journal* 71, no. 1 (January 5, 2016), https://doi.org/10.1177/0020702015622994.

12 Robert G. Bringle, and Julie A. Hatcher, "Institutionalization of Service Learning in Higher Education," *The Journal of Higher Education* 71, no. 3 (May 1, 2000): 274, https://doi.org/10.1080/00221546.2000.11780823.

13 National Geographic, "Globalization," https://www.nationalgeographic.org/encyclopedia/globalization/.

14 Knight-Grofe and Deacon, "Canada's Global Engagement Challenge."

15 Knight-Grofe and Deacon, "Canada's Global Engagement Challenge."

Higher education, which has the imperative to educate all its students in a manner that effectively prepares them to be active participants in society, will thus need to prepare all students to succeed in a globalized society. In the globalized world of the twenty-first century, this includes, for everyone, extensive knowledge across different cultures and being able to work in an international environment and cooperating with people from different origins.[16] Cultural, political and social involvement needs to be internationalized and practiced in higher education, in order to help students develop the skills and graduate attributes they need in a globalized society.[17] It also means that it can no longer be up to a relatively small number of individual students to pursue an international education or follow a Global Citizenship course in their program, as was previously mostly the case. Already in 2011, the American Council on Education stated that institutions of higher education, "are asked to produce graduates who are capable of communication across borders and citizens who are invested with the capacity to navigate a transparent, permeable world."[18] While some higher education institutions have successfully managed to incorporate ways to integrate Global Engagement in the curriculum and offer transnational courses to students, such as the institutions that are a part of CIVIS (an alliance of ten research universities in Europe) and many of the University Colleges in the Netherlands, a majority of institutions appear to face challenges with institutionalizing Global Engagement.

Higher education thus needs to re-assess the purpose and position of Civic Engagement and citizenship in a changing globalized world, and instead move its focus to Global Engagement and Global Citizenship, in order to train the future global citizens of our interconnected society. By directly connecting engagement to internationalization, higher education will need to shift from preparing students to participate in a democratic society to supporting the

16 P. McGill-Peterson, and R. Matoss-Helms, "Challenges and Opportunities for Global Engagement," i*n Proceedings of the Beijing Forum Conference, Beijing, China*, November 1, 2013.

17 McGill-Peterson and Matross-Helms, "Challenges and Opportunities for Global Engagement."

18 American Council on Education, "Strength Through Global Leadership and Engagement: U.S. Higher Education in the 21st Century." Report of the Blue Ribbon Panel on Global Engagement, 6. Retrieved From: ACE's Blue Ribbon Panel on Global Engagement Report Informs Next Steps for American Higher Education (acenet.edu, accessed September 13, 2022), 6.

development of global citizens.[19] These developments do not need to be separated but can be achieved simultaneously as engagement and service are linked to internationalization and influence each other.[20] Once it is established that Global Citizenship is a necessity in higher education in order to equip students with Global Citizenship competences, questions are raised on how to position this in the curriculum. For example: is Service Learning, which was previously well-connected to Civic Engagement, still a relevant teaching method? Are there alternative pedagogical tools to educate global citizens? Is offering exchanges between institutions of higher education sufficient to learn relevant cross-cultural competencies? In this paper, we are concretely exploring two main research objectives:

1 Why is a change from Civic- to Global Engagement in higher education necessary and why is this topic relevant regarding student development in institutions?
2 What can we learn from pedagogical tools such as Service Learning in order to foster Global Engagement in higher education institutions?

We aim to answer these questions by way of a theoretical paper in which we analyze the current literature and explore new perspectives regarding the interconnectedness and development of engagement in higher education in a globalized world, with the overarching goal of fostering Global Citizenship in students. As our research method is literature-based, we first review the development from citizenship and Civic Engagement to Global Citizenship and Global Engagement as presented in the literature. We subsequently address the role of higher education and discuss ways in which Global Engagement efforts can be implemented and institutionalized in curricula in order to prepare global citizens to take an active role and succeed in an increasingly interconnected and dynamic society.

19 Melissa L. Millora, "This is How Life Can Be Different: How U.S. Student Experiences in International Education Programs Facilitate Civic and Global Engagement." *Journal of Student Affairs Research and Practice* (May 31, 2011), https://doi.org/10.2202/1949-6605.6173.

20 Jones et al., "Global Social Responsibility."

CITIZENSHIP AND CIVIC ENGAGEMENT IN DEMOCRACIES

In order to conceptualize citizenship and Civic Engagement and assess their relation to higher education, we will first need to develop a mutual understanding of what these two terms encompass. According to Constanze Flanagan (2008),[21] a common definition of citizenship was first described by Michael Walzer in 1989: "A citizen is, most simply, a member of a political community, entitled to whatever prerogatives and encumbered with whatever responsibilities are attached to membership. The word comes to us from the Latin civis; the Greek equivalent is polites, member of the polis, from which comes our political."[22]

Another conceptualization of citizenship is provided by Joseph Kahne and colleagues, who differentiate between three different types of citizens in 2000:[23]

1. Someone who fulfills their civic duties (e.g., voting, paying taxes, obeying the law) is a responsible citizen;
2. Someone who is an active member within their community and helps with the planning of events or participates in local board positions is a participatory citizen;
3. Someone who tries to get to the bottom of civil problems and brings them to the public's attention is a social reformer.

Both citations make connections from citizenship to politics and responsibility. Taking responsibility and acting as active agents in society make citizens great contributors to democratic structures. Focusing on democracies in the discussion around active citizenship is not an arbitrary choice. Democracies provide a certain structure in the way their society is built that allows organization-based and individual-based engagement equally and has a requirement for engagement in the way that democracy needs social capital and

21 Constance A, Flanagan, "Young People's Civic Engagement and Political Development," in *International Handbook on Youth and Young Adulthood*, edited by A. Furlong, 1–8. Abingdon: Routledge, 2008.

22 Michael Walzer, *Citizenship. Political Innovation and Conceptual Change*, edited by T. Ball, J. Farrand, and R. Hanson (Cambridge: Cambridge University Press, 1989), 211.

23 J. Kahne, J. Westheimer, and B. Rogers, "Service Learning and Citizenship in Higher Education," *Michigan Journal of Community Service Learning* 7 (2000): 46.

actively engaged citizens in order to function effectively.[24] The concept of citizenship includes fulfilling one's responsibility towards the community and playing an active part in society, which is where Civic Engagement comes in, and according to the Policy Circle, is a tool to foster a variety of outcomes in a society. Civic Engagement is said to lead to more civic participation, an educated citizenry on the topics of governance and history, more advocacy for organizations that try to establish communal well-being and citizens standing up for their legislation.[25] As such, Civic Engagement represents values that go together with the listed outcomes. Advocating for and with others, respecting communal structures and developing flourishing living spaces can be listed as such outcomes.[26] Deborah Bobek and colleagues (2009) use a four-dimensional definition of Civic Identity and Civic Engagement ("CICE" in order to define the concept even more concretely:[27]

1. Social trust and social capital which are defined as a sense of generalized reciprocity;
2. Civic knowledge and skills which are defined as the ability and expertise to be involved in civil society and democracy;
3. Procivic attitudes which refers to the desire and mindset to get involved with others to make positive contributions to society;
4. Civic Engagement is the participation in activities for the betterment of one's community (however narrowly or broadly defined).

While Deborah Bobek and colleagues' research constitutes a theoretical framework that consists of four factors, the results conducted by their confirmatory factor analysis, a research method that investigates the amount of explanatory power various items provide for a latent factor, indicate that CICE can be better framed by the following six factors: Civic Duty; Civic Skills; Neighborhood Social Connection; Peer Social Connection; Adult Social Connection; Civic Participation.[28] In 2004, Maryland's Team on Civic

24 "What Is Civic Engagement?"

25 "What Is Civic Engagement?"

26 "What Is Civic Engagement?"

27 Bobek et al., "Components of Civic Action," 617 - 618.

28 Bobek et al., "Components of Civic Action," 616.

Engagement and Leadership also recognized that there are multiple dimensions to Civic Engagement, and defined the term as follows: "a heightened sense of responsibility to one's communities that includes a wide range of activities, including developing civic sensitivity, participation in building civil society, and benefiting the common good."[29]

Civic Engagement is not just something that is nice to have; it is a necessity in democracies to keep the political and civil system working. This connection between citizenship, Civic Engagement and democracy is further emphasized in the description of engagement as provided by Peter L. Benson and colleagues who explain that engagement in civic associations helps develop a specific set of skills as well as social capital that are transferable to forms of Civic Engagement.[30] These perspectives can be connected to the claim that a healthy democracy requires organizations in the civic sector as a sort of social capital which can be accomplished through Civic Engagement.[31] Civic Engagement can be practiced under all forms of constitutions, yet depending on the governance structure, the focus of the engagement tends to be on different aspects and the engagement is organized in different ways.[32] For example, while comparing Civic Engagement in Japan to Civic Engagement in the United States, it becomes apparent that, in Japan, Civic Engagement is much more often carried out by governmental organizations than it is practiced by non-governmental ones. Whereas in the United States, in contrast, Civic Engagement is not only related to organizations but much more closely bound to the individual engagement of various types.[33]

Considering the described conceptions of Civic Engagement, it becomes clear that the meaning behind Civic Engagement is not limited to an activity or something a person does, it also includes cultivating a specific mindset. In pedagogical terms, this is where we would speak of the development of competencies: the combination of skills, behavior and attitude. In 2010, Constance Flanagan and Peter Levine further indicated such characteristics of

29 University of Maryland, "Report on Civic Engagement and Leadership" (Terpimpact, 2004), 17.

30 Benson et al., "HCP positive youth development."

31 "What Is Civic Engagement?"

32 Haddad, "Civic Responsibility and Patterns of Voluntary Participation."

33 Haddad, "Civic Responsibility and Patterns of Voluntary Participation."

civic activities, which include: connecting to others; learning about public goods and values; solving problems; forming social networks and building social capital.[34] They additionally mention that connecting to educational and occupational opportunities is important to achieve the desired outcomes of Civic Engagement.

At the same time, it is a necessity to highlight the importance of higher education for the development of individuals in regard to society. Higher education prepares students to be responsible citizens and form developing societies.[35] In addition, one of the main priorities is to prepare students for the labor market. Civic Engagement is therefore a required asset in higher education to allow students to develop their sense of citizenry while also providing students with the tools they need to persist in future societies.[36]

There are various ways to incorporate Civic Engagement into higher education, and a popular one has been by applying the method of Service Learning (SL). SL can be defined as, "active, relevant, and collaborative learning [...] and to enhance student learning, student development, and commitment to future civic involvement."[37] The main motivation behind SL is to engage students in meaningful work that is connected to actual needs in a community while also following up said engagement in academic classroom learning and thereby helping students among other things to develop civic skills and a democratic attitude.[38] SL as a method thus manages to balance the needs of a community with education and theory. Furthermore, applying methods of SL actually improves student achievement of core academic skills[39] and increases

34 Constance A. Flanagan and Peter Levine, "Civic Engagement and the Transition to Adulthood," *The Future of Children* 20, no. 1 (January 1, 2010), https://doi.org/10.1353/foc.0.0043.

35 Annette, "Service Learning in an International Context."

36 Knight-Grofe and Deacon, "Canada's Global Engagement Challenge."

37 Bringle and Hatcher, "Institutionalization of Service Learning", 274.

38 Flanagan, "Young People's Civic Engagement and Political Development."

39 Gregory B. Markus, Jeffrey T. Howard, and David. A. King, "Integrating community service and classroom instruction enhances learning: Results From an Experiment." *Educational Evaluation and Policy Analysis* 15, no. 4 (December 21, 1993), https://doi.org/10.3102/01623737015004410; Randall E. Osborne, Sharon Hammerich, and Chas nin Hensley, "Student effects of service-learning: Tracking Change Across a Semester." *Michigan Journal of Community Service-Learning* 5, no. 1 (January 1, 1998).

student development and future civic engagement[40] while simultaneously elevating teachers' satisfaction with their teaching.[41] According to Janet Eyler and Dwight Giles (1999) "participation in service-learning leads to the values, knowledge, skills, efficacy, and commitment that underlie effective citizenship."[42] A practical example of SL in higher education is the "Small World Initiative" by Yale University. Starting in 2012, this project started as a pilot course addressing the issue of antibiotic resistance in modern society. Together with partner institutions, students can work on this real-life impactful problem for society by collecting their own data and experimenting. The project has spread first nationwide and then internationally with a variety of partner institutions and companies.[43] By connecting the performance of a service to society and engagement with education in this approach, the barrier some institutions believe to exist between education and engagement can be crossed.[44] This combination allows students to connect volunteer service with practical work, their education and job aspirations.

With the institutionalization of Service Learning (SL) and other types of community service methods in higher education, for example, making a specific number of service hours a mandatory condition for graduation which has become practice at some universities and colleges in the US, the number of SL courses has reportedly increased exponentially.[45] An increase was shown in

40 Markus, Howard and King, "Integrating community service and classroom instruction enhances learning"; Linda J. Sax and Alexander W. Astin, "The benefits of service: Evidence from Undergraduates." The Educational Record 78, no. 1 (January 1, 1997).

41 Christopher J. Hammond, "Integrating service and academic study: Faculty Motivation and Satisfaction in Michigan Higher Education." *Michigan Journal of Community Service-Learning* 1, no. 1 (January 1, 1994).

42 Giles and Eyler, "Where is the Learning in Service Learning?", 164.

43 Small World Initiative, "Our Approach — Small World Initiative," http://www.smallworldinitiative.org/about.

44 Jones et al., "Global Social Responsibility."

45 Flanagan, "Young People's Civic Engagement and Political Development."

students' civic and democratic skills and their sense of communal problems, which was fostered through high engagement rates.[46] These findings suggest that Civic Engagement in higher education could benefit from a high level of institutionalization of engagement activities.

In short, citizenship and Civic Engagement entail the idea of taking responsibility to get involved at a local and national level and gaining the competencies to do so through engagement. Engagement of citizens benefits individuals and democracies greatly, and Civic Engagement competencies have therefore been promoted in higher education in order to prepare graduates to take an active role in society and be prepared for the labor market. However, in recent decades the labor market has fundamentally changed due to globalization efforts. This provokes the question of whether Civic Engagement does still meet the needs of citizens in a globalized world.

GLOBALIZATION AND CHANGES IN THE LABOR MARKET

The term globalization describes the process of the world becoming a more interconnected place, leading to economic and social changes.[47] Using the example from the National Geographic Society (2019), we can picture globalization as a huge spider web being spun around the world with a continuously increasing number of threads.[48] This allows for various things, such as goods, money, diseases and people, to travel around the world and interchange. Due to globalization, communities themselves thus change: they become multicultural and international, which creates different needs. Globalization caused a shift in society and the labor market towards internationalization and global thinking. Therefore, citizens now need to be equipped with new or added skills in order to effectively meet their civic duties, such as taking responsibility for global societal challenges or actively engaging in multicultural community events. This expectation of an internationalized society and labor market directly influences the curricula of higher education

46 Flanagan, "Young People's Civic Engagement and Political Development."

47 National Geographic, "Globalization."

48 National Geographic, "Globalization."

institutions, which need to respond to this shift in society and make an effort to prepare students with the required skills and a global mindset.[49]

In 2011, the American Council on Education (ACE) clearly stated the direction higher education should gravitate towards: "In the 21st century, ACE and the institutions that it represents operate in a more complex, interconnected global environment."[50] They continue to argue that higher education can no longer only observe from afar, but that it is time to act as education is directly affected by the changes in society due to globalization.[51] In their words: "Active engagement with the rest of the world has become fundamental to a high quality education, one that prepares students and their communities for the larger world in which they will live and work."[52]

Six years later, Fletcher and colleagues explored internationalized learning outcomes specifically, and collected expert interviews and used the existing literature to shed light on the question of why the world needs Global Learning goals. As a starting point, they state that the future of education is not certain yet in terms of which topics are going to be covered in the curricula of schools. According to the authors, "[i]t is increasingly clear that we are currently teaching the wrong things in the wrong ways,"[53] implying that education as a whole needs to be rethought by considering all the skills future citizens might need in our globalized world. These skills and subsequent learning outcomes would include, "[...] education of the head (knowledge), hand (skills) and heart (well-being)."[54] The mission of education should be to foster skills students need to succeed in the future society.

Based on the literature, it can be established that there are three apparent steps that higher education can take as a guide to meet the needs of an international society and a globalized labor market:

49 Knight-Grofe and Deacon, "Canada's Global Engagement Challenge."

50 American Council on Education, "Strength Through Global Leadership and Engagement," 6.

51 American Council on Education, "Strength Through Global Leadership and Engagement."

52 American Council on Education, "Strength Through Global Leadership and Engagement," 6.

53 Fletcher et al., "The World Needs Global Learning Goals," 6.

54 Fletcher et al., "The World Needs Global Learning Goals," 6.

1 Thinking globally: A broader perspective on our globalized world is necessary. Extending knowledge across borders, including the Global South and engaging in meaningful relationships,[55] can be a way to create a more open mindset and consider multiple perspectives. University graduates should no longer only be educated in their field of study but they should have cross-cultural competencies and interdisciplinary knowledge[56] both of which allow them to live and work in international environments.
2 Institutionalization: Offering Civic Engagement as a voluntary extra-curricular activity is not sufficient to support all students to achieve a global mindset. Higher education needs to take steps as a whole to integrate forms of engagement into their curricula as well as create a supportive environment and financial support to allow for internationalization.[57] In addition, research is needed to provide a formal assertion of students' global learning achievements and the subsequent graduate attributes in relation to (Civic) Engagement.
3 Teaching environment: Higher education can make a difference in developing global citizens when using the right teaching approaches, such as Service Learning, and concepts in their curricula.[58]

In short, when talking about engagement, it is crucial to be aware that thinking locally or even nationally is no longer sufficient. The Maryland Team on Civic Engagement and Leadership (2004) already recognized this need for engagement beyond the national level, when they added to their definition of Civic Engagement that citizens are meant to act "[…] as citizens of their communities, their nations, and the world […]."[59] Engagement thus needs to be thought of as a global practice that is transnational and cross-cultural.[60] Therefore, local Civic

55 Annette, "Service Learning in an International Context"; McGill-Peterson and Matross-Helms, "Challenges and Opportunities for Global Engagement."

56 Fletcher et al., "The World Needs Global Learning Goals."

57 Bringle and Hatcher, "Institutionalization of Service Learning"; Dan W. Butin, "The Limits of Service-Learning," *The Review of Higher Education* 29, no. 4 (June 5, 2006), https://doi.org/10.1353/rhe.2006.0025.

58 Kahne, Westheimer, and Rogers, "Service Learning and Citizenship in Higher Education"; Giles and Eyler, "The theoretical roots of service-learning."

59 University of Maryland, "Report on Civic Engagement and Leadership," 17.

60 Knight-Grofe and Deacon, "Canada's Global Engagement Challenge."

Engagement opportunities as offered by institutions of higher education and residential organizations do not equip students with the tools and skills they need to persist in a global society and an international labor market.[61] Instead, it is proposed that higher education should prepare its students to take up their role as global citizens, and be equipped with Global Engagement competencies and attributes.

GLOBAL CITIZENSHIP AND GLOBAL ENGAGEMENT

Before exploring how Global Engagement can be institutionalized in higher education, we need to gain a more in-depth understanding of the concept of Global Engagement itself. In doing so, it should become clear why the development towards Global Citizenship should be encouraged and what elements are included in the concept of Global Engagement.

As mentioned previously, democracies require engagement to function effectively and this need for engagement was fulfilled through various forms of Civic Engagement, which was incorporated into higher education practices. However, as Civic Engagement does not respond to the globalized society, the concept of Civic Engagement needs to be extended to include the teaching of intercultural competence and internationality, which means shifting towards Global Engagement and Global Citizenship.

Global Citizenship can be defined using two levels: on the one hand the rights and responsibilities citizens have towards their own community and nation, and, on the other hand, the rights and responsibilities citizens have towards the transnational community.[62] The two levels are complementary and for Global Citizenship both need to be present. Lucy Mule and colleagues (2018) establish three common approaches within Global Citizenship: a radical, a transformationalist and a neoliberal approach.[63] While the radical approach

61 Annette, "Service Learning in an International Context."

62 K. Szelenyi and R. A. Rhoads, "Citizenship in a global context: The Perspectives of International Graduate Students in the United States." *Comparative Education Review* 51 (2007), 23.

63 Lucy W. Mule, Shannon Audley and Kathryn M. Aloisio, "Short-Term, Faculty-Led Study Abroad and Global Citizenship Identification: Insights from a Global Engagement Program." *Frontiers: The Interdisciplinary Journal of Study Abroad* 30, no. 3 (November 15, 2018).

focuses on structural (power) relations, the transformationalist approach tries to emphasize a change in the social sector. For the purpose of thematizing engagement in democracies, the neoliberal approach seems most fitting, because its emphasis is on the development of competencies to increase the success of students in the labor market. The development of competencies under the neoliberal approach ties into a, what he himself calls utopian, definition of Global Citizenship as provided by Michael Woolf (2010): The term Global Citizen, "usually describes someone who is, or who aspires to be, broad minded, intellectually engaged with other cultures, aware of the interdependence of nations, committed to tolerance and understanding of difference."[64]

The OECD (2016) defines Global Competence using four dimensions people need to master in order to be globally considerate:[65]

1. The capacity to examine issues and situations of local, global and cultural significance. (e.g., poverty, economic interdependence, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes);
2. The capacity to understand and appreciate different perspectives and world views;
3. The ability to establish positive interactions with people of different national, ethnic, religious, social or cultural backgrounds or gender;
4. The capacity and disposition to take constructive action toward sustainable development and collective well-being.

This suggestion from the OECD for the conception of Global Thinking and Global Competencies allows for precise orientation when it comes to framing what a global citizen should be able to do. With this perspective of Global Citizenship, the earlier explained and commonly implemented idea of Civic Engagement needs to be complemented by adding the development of competencies that are needed for Global Thinking and taking responsibility in a globalized society. Those two aspects are incorporated into the concept of

64 Michael Woolf, "Another Mishegas: Global citizenship" Frontiers: The Interdisciplinary Journal of Study Abroad 19, no. 1 (November 15, 2010), 48, https://doi.org/10.36366/frontiers.v19i1.273.

65 OECD, *Global Competency for an Inclusive World* (OECD, 2016), 7-8.

Global Engagement. Global Engagement is therefore linked to Civic Engagement by globalization and different understandings of citizenship; however, it is a much more complex concept that requires further explanation.

The term Global Engagement is used to describe new ways of thinking and working in a globalized and, therefore, connected world. Within Global Engagement, we recognize two important features. On an individual level, Global Engagement includes the efforts that individuals make within an institution to develop themselves as global citizens. This is where the development of personal Global Engagement competencies comes in, summarized by Darla Deardorff (2004) as follows: "the ability to communicate effectively and appropriately in intercultural situations based upon one's intercultural knowledge, skills, and attitudes."[66] If we continue to apply this explanation to higher education, this could for example refer to exchanges of faculty members or students, studying abroad or cross-county cooperation.[67] There are multiple examples of cross-country cooperation in higher education. For example, "CIVIS," the European Civic University, is a cooperation of 10 European universities co-founded by the Erasmus organization. Students from these universities can enroll in collaborative courses and develop their cross-cultural competencies by gaining new perspectives from students of other nationalities.[68]

A second required feature of Global Engagement includes dimensions that extend beyond individual awareness, to global awareness of the world and the responsibility of the individual within their surroundings. This is in line with parts of the definition of Global Engagement by the OECD: "Globally competent individuals can examine local, global and intercultural issues, understand and appreciate different perspectives and worldviews, interact successfully and respectfully with others, and take responsible action toward sustainability and collective well-being."[69]

66 D. Deardorff, "The Identification and Assessment of as a Student Outcome of Internationalization at Institutions of Higher Education in the United States" (Unpublished Ph.D. diss., North Carolina State University, 2004), 194.

67 McGill-Peterson and Matross-Helms, "Challenges and Opportunities for Global Engagement."

68 CIVIS - a European Civic University. "Wer ist CIVIS?," n.d., https://civis.eu/de/uber-civis/wer-ist-civis.

69 OECD, *Global Competency for an Inclusive World*, 4.

Finally, Kevin Hovland's (2014) suggestion for Global Learning outcomes could be a way to orient the framework of Global Engagement toward concrete teaching and learning goals.[70] Here, it is proposed that Global Learning should enable students to:[71]

1. Become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences;
2. Seek to understand how their actions affect both local and global communities;
3. Address the world's most pressing and enduring issues collaboratively and equitably.

Emerging from those learning objectives one can conclude that Global Engagement should facilitate cross-cultural and reflective education, awareness concerning the impact of actions in international contexts, and inter-and transdisciplinary international cooperation to solve global problems. This cross-cultural education to facilitate a cross-cultural understanding among society does not establish itself and needs to be actively incorporated in higher education institutions to equip students with the knowledge, skills and attitudes needed to become globally engaged citizens.

INSTITUTIONALIZATION OF GLOBAL ENGAGEMENT

After establishing what the concept and components of Global Engagement encompass, the question that remains unanswered is how one can develop programs and educational strategies to concretely implement Global Engagement into higher education, in order to achieve the overarching goal of Global Citizenship. In the literature, this effort is generally referred to as institutionalization. While individuals within institutions need to understand the importance of engagement and change the way they think about learning in higher education, not all responsibility can or should be shifted to the

70 K. Hovland, *Global Learning: Defining, Designing, Demonstrating* (Washington, D.C.: American Association of Colleges and Universities, 2014).

71 Hovland, "Global Learning," 1.

individual.[72] Only holding individual teachers and learners accountable or making changes in isolated parts of programs is not sufficient to achieve a fundamental change. Instead, the aim higher education should be reaching for is the entire institutionalization of engagement throughout the programs offered by the institution.[73]

On an institutional level, it is therefore suggested that Global Engagement requires, "formalized relationships explicitly defined by memoranda of understanding, joint and dual degree programs, branch campuses established in other countries, cooperative research projects, and other related ventures."[74]

In other words, institutions should incorporate opportunities for Global Engagement in their curriculum, adapt their learning outcomes and create structures that make cross-cultural and internationalized learning possible, which should be accessible to both their students and staff. In 2004, Mary Jane Brukardt and colleagues developed a framework of practices that institutions can apply to aim for more institutionalization of engagement.[75] According to the authors, on the level of the teaching and learning environment, institutions need to:

1. Make room for engagement in teaching and learning: In regard to Civic Engagement, this meant engaging students in local meaningful hands-on activities, while Global Engagement could now require staff to incorporate pedagogical tools where students are asked to reflect on intercultural perspectives. Connecting with different actors and realities outside of the traditional classroom and thus extending the classroom are important elements in this respect.
2. Change the way they recruit by prioritizing other characteristics of applicants: Instead of recruiting students that are engaged civically (which one usually does by paying attention to extracurricular activities and prior

72 Andrew Furco, *Self-Assessment Rubric for the Institutionalization of Service-Learning in Higher Education* (Berkeley: University of California, 2002).

73 Furco, "Self-Assessment Rubric for the Institutionalization of Service-Learning."

74 McGill-Peterson and Matross-Helms, "Challenges and Opportunities for Global Engagement," 1.

75 M. H. Brukardt et al., *Wingspread Statement: Calling the Question: Is Higher Education Ready to Commit to Community Engagement,* On Behalf of Wingspread Conference Participants (Milwaukee: University of Wisconsin-Milwaukee, 2004).

work in the community), institutions should prioritize the value of an international classroom where learning from different perspectives and cultures can take place, and focus on openness towards such an environment in the recruitment process.

3 Form meaningful partnerships as a guiding structure: It can be said that Civic Engagement relies on engagement within a community, while Global Engagement requires working with international and external partners. Forming meaningful and long-term partnerships can enhance student learning and the overall learning outcome, as also referenced by Cynthia Toms.[76]

However, these three components of the teaching and learning environment are just one of the areas that can be investigated in regard to global engagement efforts. According to Brukardt and colleagues, an even broader scope needs to be added in order to effectively incorporate engagement into an institution. In their paper, they state that institutions need to: (4) involve engagement in their institutional philosophy, (5) reflect on how they need to change their thinking about scholarships, and, (6) reform the institution radically.[77] The framework thus shows that in order to reach institutionalization of Global Engagement, changes need to be made on the organizational level such as an institution's philosophy but also on a practical level such as the adaptation of the curriculum. While working on the institutionalization of engagement at an institution, program leaders should thus be aware of making changes in multiple dimensions: horizontally throughout each department as well as vertically, spread through the hierarchy and different levels of the institution.[78]

INSTITUTIONALIZATION AND GLOBAL SERVICE LEARNING

Evidently, there is not just one or one "right way" to concretely institutionalize Global Engagement in higher education. While short stays abroad or more extensive study abroad programs are an obvious way to engage students globally

76 Cynthia Toms, "From Homemaking to Solidarity: Global Engagement as Common Good in an Age of Global Populism," *Christian Higher Education* 17, no. 1–2 (January 3, 2018).

77 Brukardt et al., "Is Higher Education Ready to Commit to Community Engagement?"

78 Butin, "The Limits of Service-Learning", 478.

and can serve as a catalysator for Global Engagement,[79] it is usually challenging for a meaningful partnership to form, which is a key element to achieve Global Engagement learning outcomes.[80] Adding to this reasoning, supervision needs to be provided by an organization or institution and traveling itself needs to be organized[81] and funded, making short stays and study abroad very selective and, therefore, less attractive and accessible to all students.[82] Therefore, studying abroad can be considered an option to engage students globally, however, as stated above, there are serious limitations to these methods and more promising options to foster Global Citizenship in students. In contrast, a more accessible and popular method to make room for engagement in teaching and learning activities has been, as explained earlier, through Service Learning (SL), and it is, therefore, interesting to explore, as we will do below, how the SL teaching method could also be relevant in Global Learning, i.e., Global Service Learning (GSL).

Campus Compact researched, "the degree of success"[83] of incorporating SL at different institutions and concluded that the likelihood of the institutionalization of SL increases if:

1. The institutional mission and the actual planning share the same basis;
2. There is acceptance and support for long-term investment into SL;
3. The faculties are involved in the planning process as well and not just administration;
4. The faculties are equipped with the necessary allowances by the administration to engage in methods of Service Learning (course development, financial support);
5. The work of the faculty is accessible to the public;

79 Gregory T. Bish and John Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy for Christian Higher Education." *Christian Higher Education* 15, no. 5 (September 12, 2016). https://doi.org/10.1080/15363759.2016.1211970.

80 Toms, "From Homemaking to Solidarity."

81 Bish and Lommel, "Enhancing Global Service Learning with Partnerships as an Engagement Strategy."

82 Öhrström et al., "Global Engagement in Science: The University's Fourth Mission?", *Science & Diplomacy* 7, no. 2 (January 1, 2018).

83 Bringle and Hatcher, "Institutionalization of Service Learning in Higher Education," 275.

6 The planning of the integration of SL takes place over time and on different levels.[84]

Additionally, Janet Eyler and Dwight Giles (1999) point out that Service Learning actually leads to more engagement if the framework is thoroughly ingrained and implemented within an institution.[85] Barbara Holland contributes to this perspective by describing the key institutional factors for SL in Bringle and Hatcher (2000) as follows: "mission; faculty promotion, tenure, and hiring; organizational structure to support community engagement; student involvement and integration of service into the curriculum; faculty involvement; community involvement; and publications and university relations."[86]

While some institutionalization aspects can be implemented without making radical changes, such as making engagement part of the mission or forming stronger cooperations with external partners, other steps require a longer-term investment and more radical change within institutions and programs.[87]

Successful engagement requires commitment from the institution that is trying to incorporate forms of SL for more engagement. As SL was already commonly used as a way to implement and institutionalize Civic Engagement,[88] there is an implication that there may be continuous benefits and lessons to be learned from the educational method now that Civic Engagement progresses to Global Engagement. In this development, SL now develops into Global Service

84 K. Morton and M. Troppe, "From the margin to the mainstream: Campus Compact's Project on Integrating Service with Academic Study," *Journal of Business Ethics* 15 (1996).

85 Eyler and Giles, "Where is the Learning in Service Learning?"

86 Bringle and Hatcher, "Institutionalization of Service Learning in Higher Education," 276; Barbara A. Holland, "Analyzing institutional commitment to service: A Model of Key Organizational Factors." *Michigan Journal of Community Service-Learning* 4, no. 1 (January 1, 1997); Barbara A. Holland, "From Murky to Meaningful: The Role of Mission in Institutional Change" in *Colleges and Universities as Citizens*, ed. R.G. Bringle, R. Games, and E.A. Malloy (Boston: Allyn & Bacon, 1999).

87 McGill-Peterson and Matross-Helms, "Challenges and Opportunities for Global Engagement"; Butin, "The Limits of Service-Learning."

88 Robert G. Bringle, Patti H. Clayton and Mary V. Price, "Partnerships in Service Learning and Civic Engagement," *Partnerships : A Journal of Service-Learning and Civic Engagement* 1, no. 1 (April 18, 2012), https://doi.org/10.7253/partj.v1i1.415.

Learning (GSL) as an educational method to promote and practice Global Engagement to foster Global Citizenship in students.

McGill and Matross (2013) take Service Learning on a global level, i.e., GSL, further by conceptualizing internationalization in higher education. Examples of institutionalized GSL are for instance spending one or two semesters abroad to structure academic experiences and allow guidance through the local environment and challenges,[89] or (virtual) research internships with international partners with a focus on local solutions and reflective practices.[90] Since this type of learning is guided, students have the opportunity to actively reflect on their experiences, enriching their learning outcomes.[91] Again, home institutions need to adequately prepare their students for their experience in order to achieve GSL learning outcomes,[92] requiring high levels of institutionalization of Global Engagement.

To summarize, the institutionalization of engagement through the practice of methods such as SL has shown to be of great importance for successful Civic Engagement. Nowadays, GSL can be used as a way to implement Global Engagement in higher education by broadening the context of engagement to a global level. Institutions as a whole need to provide structures, such as an institutional philosophy that encourages engagement, for staff and students to make engagement easily accessible to everybody regardless of their financial standing and also show the value of engaging in society. Active citizenship can be learned and taught in higher education by adapting teaching methods accordingly. However, engagement extends beyond the teaching and learning environment, and also requires collaboration within the international community for example by collaborating with external partners, and again institutionalizing these partnerships.

89 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy."

90 Van Engelenhoven et al., "Student Perceptions of Living Lab Research Internships in the COVID-19 Pandemic—A Dutch Case Study," *Journal of Education and Training*, 2022.

91 Bringle and Hatcher, "Institutionalization of Service Learning in Higher Education."

92 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy."

INSTITUTIONALIZATION AND PARTNERSHIP

Institutionalization of Global Engagement does not only allow for controlled and well-managed ways of supporting the development of Global Citizenship in students, it simultaneously encourages the facilitation of long-term relationships with external partners. As stated by Cynthia Toms (2018): "When carefully designed, deep and meaningful partnerships within our close locality can become the essential ingredient for enacting global engagement for the common good of both students and communities."[93]

Continuing, it can be said that if higher education is to work on and work with Global Engagement as a tool for the development of Global Citizenship in students, it needs to view engagement not as something you do for someone else somewhere else, but as something you do with someone else while incorporating local perspectives as well.[94] The goal should be to work towards the development of a sense of citizenship that is, "[. . .] committed to working toward a vision of society that is free of exclusion and nativism."[95] This view on the relevance of partnership building in order to make meaningful changes in society can be complemented by Denise Gammonley and colleagues (2007), who emphasize: "the central importance of human relationships as a vehicle for change [...] by promoting reciprocity between in-country hosts and student and faculty participants and with interactions based on mutual respect."[96]

Emerging from this statement is that partnership in the sense of performing a service for someone else is not what Global Engagement means. Global Engagement requires partnerships to be beneficial for both sides while also demanding from both sides. This view often comes from an understanding in higher education that partnerships do not need to be integrated into the curriculum, but they do need to be useful by for example allowing students to network.[97] Partnerships can serve to be so much more than just "useful," which

93 Toms, "From Homemaking to Solidarity," 69.

94 Toms, "From Homemaking to Solidarity."

95 Toms, "From Homemaking to Solidarity," 70.

96 D. Gammonley, K. S. Rotabi and D. N. Gamble, "Enhancing global understanding with study abroad: Ethically Grounded Approaches to International Learning," *Journal of Teaching in Social Work* 27 (2007), 134.

97 Annette, "Service Learning in an International Context."

can be seen in the three components of effective Global Service Learning with partnerships by Gregory T. Bish and John Lommel (2016):[98]

1 The program should allow for a shared representation of both partners. There should be clear communication about the partnership and the emphasis on benefitting mutually from the collaboration;
2 The program should allow for the realization of the importance of student- and community outcomes. While academic outcomes can be tested and visualized with grades, personal development should be taken into consideration as well;
3 The program should value the unfolding of the benefits from the partnership in the host community. People that are connected to the program should experience personal growth from the collaboration.

These practices can specifically be applied to Global Service Learning but should be transferable to other Global Engagement methods as well.[99] Concluding the section on the importance of establishing partnerships correctly during the process of institutionalization, one can infer that partnerships with regional or global organizations should allow both partners to benefit from the collaboration. Or, as Steve Corbett and Brian Fikkert (2012) summarize: "Development is not done to people or for people but with people."[100] This statement distinctly illustrates the intrinsic context-specificity of GSL as a pedagogical tool, which is further illustrated in the example of the CU Wheelchair project, a GSL initiative based in Kenya in collaboration with Hope City.[101] Here, researchers are able to collect a variety of data regarding wheelchair experience (e.g., different wheelchair models, prosthetics, physical therapy and gear evaluation), while the community at the same time participates and benefits from the medical tools and input they receive from the researchers. In the CU Wheelchair project, a

98 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy."

99 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy."

100 Steve Corbett and Brian Fikkert, *When Helping Hurts : How to Alleviate Poverty without Hurting the Poor…and Yourself* (Chicago: Moody, 2012), 105.

101 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy."

partnership is developed which is marked by constant communication and information exchange between the two involved parties. The needs of the community and the researchers can be addressed and aligned, and ways of working can be altered if necessary, resulting in a mutually beneficial partnership: "The structured frequent checks and rechecks among all partners involved in this long-term commitment have allowed the project to continue to address the needs of the host community."[102] One should strive for these types of collaborations when attempting to further institutionalize Global Engagement.

DISCUSSION

The literature shows that the concepts of Citizenship, Civic Engagement, Globalization, Global Citizenship, Global Engagement, Institutionalization and Service Learning are greatly linked to each other. Interestingly, all these topics have been discussed individually in the previous literature, yet their interconnectedness remains rather undiscussed and is only thematized sporadically. In our paper, we have attempted to demonstrate how the concepts are connected and how they have evolved over time from Citizenship and Civic Engagement to the present need, driven by globalization, to foster Global Citizenship and Global Engagement.

A reason for the noticeable lack of research on Civic Engagement in recent years could be related to the notion that Civic Engagement no longer sufficiently supports the development of competencies and attributes needed in a multicultural society and an international labor market. At the same time, we do observe an increase in publications about study abroad programs. Even though, as argued above, studying abroad in itself does not facilitate Global Citizenship and Global Engagement, there are many factors that can be considered mediators for the learning outcome for students of study abroad, one of them being institutionalization. Authors such as Gregory T. Bish and John Lommel (2016) point out that the accompaniment of study abroad with supervision and academic courses to embed gained experiences in an academic context allows for better Global Engagement learning outcomes.[103] As such, the

102 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy", 299.

103 Bish and Lommel, "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy."

increase in publications regarding studying abroad could support the observed shift toward Global Engagement. In order to gain further insight into achieving Global Engagement and the lessons we can still learn from educational practices related to prior Civic Engagement, it would be beneficial to conduct further research into other aspects of institutionalizing Global Engagement, such as Global Service Learning.

As indicated above, in order to institutionalize engagement, institutions need to make room for engagement in teaching and learning. Evidently, teachers are fundamental in successfully incorporating Global Engagement in the classroom, which leads to questions such as: How do we equip teachers with the right training to integrate Global Engagement in the curriculum? What skills do teachers themselves need to teach a Global Service Learning course? What should their qualifications be and how should they teach? These questions gain even more relevance if we compare and learn from existing research in this field of secondary education. For example, the 2018 PISA results indicate that the percentage of students whose teachers received professional training in the field of Global Competence is below 50% in multiple areas such as the role of education in confronting discrimination, teaching about equality and diversity, and culturally responsive teaching approaches and techniques for example.[104] The 2018 TALIS study that specifically focuses on teachers and their development further supports these findings by reporting the lack of training teachers receive in their education on teaching in multilingual or multicultural settings.[105] In higher education, we can learn from previously conducted research among different yet connected target groups and from the efforts that have since been implemented to improve professional development regarding Global Engagement. Future research could therefore focus on specifically determining what the desired learning outcomes of Global Learning are and what Global Learning contains from the teacher's perspective.

Andreas Schleicher, director for the Directorate of Education and Skills, OECD in Paris, was interviewed on the topic of Global Learning by Fletcher and colleagues in 2017 and marked the importance of a change in people's mindset when it comes to education. Content-focused teaching is a widely accepted view

104 OECD, "PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?" PISA (Paris: OECD Publishing, 2020), 195.

105 OECD, "TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners." TALIS (Paris: OECD Publishing, 2019).

of education, while thinking and truly understanding a topic are not actively seen as a priority in education at the moment. Students' understanding and thinking can be promoted by interdisciplinary teaching which is likely to offer multiple perspectives on a topic. Students should be introduced to said different perspectives and contexts, but the development of skills such as creativity, imagination and resilience should be encouraged as well.[106] There is a need to examine additional pedagogical methods beyond Global Service Learning as a tool for fostering said mindset, where digitization and the lessons learned from the COVID-19 pandemic, regarding for example virtual classrooms and internships, are important areas to incorporate,[107] especially as they show potential to remove some of the accessibility limitations of previously mentioned tools such as study abroad.

Referring back to the conceptualization of Global Competence as proposed by the OECD (the capacity to examine issues of local and global significance; understand and appreciate different world views; take constructive action toward sustainable development and well-being), it becomes quite clear that Global Learning relies on interdisciplinary thinking and the application of multiple contexts and perspectives on a problem but also facing the problem on a local-, national- and global levels and searching for sustainable solutions while still tolerating other perspectives. Using this argument, it can be highlighted that Global Citizenship requires Global Learning and the development of Global Competencies through interdisciplinary education. Teachers thus need to be able to think critically and make interconnections across a variety of topics. It is a necessity that teachers can consider, tolerate and apply multiple perspectives on a topic. Therefore, teacher education itself needs to be more interdisciplinary and address the importance of thinking, understanding and reflecting rather than just presenting content to students (i.e., interactive teaching). Intercultural awareness training for teachers can be a tool to raise awareness and equip teachers with a fundamental understanding of the increasing importance of international classroom designs. It is crucial that teachers themselves also need to understand and practice reflection, which can be achieved through professional development workshops that specialize in internationalization, such as the European EQUiiP program (Educational Quality at Universities for

106 Fletcher et al., "The World Needs Global Learning Goals."

107 Van Engelenhoven et al., "Student Perceptions of Living Lab Research Internships."

inclusive international Programmes).[108] When education is viewed as a collaborative process in which students and teachers both interact in a safe environment, Global Learning can successfully take place.

Concluding, democracy requires engagement and active citizenship, which can be summarized in the concept of Civic Engagement. The objective of this theoretical paper was to provide an overview of the development from citizenship and Civic Engagement to Global Citizenship and Global Engagement. It was proposed that globalization made cross-cultural competencies a necessity in modern international societies in order to be successful in the labor market. Being aware of multiculturalism and international differences, taking transnational responsibility and acting mindful of global impacts are included in the components of Global Citizenship. However, citizens are not born as global citizens and need to learn how to engage in a globalized world. Higher Education institutions play an important role in promoting the development of their students' Global Citizenship skills. Integrating teaching methods such as Service Learning and establishing equally beneficial partnerships are ways to institutionalize Global Engagement within the educational systems. Evidently, educators themselves also play an important role within higher education institutions and should be trained and encouraged to act as facilitators of change and support students as they develop the competencies to become global citizens.

BIBLIOGRAPHY

American Council on Education. "Strength Through Global Leadership and Engagement: U.S. Higher Education in the 21st Century." Report of the Blue Ribbon Panel on Global Engagement. Retrieved From: ACE's Blue Ribbon Panel on Global Engagement Report Informs Next Steps for American Higher Education (acenet.edu), 2011. Accessed September 13, 2022. https://www.acenet.edu/Documents/2011-CIGE-BRPReport.pdf.

Annette, John. "Service Learning in an International Context." *Frontiers: The Interdisciplinary Journal of Study Abroad* 8, no. 1 (December 15, 2002): 83–93. https://doi.org/10.36366/frontiers.v8i1.95.

Benson, P.L., P.C. Scales, S. Hamilton, and A. Sesma. "HCP Positive Youth

108 EQUiiP, "Educational Quality at Universities for Inclusive International Programmes," https://equiip.eu/.

Development: Theory, Research, and Applications." In *Handbook of Child Psychology- Theoretical Models of Human Development*, edited by Richard M. Lerner, 6th ed., 1:894–941. Hoboken: Wiley, 2006.

Bish, Gregory T., and John Lommel. "Enhancing Global Service-Learning with Partnerships as an Engagement Strategy for Christian Higher Education." *Christian Higher Education* 15, no. 5 (September 12, 2016): 287–306. https://doi.org/10.1080/15363759.2016.1211970.

Bobek, Deborah L., Jonathan F. Zaff, Ying Li, and Richard M. Lerner. "Cognitive, Emotional, and Behavioral Components of Civic Action: Towards an Integrated Measure of Civic Engagement." *Journal of Applied Developmental Psychology* 30, no. 5 (September 1, 2009): 615–27. https://doi.org/10.1016/j.appdev.2009.07.005.

Bringle, Robert G., Patti H. Clayton, and Mary V. Price. "Partnerships in Service Learning and Civic Engagement." *Partnerships: A Journal of Service-Learning and Civic Engagement* 1, no. 1 (April 18, 2012). https://doi.org/10.7253/partj.v1i1.415.

Bringle, Robert G., and Julie A. Hatcher. "Institutionalization of Service Learning in Higher Education." *The Journal of Higher Education* 71, no. 3 (May 1, 2000): 273–90. https://doi.org/10.1080/00221546.2000.11780823.

Brukardt, M.H., B. Holland, S.L. Percy, and N. Simpher. "Wingspread Statement: Calling the Question: Is Higher Education Ready to Commit to Community Engagement." *On Behalf of Wingspread Conference Participants*. Milwaukee: University of Wisconsin-Milwaukee, 2004.

Butin, Dan W. "The Limits of Service-Learning in Higher Education." *The Review of Higher Education* 29, no. 4 (June 5, 2006): 473–98. https://doi.org/10.1353/rhe.2006.0025.

CIVIS - a European Civic University. "Wer ist CIVIS?," Accessed 30 August 2023 https://civis.eu/de/uber-civis/wer-ist-civis.

Corbett, Steve, and Brian Fikkert. *When Helping Hurts : How to Alleviate Poverty without Hurting the Poor...and Yourself.* Chicago: Moody, 2012.

Deardorff, D. "The Identification and Assessment of as a Student Outcome of Internationalization at Institutions of Higher Education in the United States" (Unpublished Ph.D. diss., North Carolina State University, 2004). http://repository.lib.ncsu.edu/ir/bitstream/1840.16/5733/1/etd.pdf.

"EQUiiP," n.d. https://equiip.eu/.

Flanagan, Constance A. "Young People's Civic Engagement and Political Development." In *International Handbook on Youth and Young Adulthood*, edited by A. Furlong, 1–8. Abingdon: Routledge, 2008.

Flanagan, Constance A., and Peter Levine. "Civic Engagement and the Transition to

Adulthood." *The Future of Children* 20, no. 1 (January 1, 2010): 159–79. https://doi.org/10.1353/foc.0.0043.

Fletcher, T., J. Chivers, L. Charles, C. Wheeler, and A. Solomon. "The World Needs Global Learning Goals. Towards Global Learning Goals (TGLG)." The World Needs Global Learning Goals, 2017. Accessed September 13, 2022. https://www.academia.edu/36637748/The_World_Needs_Global_Learning_Goals.

Furco, Andrew. *Self-Assessment Rubric for the Institutionalization of Service-Learning in Higher Education*. Berkeley: University of California, 2002.

Gammonley, D., K.S. Rotabi, and D.N. Gamble. "Enhancing Global Understanding with Study Abroad: Ethically Grounded Approaches to International Learning." *Journal of Teaching in Social Work* 27 (2007): 115–35.

Giles, Dwight E., and Janet Eyler. *Where's the Learning in Service Learning?* San Francisco: Jossey-Bass, 1999.

Giles, Dwight E., and Janet Eyler. "The Theoretical Roots of Service-Learning in John Dewey: Toward a Theory of Service Learning." *Michigan Journal of Community Service-Learning* 1, no. 1 (January 1, 1994): 7–20. https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1152&context=slceslgen.

Haddad, Mary Alice. "Civic Responsibility and Patterns of Voluntary Participation Around the World." *Comparative Political Studies* 39, no. 10 (December 1, 2006): 1220–42. https://doi.org/10.1177/0010414005281937.

Hammond, Christopher J. "Integrating Service and Academic Study: Faculty Motivation and Satisfaction in Michigan Higher Education." *Michigan Journal of Community Service-Learning* 1, no. 1 (January 1, 1994): 21–28. http://quod.lib.umich.edu/m/mjcsl/3239521.0001.102?rgn=main;view=fulltext.

Holland, Barbara A. "Analyzing Institutional Commitment to Service: A Model of Key Organizational Factors." *Michigan Journal of Community Service-Learning* 4, no. 1 (January 1, 1997): 30–41. http://quod.lib.umich.edu/m/mjcsl/3239521.0004.104/1/–analyzing-institutional-commitment-to-service-a-model-of-key?size=100;view= text.

Holland, Barbara A. "From Murky to Meaningful: The Role of Mission in Institutional Change." In *Colleges and Universities as Citizens*, edited by R.G. Bringle, R. Games, and E.A. Malloy, 48–73. Boston: Allyn & Bacon, 1999.

Hovland, K. *Global Learning: Defining, Designing, Demonstrating*. Washington, D.C.: American Association of Colleges and Universities, 2014.

Jaros, Milan. "Leadership and Methodology Challenges in Higher Education: Integrating Personal Development, Skills and Competences in the Space of Digital Systems." *Global Journal on Technology* 4, no. 1 (June 25, 2014). http://archives.un-pub.eu/index.php/gjit/article/viewArticle/3140.

Jones, Elspeth, Betty Leask, Uwe Wolfgang Brandenburg, and Hans De Wit. "Global Social Responsibility and the Internationalisation of Higher Education for Society." *Journal of Studies in International Education* 25, no. 4 (July 22, 2021): 330–47. https://doi.org/10.1177/10283153211031679.

Kahne, J., J. Westheimer, and B. Rogers. "Service Learning and Citizenship in Higher Education." *Michigan Journal of Community Service Learning* 7 (2000): 42–51.

Knight-Grofe, Janine, and Lisa Deacon. "Canada's Global Engagement Challenge: A Comparison of National Strategies." *International Journal* 71, no. 1 (January 5, 2016): 129–43. https://doi.org/10.1177/0020702015622994.

Lerner, Richard M. *Liberty: Thriving and Civic Engagement among America's Youth*. Thousand Oaks: Sage Publications, 2004.

Markus, Gregory B., Jeffrey T. Howard, and David A. King. "Notes: Integrating Community Service and Classroom Instruction Enhances Learning: Results From an Experiment." *Educational Evaluation and Policy Analysis* 15, no. 4 (December 21, 1993): 410–19. https://doi.org/10.3102/01623737015004410.

McGill-Peterson, P., and R. Matross-Helms. "Challenges and Opportunities for the Global Engagement of Higher Education." *In Proceedings of the Beijing Forum Conference, Beijing, China*, November 1, 2013.

Millora, Melissa L. "This Is How Life Can Be Different: How U.S. Student Experiences in International Education Programs Facilitate Civic and Global Engagement." *Journal of Student Affairs Research and Practice*, May 31, 2011. https://doi.org/10.2202/1949-6605.6173.

Morton, K., and M. Troppe. "From the Margin to the Mainstream: Campus Compact's Project on Integrating Service with Academic Study." *Journal of Business Ethics* 15 (1996): 21–32.

Mule, Lucy W., Shannon Audley, and Kathryn M. Aloisio. "Short-Term, Faculty-Led Study Abroad and Global Citizenship Identification: Insights from a Global Engagement Program." *Frontiers: The Interdisciplinary Journal of Study Abroad* 30, no. 3 (November 15, 2018): 20–37. https://doi.org/10.36366/frontiers.v30i3.425.

National Geographic. "Globalization,". Accessed 30 August 2023. https://www.nationalgeographic.org/encyclopedia/globalization/.

OECD. "Global Competency for an Inclusive World." OECD, 2016. http://www.oecd.org/pisa/aboutpisa/Globalcompetency-for-an-inclusive-world.pdf.

OECD. "PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?" PISA; Paris: OECD Publishing, 2020.

OECD. "TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners." TALIS; Paris: OECD Publishing, 2019.

Öhrström, Lars, Morsy A. M. Abu-Youssef, Peter Weiderud, and Omar M. Yaghi. "Global Engagement in Science: The University's Fourth Mission?" *Science & Diplomacy* 7, no. 2 (January 1, 2018).

Osborne, Randall E., Sharon Hammerich, and Chanin Hensley. "Student Effects of Service-Learning: Tracking Change Across a Semester." *Michigan Journal of Community Service-Learning* 5, no. 1 (January 1, 1998): 5–13. http://quod.lib.umich.edu/m/mjcsl/3239521.0005.101?rgn=main;view=fulltext.

Small World Initiative. "Our Approach — Small World Initiative,". Accessed: 30 August 2023. http://www.smallworldinitiative.org/about.

Sax, Linda J., and Alexander W. Astin. "The Benefits of Service: Evidence from Undergraduates." *The Educational Record* 78, no. 1 (January 1, 1997): 25–32. https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1039&context=slcehighered.

Szelenyi, K., and R. A. Rhoads. "Citizenship in a Global Context: The Perspectives of International Graduate Students in the United States." *Comparative Education Review* 51 (2007): 23.

The Policy Circle. "Civic Engagement - What Is Civic Engagement?," Accessed April 26, 2022. https://www.thepolicycircle.org/brief/whats-whys-civic-engagement/.

Toms, Cynthia. "From Homemaking to Solidarity: Global Engagement as Common Good in an Age of Global Populism." *Christian Higher Education* 17, no. 1–2 (January 3, 2018): 67–80. https://doi.org/10.1080/15363759.2018.1404817.

University of Maryland. "Report of the Team on Civic Engagement and Leadership." Terpimpact, 2004.

Van Engelenhoven, A., J. Geiger, B. Unal, R. Spinder, and I.S.E. Van Der Zande. "Student Perceptions of Living Lab Research Internships in the COVID-19 Pandemic—A Dutch Case Study." *Journal of Education and Training.*, 2023, forthcoming.

Walzer, Michael. *Citizenship. Political Innovation and Conceptual Change*. Edited by T. Ball, J. Farrand, and R. Hanson. Cambridge: Cambridge University Press, 1989: 211–219

Woolf, Michael. "Another Mishegas: Global Citizenship." *Frontiers: The Interdisciplinary Journal of Study Abroad* 19, no. 1 (November 15, 2010): 47–60. https://doi.org/10.36366/frontiers.v19i1.273.

Zaff, J.F., and E. Michelsen. "Background for Community-Level Work on Positive Citizenship among Adolescents: A Review of Antecedents, Programs, and Investment Strategies." Report Prepared for the John S. and James L. Knight Foundation. Washington D.C.: Child Trends, 2001.

6
CLIMATE SCIENCE, ACTIVISM AND CIVIL DISOBEDIENCE: SHOULD ACADEMICS JOIN SCIENTIST REBELLION?

BRENDAN F.D. BARRETT

INTRODUCTION

In April 2022, over 1,000 scientists from twenty-five countries participated in a worldwide Scientist Rebellion[1] following publication of the Mitigation of Climate Change report from the Intergovernmental Panel on Climate Change (IPCC).[2] These scientists were inspired by a broader social movement known as Extinction Rebellion recognized for employing non-violent direct action

1 See: https://scientistrebellion.com.

2 Margaret Osborne, "Scientists Stage Worldwide Climate Change Protests After IPCC Report," *Smithsonian Magazine*, April 13, 2022. https://www.smithsonianmag.com/smart-news/scientists-stage-worldwide-climate-protests-after-ipcc-report-180979913.

and civil disobedience to pressure governments to take meaningful action on climate change. From the perspective of meta-science, scientists who engage in activism challenge understanding of their conventional role in society. They raise momentous concerns about how scientific findings are interpreted and acted upon, specifically in the face of existential threats like climate change and ecological breakdown. Scientific activism is considered highly contentious because it runs counter to established norms on what is appropriate scientific conduct. These norms are perhaps best elucidated in Roger A. Pielke's presentation of four possible positions that scientists tend to adopt.[3] First, there is the pure scientist who has no interest in how decisions are made based on the output of their work but hopes that noble science will result in good societal outcomes. Second, there is the science arbiter who is happy to provide resources to decision-makers, but who refrains from offering advice. Third, there is the scientist as an issue advocate who has a clear idea how their science should be interpreted by policymakers and who recommends the best options or choices. Fourth, there is the honest broker scientist who offers policy alternatives and seeks to clarify the choices available to decision-makers in an unbiased way.

The activist scientist differs from these four stances by asserting that they need to act based upon scientific truths, in this instance the IPCC's findings, even when (and perhaps also because) these truths remain ideologically contested by broader society. The source of this societal disagreement over climate science in part relates to the way that various discourses attach social meaning to scientific truths[4] and this constant disputation in turn explains how significant climate action has been consistently delayed.[5] The purpose of this chapter, therefore, is not to undertake an in-depth assessment of the pros and cons of the Scientist Rebellion, but simply to try to understand why some scientists feel that direct action and civil disobedience are necessary. In this context, the German philosopher Niklas Luhmann argued that when it comes to addressing ecological problems, politics "pins it hopes on science and

3 R. A. Pielke, *The Honest Broker: Making Sense of Science Policy and Politics* (Cambridge: Cambridge University Press, 2007).

4 John S. Dryzek, *Politics of the Earth*, 4th ed. (Oxford: Oxford University Press, 2022).

5 William F. Lamb et al., "Discourses of climate delay," *Global Sustainability* 3, no. 17 (2020). https://doi.org/10.1017/sus.2020.13.

establishes programs promoting research and technological developments."[6] The German version of Luhmann's book *Ecological Communication* was published in 1986, two years before the IPCC was established by a December 1988 UN General Assembly Resolution.[7] As such, it is unsurprising that while Luhmann addressed questions of how modern society should appropriately act in response to ecological dangers, he made no reference to global warming. The IPCC, one of the most extensive scientific collaborations of our time, can essentially be cognized as a gigantic climate research review program. It is charged with responsibility to assess available scientific evidence on climate change as well as on associated environmental and social impacts, and to formulate response strategies.[8]

Luhmann further observed that in terms of ecological dangers "society as a whole neither wants nor is in the position to assume the scientific world-picture" and that "only a fraction of what is scientifically possible is ever realized."[9] This implies that the IPCC's climate change assessments and response strategies need to be accommodated by other functional systems in society, specifically politics, economics, and the legal system. These determine which parts of climate science are operationalized and which are not. They ascertain which climate response strategics are politically acceptable, economically feasible and legally implementable. So far, these systems have resolved by default to allow unabated global growth of CO2 atmospheric concentrations and fossil fuel CO2 emissions.[10] The first international attempt to legislate for global emission reductions took place in 1997 with ratification of the Kyoto Protocol. Subsequently, the 2015 Paris Agreement set out an international goal of net-zero emissions by 2050, getting countries to present emission reduction commitments. The aim was to promote a collective

6 Niklas Luhmann, *Ecological Communication* (Oxford: Polity Press, 1989), 76.

7 The UN General Assembly Resolution 43/53 of 6 December 1988 is accessible via this link: https://www.ipcc.ch/site/assets/uploads/2019/02/UNGA43-53.pdf.

8 As set out in the 1989 Memorandum of Understanding between the United Nations Environment Programme and the World Meteorological Organization: See https://www.ipcc.ch/site/assets/uploads/2019/06/MOU_between_UNEP_and_WMO_on_IPCC-1989.pdf.

9 Luhmann, *Ecological Communication*, 83.

10 Pierre Friedlingstein et al., "Global Carbon Budget 2022." *Earth Systems Science Data* 14, no. 2 (2022). https://doi.org/10.5194/essd-14-4811-2022.

response on the part of all nations that would avoid projected IPCC worse case scenarios and keep global warming to no more that 1.5°C. Unfortunately, the only events to date that appear to have made temporary dents in emissions growth from the 1990s onwards have been the 1991 dissolution of the Soviet Union, the 2008 global recession and the 2019 pandemic, not exactly offering a positive representation of how effective climate mitigation might unfold.

When and how might it be possible to drastically change this emission trajectory? If things stay as is, we can anticipate that parties to the UN Framework Convention on Climate Change (UNFCCC) will continue to meet annually, and the IPCC will continue to publish assessment reports in six to seven-year cycles. Governments and business will commit to a range of ambitious, modest, and laggard emission reduction targets depending upon their political and economic circumstances. Reform-oriented environmentalists will call for technological solutions and promote green capitalism. Their more radical counterparts will call for complete transformation of society, ditching of capitalism and attainment of a climate-friendly economy. At same the time, obfuscation of climate science truths (that activist scientists want society to act upon) in ongoing political debate lies at the heart of climate delay. In the absence of a clear picture of how this delay may be effectively overcome, this chapter examines the potential role that activism and broader civil disobedience could play, before ending on a discussion of why some scientists believe they need to become activists. Reference is made to the emergence of direct-action protest groups demanding that governments tell the truth about the climate and ecological emergency.[11] We continue here with a brief reflection on "scientific truth" as represented in the latest climate science from the IPCC.

LATEST CLIMATE SCIENCE AS SCIENTIFIC TRUTH

From a meta-science perspective, we may intimate that the code of climate science (as with all scientific fields) is tied into differentiating between true and false.[12] Essentially, scientific truth, as a general concept, implies that most of the scientific community has studied the theory (in this case various aspects of

11 Rupert Read and Samuel Alexander, *Extinction Rebellion: Insights from the Inside* (Simplicity Institute, 2020), 64.

12 Luhmann, *Ecological Communication*, 76.

climate change science) and agreed that it is true based on current understanding. There will always be outliers and those who argue that the science is unsettled. The generally accepted scientific truth at any given point, however, is that to which the scientific majority agree with based on existing evidence to support that theory. Scientific truth, therefore, ought to reflect a distillation of all the evidence. This in turn is dependent upon three important factors: (1) quality of evidence and research protocols; (2) quality and integrity of the researchers; and (3) the vigilance and diligence of peer reviewers.[13] Even generally accepted scientific truths, however, are not necessarily broadly accepted by all members of society. It is important to recognize that various interest groups work to undermine climate science, climate scientists and their scientific findings through well-orchestrated attacks shedding doubt (falsehoods) and by simply denying the evidence.[14] This has proven detrimental to the pursuit of more progressive climate science policy goals. To address this phenomenon, the IPCC accommodates new climate-related knowledge primarily through peer-reviewed scientific papers.

Where does this scientific evidence come from? Unfortunately, the current situation, while the best we have, is not perfect and there is scope for improvement. Bibliometric analysis of 222,060 papers published between 1980 and 2014 revealed that climate change research is quantitively dominated by the USA, UK, Germany, and Canada.[15] Another survey of 120,000 climate change publications between 2001 and 2018 revealed that scientists from the USA contributed to 73% of the published articles, while Chinese scientists contributed to 29% and UK scientists were contributors for 23%.[16] Analysis of the IPCC Sixth Assessment revealed that citations are heavily dominated by

13 Rod Baber, "What is scientific truth?" *Climacteric* 20, no. 2 (10 March 2017), http://dx.doi.org/10.1080/13697137.2017.1295220.

14 Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (New York, London, New Delhi, Sydney: Bloomsbury Press, 2011); Yearley et al., "Perspectives on global warming." *Metascience* 21 (2012): 531–559. https://doi.org/10.1007/s11016-011-9639-9.

15 Robin Haunschild et al., "Climate Change Research in View of Bibliometrics," *PLoS ONE* 11, no. 7 (2016). https://doi.org/10.1371/journal.pone.0160393.

16 Hui-Zhen Fu and Ludo Waltman, "A large-scale bibliometric analysis of global climate change research between 2001 and 2018," *Climate Change* 170, no. 35 (2022), https://doi.org/10.1007/s10584-022-03324-z.

the global North and many of the journal articles referenced by the IPCC are paywalled. Moreover, 99.9% of all cited references are in English and three-quarters of all literature cited include one author based in either the US or the UK.[17] A review of authorship of all six IPCC assessment reports undertaken by the Carbon Brief reveals that female and global South authors, while gradually increasing over the past three decades, remain significantly underrepresented.[18] For the IPCC Sixth Assessment, 33% of the authors were female and 43% were from the global South. These structural issues with IPCC assessment reports (dominated by North America and European authors and their research) lead to concerns about who is represented and whose "truth" is being addressed. It may well be a "truth" that resonates with a minority in wealthy nations of the global North rather than a majority (who contribute little to climate change related emissions) in the global South. These structural problems need to be addressed by the IPCC going forward and at the same time the global community needs to operationalize existing scientific knowledge on climate change.

At the time of writing, the latest scientific truth on climate change is represented by the IPCC's Sixth Assessment Synthesis Report published in March 2023.[19] It contains sobering assertations (hard truths) with regards to the state of the climate including the following:

- There is increased evidence of observed changes in extreme weather events such as heatwaves, heavy precipitation, droughts, and tropical cyclones.
- Approximately 3.3-3.6 billion people are highly vulnerable to climate change impacts.
- Global surface temperatures today are 1.1°C degrees above 1850-1900 levels.
- Global mean sea level increased by 0.2m between 1901 and 2018.

17 Sarah Connors and Felix Chavelli. "What 13,500 citations reveal about the IPCC's climate science report." *Carbon Brief*, March 16, 2023. https://www.carbonbrief.org/guest-post-what-13500-citations-reveal-about-the-ipccs-climate-science-report.

18 Ayesha Tandon. "Analysis: How the diversity of IPCC authors has changed over three decades." *Carbon Brief*, March 15, 2023. https://www.carbonbrief.org/analysis-how-the-diversity-of-ipcc-authors-has-changed-over-three-decades.

19 IPCC, *Climate Change 2023*: *AR6 Synthesis Report* (Geneva: Intergovernmental Panel on Climate Change, 2023).

- Climate change is causing substantial damage to terrestrial and marine ecosystems.
- Food and water security are significantly reduced.
- In all regions, extreme heat events, food-borne and water-borne diseases are impacting human health.

Eight future scenarios are presented from very low emission pathways that limit warming to 1.5°C to very high emission pathways that could result in a temperature rise exceeding 4°C. The speed of climate mitigation and emission reductions will determine which scenario is realized. The report argues, however, that the current gap between nationally determined commitments made under the Paris Agreement and the IPCC's modelled mitigation pathways suggests there is "high confidence" that warming will exceed 1.5°C in the twenty-first century. Moreover, current national commitments (without an increase in the level of ambition) are projected to lead to global warming between 2.1 and 3.4°C by 2100. Deep global emission reductions are required in the period 2020-2030 to limit warming to 2°C. The central argument in this IPCC report is that with every increment of global warming, climate impacts become more widespread and pronounced. These rather daunting "scientific truths" imply that many climate impacts are effectively locked in. Changes in the climate system, even after deep emission cuts, will continue over decades and sea levels will carry on rising. The report talks about the potential to trigger climate change tipping points that could quickly make the planet a very uncomfortable place to live, cascading towards what leading climate scientists describe as "hothouse Earth."[20]

The report highlights the importance of reaching net-zero emissions as soon as possible. It indicates that the remaining global carbon budget from 2020 onwards is 500 GtGO2 for a 50% likelihood to limit warming to 1.5°C. This increases to 1150 GtCO2 for a 67% chance to limit temperature rise to 2°C. If emissions are produced at the same rate as in 2019, however, the 1.5°C climate budget will be exhausted by 2030. The report concludes by stating that "evidence of observed adverse impacts and related losses and damages, projected risk,

20 Steffen et al., "Trajectories of the Earth System in the Anthropocene," *Proceedings of the National Academy of Sciences* 115, no. 33 (2018), https://doi.org/10.1073/pnas.1810141115.

levels and trends in vulnerability and adaptation limits, demonstrate that worldwide climate resilient development is more urgent than previously addressed." The course of action advocated by the IPCC is deep, rapid, and sustained mitigation and accelerated implementation of adaptation actions this decade. Specifically, IPCC scientists call for "rapid and far-reaching transitions across all sectors and systems … to achieve deep and sustained emissions reductions and secure a liveable and sustainable future for all."

In commenting on this report, the UN Secretary General, Antonio Guterres, described it as a survival guide for humanity and called for net-zero targets to be brought forward by a decade from 2050 to 2040. Other commentators raised concerns about the IPCC's proposed emission reduction strategies and an over-reliance on carbon capture and storage (CSS).[21] This is not new, and it has been suggested that CSS is less a real solution and more a narrative ploy since it has not proven to be scalable or economically feasible.[22] In fact, radical environmentalists tend to believe (and have done so for a while) that the "scientific truth" we must deal with lies at the most pessimistic end of IPCC predictions.[23] Author and environmentalist Naomi Klein argued in 2015, for instance, that the likelihood of a future global temperature increase over 4°C is high. She quoted Kevin Anderson, former Director of the UK Tyndall Centre for Climate Change Research, who declared that "there is… no certainty that adaptation to a 4°C world is possible."[24] Another leading climate scientist, John Schellnhuber, former director of the Potsdam Institute for Climate Impact Research, succinctly captures the dire implications with this statement: "The difference between two and four degrees is human civilization."[25] Basically, a

21 Matt McGrath and Georgina Rannard, "Scientists release 'survival guide' to avert climate disaster," *BBC*, March 20, 2023. https://www.bbc.com/news/science-environement-65000182.

22 George Marshall, *Don't Even Think About It: Why Our Brains are Wired to Ignore Climate Change* (London, Oxford, New York, New Delhi, Sydney: Bloomsbury Press, 2015), 179.

23 Roger Hallam, *Common Sense for the 21st Century: Only Nonviolent Rebellion can now stop Climate Breakdown and Social Collapse* (White River Junction: Chelsea Green Publishing, 2019), 15.

24 Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (London: Allen Lane, an imprint of Penguin Books, 2015), 13.

25 Tim Radford. "Conservatives Don't Like the Message on Climate Change, So They

drastically climate-changed world would face so many challenges at temperatures 4°C higher that the capacity to maintain stable societies would be greatly diminished, potentially bringing about the collapse of modern civilization. It appears that many climate scientists in private confess to being extremely anxious that average global temperatures may rise above 4°C in the absence of transformative change.[26]

SCIENTIFIC KNOWLEDGE, TRUTH AND DISCOURSE

The problem is that while the scientific subsystem of society (in the form of the IPCC and the climate science community) has been responding appropriately to the climate and ecological emergency, other key societal sub-systems (e.g., economy, law, science, politics, religion, and education) have so far not embraced the necessity for a deep and transformative response. This overall intransigence has led to the emergence of new direct action protest groups (e.g., Extinction Rebellion, Fridays for the Future, Just Stop Oil, etc.). They see it as their responsibility to disrupt the status quo by blocking roads, invading sporting events and defacing works of art in public galleries.[27] These movements argue that the only rational response to the climate crisis is for society to embrace and uncompromisingly push for a net-zero carbon transition as rapidly as possible. Their actions, however, are heavily criticized in the media. This cycle of climate protest followed by negative media reaction points to two rather tragic realities that we need to acknowledge. First, as Luhmann explained, "modern society is too dependent for self-description on the entirely inadequate basis of social movements."[28] Essentially, as for many environmental issues, the response from key societal systems has often been lacking without pressure from social movements. Second, certain segments of the incumbency (i.e., those in power) are more than happy to label the actions of these protest groups as disruptive and to ignore their recommendations.

Want to Shoot the Messenger." *Alternet*, November 10, 2014. https://www.alternet.org/2014/11/conservatives-threatening-climate-scientists.

26 Marshall, *Don't even think about it*, 198-199.

27 Johnston and Holland Bonnett, *Picturing these days of love and rage: Extinction Rebellion's 'Impossible Rebellion'*, 315-323.

28 Luhmann, *Ecological Communication*, 125.

There is another deep-seated problem that we need to address. Once scientific truth enters the public arena it can easily fall foul of ideologies. This becomes clearer through the application of discourse theory to explain the way language, communication and meaning play a central role in shaping how reality is interpreted.[29] Discourses are ways of thinking and constructing knowledge through semantics, assumptions, and practices. They provide a social boundary around a topic, including appropriate expression, action, and responses to new information (or in this case scientific knowledge). A discourse is a shared way of apprehending the world. People subscribing to one discourse will use it to interpret scientific information and to create their own coherent narratives. They construct meanings and relationships thereby legitimating knowledge. This becomes the basis for analyses, debates, agreements, and disagreements. When it comes to interpretation of IPCC findings, therefore, we can point to two areas of discourse theory that can be applied to explain our current predicament and inability to collectively respond to climate science truths. The first relates to nine environmental discourses originally outlined in John Dryzek's book entitled The Politics of the Earth.[30] These discourses are part of an ongoing battle between reformists and radicals for people's hearts and minds. The second relates to twelve climate delay discourses that work to erode political support for climate action.[31]

As a simple intellectual exercise, Lamb's twelve climate delay discourses have been mapped onto Dryzek's nine environmental discourses in Figure 1. The aim is not to insinuate a direct correlation between these discourses but rather to illustrate some interesting observations that may arise via this unsophisticated representation. First, delay discourses around re-directing responsibility for climate action appear to take on a new framing when placed under the prosaic/reformist discourses proposed by Dryzek. From an economic rationalist perspective, it is easy to understand how concerns about "free-riding" are often used to avoid climate action. The assumption here is that an economy that takes aggressive climate action will be weakened compared to a free-rider economy that avoids implementing climate measures. Likewise, we can understand how

29 Johannes Angermuller, "Discourse Studies," in *International Encyclopedia of the Social & Behavioral Sciences*, 2nd edition, ed. James D. Wright (Amsterdam: Elsevier, 2015).

30 Dryzek, *Politics of the Earth.*

31 Lamb et al., "Discourses of climate delay."

economic actors might want to shift the burden of responsibility onto individual consumers. A good example is the way that British Petroleum supported the notion of individual carbon footprints.[32] Second, appeals from green radicals for perfect policies and social justice may create a direct negative reaction from the media which tends to emphasize the downside of what it sees as disruptive measures. Third, the emphasis from some environmental groups on survivalism and the limits to growth may in part play into the hands of delay discourses that imply climate change mitigation is futile. Fourth, delay discourses that emphasize non-transformative solutions as the best way forward appear to align with technological optimism and the emphasis on voluntary measures that we find associated with sustainable development and ecological modernization.

Environmental reformists tend to believe it is possible to solve the climate change crisis through accelerated technological progress, while radicals insist that only through fundamental transformation of consumer capitalist society will it be possible to avoid disastrous climate change. This in turn creates a knee-jerk reaction from people who may be very happy with the way things are right now.

These discourses have been around for some time. For instance, pre-dating concerns about climate change, Timothy O'Riordan in 1976 proposed two divergent ideologies that characterize environmentalism as techno-centrism and eco-centrism.[33] He went on to further break techno-centrists into two groups: Cornucopian (those how have faith in human ingenuity and technology) and environmental accommodators (those who believe institutions and policies can adapt in response to environmental threats). Both groups are assumed to support the status quo. Concerning eco-centrism, O'Riordan also sub-divided it into two groups: self-reliant communalism (emphasizing small-scale and community identity) and deep ecology (recognizing the inherent worth of all living beings). Essentially, eco-centrists call for a new kind of society and economy that minimizes ecological impacts.[34] O'Riordan pointed out, however,

32 Rebecca Solnit, "Big oil coined 'carbon footprints' to blame us for their greed. Keep them on the hook." *The Guardian*, August 23, 2021. https://www.theguardian.com/commentisfree/2021/aug/23/big-oil-coined-carbon-footprints-to-blame-us-for-their-greed-keep-them-on-the-hook

33 Timothy O'Riordan, *Environmentalism* (London: Pion, 1976).

34 Timothy O'Riordan, "The Challenge of Environmentalism," in *New Models in Geography*, ed. Richard Peet, and Nigel Thrift (London: Unwin Hyman, 1989).

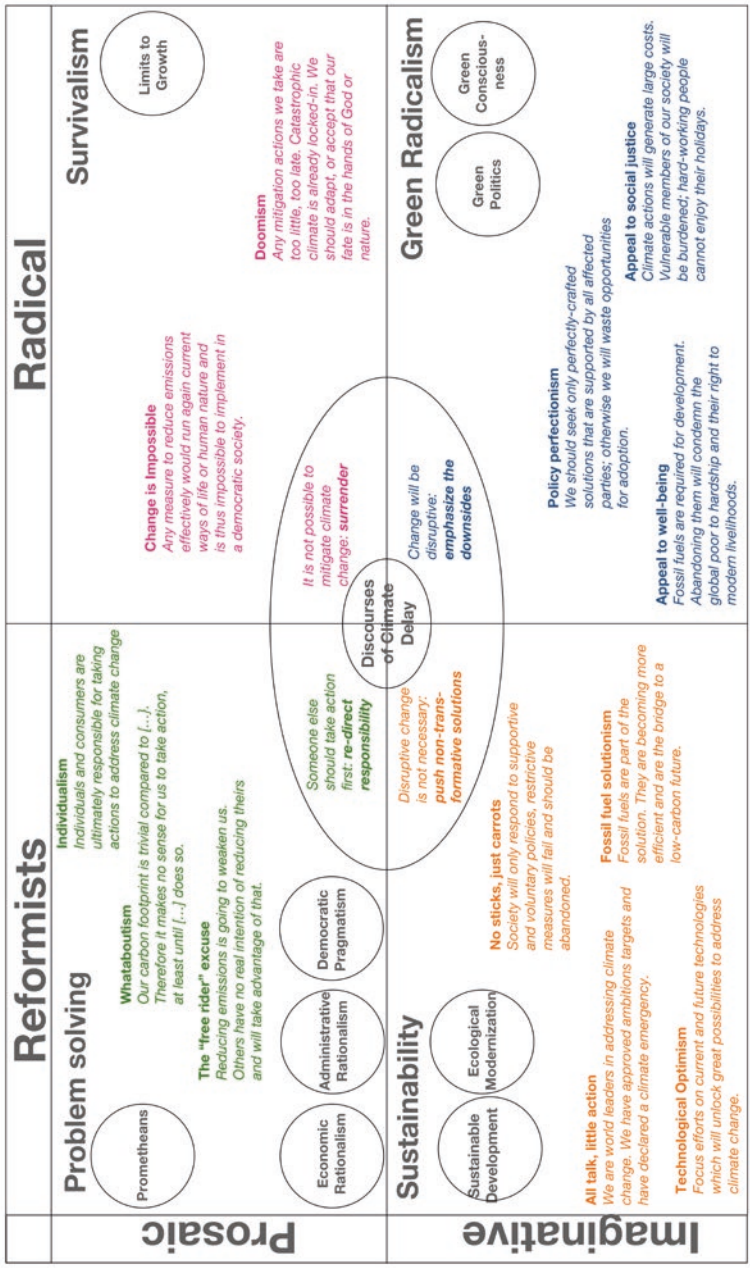


Figure 1: Integration of Environmental Discourses with a Typology of Climate Delay Discourses[35]

35 Figure 1 is based on Dryzek, *Politics of the Earth*, and Lamb et al., "Discourses of climate delay."

that this dichotomy tends to represent polarized perspectives promoted by idealized arguers who may in fact be far removed from the praxis of delivering wider societal transformation. These ideologues may be more concerned with point-scoring against advocates of other environmental discourses. As a recent example of this in action, we can point to the April 2015 "Ecomodernist Manifesto" published by a pro-reform group of scientists with the aim of promoting a technology-focused approach to conservation. A secondary objective of the manifesto, however, was to attack forms of radical environmentalism that, according to the report's authors, claim human societies must harmonize with nature to avoid economic and ecological collapse.[36]

There are six reformist environmental discourses in Figure 1 presenting solutions that lie within the liberal capitalism through the market, through governance and with citizen power. The two "imaginative reformist" discourses (sustainable development and ecological modernization) promote realistic objectives to which society can aspire and suggest that technology will play a central role. The UN Sustainable Development Goals can be understood in this context. Moreover, ecomodernism has been described by environmental reformist Mark Lynas as "recognition that human ingenuity and technological innovation offer immense promise in tackling ecological challenges."[37] In a direct critique of eco-radicalism, Lynas suggests that "solving climate change does not mean rolling back capitalism, suspending the free market or stopping economic growth." Naomi Klein is the focus of this critique arguing that her insistence on subordinating the tackling of carbon emissions into a wider agenda of social revolution and the dismantling of corporate capitalism "isn't making climate mitigation easier" but instead "is making it politically toxic."[38] As noted in Figure 1, however, perhaps Lynas' stance is prompting delays by

36 Barry W. Brook, "An ecomodernist's manifesto: save wildlife by embracing new tech," *The Conversation*, April 22, 2015, https://theconversation.com/an-ecomodernists-manifesto-save-wildlife-by-embracing-new-tech-40239.

37 Mark Lynas, "Ecomodernism launch was a screw-up of impressive proportions," *The Guardian*, September 30, 2015, https://www.theguardian.com/environment/2015/sep/30/ecomodernism-launch-was-a-screw-up-of-impressive-proportions.

38 Mark Lynas, "We must reclaim the climate change debate from the political extremes," *The Guardian*, March 12, 2015, https://www.theguardian.com/commentisfree/2015/mar/12/climate-change-reclaim-debate-political-extremes.

emphasizing the downsides of potential disruptions associated with Klein's propositions.

Only three radical environmental discourses are presented in Figure 1. The essential concern of these discourses is that humanity will over-shoot the planet's capacity to support contemporary civilization. It is very interesting, in this context, to see the UN Secretary General place the most recent IPCC report under survivalism when he described it as a "survival guide for humanity."[39] Those who subscribe to the green politics or green consciousness discourses tend to call for a complete transformation of contemporary society.

Taking climate science as their start point, both the reformist and radical discourses provide hope for a way forward in solving the climate crisis. The boundaries between theses discourses are blurred and full of inconsistencies. More than anything it appears that discourse adherents want to be heard by their audience and to be persuasive. Both claim to represent what people really want or need. The reformists more frequently attack radicals than the other way around. This could be because radicals simply view reformists as part of the "business as usual" mindset. They may consider that reformists, in some cases, deliberately mislead the public through "bright green lies" about unrealistic solutions.[40] In this context, the IPCC mitigation strategies can be considered as a clever mix of reformism and radicalism presenting dramatic technological innovation and socio-economic change over a very short period. This change is bound to be disruptive. The potential for such disruptions to occur due to climate change action is portrayed negatively in climate delay discourses.

Twelve climate delay discourses that shape current debates on climate action are depicted in Figure 1.[41] These are grouped under four categories: (1) redirect responsibility; (2) push for non-transformative solutions; (3) emphasize the downsides of climate policies; and (4) surrender to climate change. These discourses begin with acceptance of scientific truth as presented by the IPCC. The problem here is that these discourses "often lead to deadlock or a sense

39 Access speech via this link: https://www.un.org/sg/en/content/sg/statement/ 2023-03-20/secretary-generals-video-message-for-press-conference-launch-the-synthesis-report-of-the-intergovernmental-panel-climate-change.

40 Derrick Jensen, Keith Lierre, and Max Wilbert, *Bright Green Lies – How the Environmental Movement Lost its way and what we can do about it* (Rheinbeck: Monkfish Book Publishing, 2021).

41 Lamb et al., "Discourses of climate delay."

that there are intractable obstacles to taking action." In the mainstream media, for example, "Whataboutism" occurs frequently when commentators say something like this: "Australia's carbon footprint is small compared to China, and so it is better that China acts first" or "Why protest on the streets of London for government climate action, when you should be protesting in Beijing?" According to this framework, technological optimism falls under the category of the push for non-transformative solutions (like Dryzek's reformist environmental discourses). Appeals for social justice (something potentially associated with green politics) and doomism (something that may fall under survivalism) could also be causes for climate delay according to this analysis.

The suggestion here is that scientists, climate advocates and policymakers need to recognize and counter these arguments when they are used. While these discourses build upon legitimate concerns, they become delay arguments when they "misrepresent rather than clarify, raise adversity rather than consensus or imply that taking action is an impossible challenge." The central response to these climate delay discourses should be to pre-emptively warn the public about misinformation and its ramifications.[42] This discussion of how scientific truth becomes entrapped in divergent discourses raises a concern on how to effectively overcome the potential for delayed action. Certainly, more effective communication of scientific facts is a key start point. But the issue here is what should be the next step or how can be best break through the cycles of delay? In this context, it may be interesting to examine the activities of some of the more recent environmental activists through the work of Extinction Rebellion (also known as XR) who are employing a range of methods to push for immediate and aggressive action on climate change. In a world where there appears to be a gigantic divide between adherents to divergent discourses, we reflect upon whether scientists should become climate activists and, like their social movement counterparts, actively engage in civil disobedience.

42 Justin Farrell, Kathryn McConnell, and Robert Brulle, "Evidence-based strategies to combat scientific misinformation," *Nature Climate Change* 9 (2019), https://doi.org/10.1038/s41558-018-0368-6; Sander van der Linden et al., "Inoculating the public against misinformation about climate change," *Global Challenges* 1, no. 2 (2017), https://doi.org/10.1002/gch2.201600008.

EXTINCTION REBELLION'S CLIMATE ACTIVISM MODEL

Extinction Rebellion (XR) is a recent invention, founded in May 2018 by Gail Bradbrook, Simon Bramwell and Roger Hallam, with a central strategy that initially involved the use nonviolent civil disobedience to force government action to prevent climate breakdown and social collapse. Within the environmental discourses outlined in Figure 1, XR falls under the categories of survivalism and eco-radicalism. XR members are considered to have a moral responsibility to acknowledge and share scientific truth which is essentially the latest climate science and the most pessimistic IPCC projections. They are required to act on this knowledge. Virtue ethics plays a role here since XR members view activism in the face of the existential climate and ecological emergency as the right, and perhaps the only, thing to do. They are less concerned about whether their protests will work.[43] Next, with respect to civil disobedience, some XR members are willing to be arrested while protesting (blockading streets, closing bridges, damaging the buildings of major climate polluters, etc.) and could be jailed by the authorities. A central XR argument is that active involvement from only a relatively modest proportion (this could be as small as 3.5%) of the population is sufficient to bring about radical change. Doubts about the robustness of this claim as a theory of change, however, have been raised.[44] Very importantly, XR places emphasis on universalism and argues that the climate crisis should not be owned by any political ideology (or discourse) but that everyone who wants to can be engaged in protest action.

As the name implies, XR favours revolution over reform.[45] The group's tactics constantly evolve, including a recent willingness to temporarily move away from protest actions.[46] To some extent, shifting away from civil disobedience (even for a short while) is a clever strategy. It reflects the fact that XR has been heavily criticized in the media for its activities. Moreover, opinion polls show that XR's most disruptive actions are generally unpopular

43 Anthea Lawson, *The Entangled Activist: Learning to recognize the Master's tools* (London: Perspective Press, 2021), 188.

44 Oscar Berglund and Daniel Schmidt, *Extinction Rebellion and Climate Change Activism: Breaking the Law to Change the World* (Cham: Palgrave MacMillan, 2020), 79-93.

45 Hallam, *Common Sense for the 21st Century*, 13.

46 Robert Booth, "Extinction Rebellion announces move away from disruptive tactics," *The Guardian*, January 1, 2023, https://www.theguardian.com/world/2023/jan/01/extinction-rebellion-announces-move-away-from-disruptive-tactics.

with the public. For example, 54% of people in a 2019 poll indicated they oppose XRs form of protest[47] and 49% of the public polled in 2021 held a negative view of XR.[48] Other research indicates, however, that XR protests do influence public attitudes towards sustainable behaviour and public willingness to approve of climate mitigation policies. At the same time, XRs emphasis on radical economic change and government action works to shift responsibility away from individual action and environmentally-friendly consumption towards more collectivist responses.[49] As indicated in Figure 1, emphasis on individual consumption appears in the discourse that seeks to redirect responsibility away from government and corporations. Instead, individuals are given responsibility to deal with society's moral and structural failings, including the climate crisis.[50]

In addition, XR demands that governments reduce greenhouse gas emissions to net-zero by 2025. This is twenty-five years in advance of the Paris Agreement target. According to XR proponents, this 2025 target is based on hard science and the precautionary principle. They do recognize, however, that such a target is unachievable.[51] Nevertheless, ambitious targets may be pragmatic since they reflect the IPCC's worst-case scenarios and align with existing modes of governance, political election cycles and government budgeting. Put simply, net-zero 2050 as a target allows today's politicians to avoid taking hard decisions. It pushes the burden of implementation of net-zero measures onto future leaders and consequently slows diffusion of low-carbon technologies and limits the scope for social/behavioral change.[52]

At the time of writing, changes to legislation in the United Kingdom have

47 https://yougov.co.uk/topics/science/survey-results/daily/2019/10/15/470b6/1.

48 https://yougov.co.uk/topics/politics/survey-results/daily/2021/09/03/3ee46/1.

49 Kountouris and Williams, "Do protests influence environmental attitudes? Evidence from Extinction Rebellion," *Environmental Research Communications* 5 (2023), https://doi.org/10.1088/2515-7620/ac9aeb.

50 Peter Bloom, *The Ethics of Neoliberalism: The Business of Making Capitalism Moral* (London, New York: Routledge, 2019), 18.

51 Read and Alexander, *Extinction Rebellion*, 111.

52 Brendan F. D. Barrett, Hiroshi Ohta, and Gregory Trencher, "Prospects for Acceleration of Sociotechnical Transitions for Deep Decarbonization," in *Handbook of Sustainable Cities and Landscapes*, ed. Yizhao Yang and Anne Taufen (London: Routledge, 2022).

broadened the definition of what constitutes "serious disruption" and given the police greater powers to intervene and arrest protestors.[53] While applauded in some quarters, these measures are viewed by many as an erosion of important civil liberties. Perhaps the importance of, and need for, civil obedience is best captured by this quote from the Australian ethical philosopher, Peter Singer. He states: "By not resisting the force of the law, by remaining non-violent and by accepting the legal penalty for their actions, those who engage in civil disobedience make manifest both the sincerity of their protest and their respect for the rule of law and the fundamental principles of democracy. So conceived, civil disobedience can often be justified."[54]

WHY DO WE NEED SCIENCE REBELLION?

In November 2018, Rupert Read, associate professor of philosophy at the University of East Anglia, published an article in The Conversation explaining why, as an academic, he was embracing XR and taking direct action to address climate change.[55] He described how XR's aim is to prevent devastation and harm that will come. Peter Singer made a similar argument when discussing climate change and he suggests that the only obligation we have to strangers is not to harm them. He argues in favor of "international arrangements to deal with climate change" and calls for a "global ethic on which to base those arrangements."[56] He appears to support protest movements like XR when he states: "Given the gravity of the risks that our planet and its entire population face from climate change over the next century, the level of protest against inaction has, to date, been quite small. There is an urgent need for greater understanding about what is likely to happen if we do not start cutting, deeply

53 "UK government to make it easier for police to stop protests," *Al Jazeera*, January 16, 2023, https://www.aljazeera.com/news/2023/1/16/uk-government-to-make-it-easier-for-police-to-stop-protests.

54 Peter Singer, *Practical Ethics,* 3rd ed. (Cambridge: Cambridge University Press, 2015), 268.

55 Rupert Read, "Extinction Rebellion: I'm an academic embracing direct action to stop climate change," *The Conversation*, November 16, 2018, https://theconversation.com/extinction-rebellion-im-an-academic-embracing-direct-action-to-stop-climate-change-107037.

56 Singer, *Practical Ethics*, 217.

and rapidly, our greenhouse gas emissions. In this situation, we should not be passive spectators."[57]

Read elucidated that XR "challenges oligarchy and neoliberal capitalism for their rank excess and the political class for its deep lack of seriousness." In the face of powerful vested interests, he alluded that the chance of XR succeeding is relatively slim. Nevertheless, XR could be our last chance thereby making their cause the most compelling of them all. Other academics have echoed his concern. For instance, in September 2019, Charlie Gardner and Claire Wordley called on scientists to heed their own warnings to humanity about the climate/ecological crisis and to act accordingly.[58] They commented on how over 12,000 scientists signed a letter in April 2019 endorsing the global school strikes (acts of civil disobedience by school children) and suggested that scientists ought to go one step further by joining these civil disobedience movements. Not all scientists need to commit acts of protest, they argued, but those that do will send a "powerful message about how seriously scientists treat these crises." Involvement of scientists in popular movements like XR, they stated, would boost the credibility of these movements, change the tone of media reporting, and ensure that XR members are well-versed in the latest climate science.

Gardner and Wordley were aware of the potential for a negative response from the scientific community. Particularly, they intimated how scientists advocating for political positions are criticized as being no longer scientifically credible. Another group of scientists wrote to the Nature journal editor suggesting that the priority should be to support social movements more broadly, rather than civil disobedience specifically. They called for better platforms to allow scientists to "fruitfully interact with activists and social movements organizations to inform, stimulate and critically challenge their efforts in solving planetary emergencies." As to whether scientific contributions should be made from within or outside social movements, they advised that this depends on the scientist, the social movement, and the cultural context.[59] One such platform is

57 Singer, *Practical Ethics*, 237.

58 Louise Gardner and Claire F. R. Wordley, "Scientists must act on our own warmings to humanity," *Nature Ecology and Evolution* 3 (September 2019), 1271. https://doi.org/10.1038/s41559-019-0979-y.

59 Elinor Isgren et al., "Science has much to offer social movements in the face of planetary emergencies," *Nature Ecology and Evolution* 3 (November 2019).

Scientist Rebellion founded in 2020.[60] This group carried out various protests during the COP26 negotiations in Glasgow in November 2021. Scientists participating in these protests commented on three challenges. First, there is an expectation that they report their science in an impartial and objective way, not taking a view (the honest broker role mentioned in the introduction to this chapter). Second, many in academia fear for their jobs if they protest because universities generally frown upon activism. Third, many academics have high workloads, are under pressure to publish and secure research grants, and do not have time to engage in activism.[61] Scientists justifying more civil disobedience maintain that their credibility is actually "influenced by whether they are seen to be acting in line with shared values and promoting well-being of others and, in the context of climate change, according to whether their actions clearly align with their message."[62]

SHOULD ACADEMICS JOIN SCIENTIST REBELLION?

There is no simple answer to the question of whether scientists should participate in this rebellion. In the end, it is a matter of conscience for each scientist. When faced with the ethical crisis that is the climate emergency, however, a number of scientists contend that civil disobedience may be appropriate under specific conditions. For instance, they argue that scientists ought to protest when:

- Fundamental rights to life and well-being are being undermined in an unjust manner.
- Their actions have the potential to be effective and avoid harm.
- Those actions are taken as a last resort after all other avenues have been pursued.[63]

60 https://www.scientistsforxr.earth.

61 Tosin Thompson, "Scientist Rebellion: Researchers join protesters at COP16," *Nature* 599 (18 November 2021).

62 Capstick et al., "Civil Disobedience by scientists helps press for urgent climate action," *Nature Climate Change* 12 (September 2022).

63 Capstick et al.,"Civil Disobedience."

The notion that scientists should engage more effectively with society and in doing so escape from the ivory tower is not new. According to Nancy Baron, "traditionally, scientists have viewed their role narrowly: ask questions that will advance the state of knowledge; then, go out and find those answers. Successful publication in a peer-reviewed journal was the end game, the final act in a long and difficult process." But she also suggests this situation is changing. "Today, more scientists recognize the limits of this tradition and are moving beyond publications to communicate their results to the wider world."[64] As we mentioned at the beginning of this chapter, it is broadly acknowledged that scientists have many roles – pure scientists, science advisors, honest brokers, and issue advocates. The notion of the honest broker scientist, however, has been challenged as naïve since it is unthreatening to those in power and to the status quo. As such, the honest broker scientist cannot be considered as a neutral, objective position.[65] Science activism is not new and that there are numerous globally recognized scientist activists in diverse fields who advocate for very strong positions, for example, Richard Dawkins, Will Steffen, Neil deGrasse Tyson and James Hansen.[66] The latter gave testament to the US Congress in June 1988 on the greenhouse effect[67] and in 2013 was arrested for protesting against the Keystone XL pipeline.[68] Implicit in this story is the reality that Hansen engaged in protest late in his scientific career, whereas such actions are extremely difficult for early-career scientists. Most importantly, this raises the questions of how academic career trajectories play out, especially in a world where greenhouse gas emissions need to drop to zero in wealthy countries as rapidly as possible. Indeed, Gardner points out that there are "no professorships on a dead planet."[69] While rather extreme, this view does give cause for a serious rethink.

64 Nancy Baron, *Escape from the Ivory Tower: A Guide to Making Your Science Matter* (Washington, Covelo, London: Island Press, 2010), 14-15.

65 Capstick et al.,"Civil Disobedience."

66 https://en.wikipedia.org/wiki/Category:Science_activists.

67 Eric Holthau, "James Hansen's legacy: Scientists reflect on climate change in 1988, 2018, and 2048," *Grist*, June 22, 2018, https://grist.org/article/james-hansens-legacy-scientists-reflect-on-climate-change-in-1988-2018-and-2048/.

68 Jeanna Bryner, "NASA Climate Scientist Arrested in Pipeline Protest," *Livescience,* February 14, 2013, https://www.livescience.com/27117-nasa-climate-scientist-arrest.html.

69 Thompson, "Scientist Rebellion."

There are significant concerns about how academic engagement in civil disobedience may undermine the integrity of science. In response, it has been argued that the "ways of linking science and society are not founded on absolute principles, rather, they exist as partially applied assumptions based on historical precedent."[70] Academia needs to reflect upon how well these inherited norms serve society in a time of an existential climate crisis. In the overall context of this book, perhaps climate science activists share commonalities with those who advocate for meta-science as a scientific social movement.[71] Referring to scientific/intellectual movements in general, meta-science advocates suggest that these movements succeed when "high-status actors articulate problems in current intellectual trends, frame a solution that is attractive to others, develop a common identity through interaction with other critics, and are able to secure resources to ensure the self-perpetuation of the movement's goals." They refer to this as a "cognitive revolution," which in turn resonates with the notion of a climate science rebellion. While not wishing to labour this point, there are two factors connecting meta-science to climate activism that suggest further in-depth research may be requisite. First, meta-science itself calls for open science activism (i.e., the benefits of our science should be shared widely) and methodological activism (e.g., related to the reproducibility crisis). Second, meta-science is a platform that could actually support climate scientist interactions with activists/social movements organizations by democratizing knowledge (e.g., ensuring that climate science papers used by the IPCC are not trapped behind paywalls), by promoting climate science communication (so that delay discourses are addressed), by pushing for a scientist career trajectory that does not frown on extensive societal engagement, and by encouraging scientific bodies and universities to reevaluate across the board how they employ the latest climate science. Universities need to transform curriculums and research to reflect the climate reality, as well as divest from fossil fuels, and set ambitious net-zero targets. After all, as Rupert Read suggests, survival (or even future progress) of our civilization is the most compelling cause of all and one where meta-science, academia and universities play a central role.

70 Capstick et al., "Civil Disobedience."

71 David Peterson and Aaron Panofsky, "Metascience as a Scientific Social Movement," *SocArXiv* (August 2020), 5, https://doi.org/10.31235/osf.io/4dsqa.

BIBLIOGRAPHY

"UK government to make it easier for police to stop protests." Al Jazeera, January 16, 2023. https://www.aljazeera.com/news/2023/1/16/uk-government-to-make-it-easier-for-police-to-stop-protests.

Angermuller, Johannes. "Discourse Studies." In *International Encyclopedia of the Social & Behavioral Sciences*, 2nd edition, ed. James D. Wright, 510-515. Amsterdam: Elsevier, 2015.

Baber, Rod. "What is scientific truth?" *Climacteric* 20, no. 2 (10 March 2017): 83-84. http://dx.doi.org/10.1080/13697137.2017.1295220.

Baron, Nancy. *Escape from the Ivory Tower: A Guide to Making Your Science Matter*. Washington, Covelo, London: Island Press, 2010.

Barrett, Brendan F. D., Hiroshi Ohta, and Gregory Trencher. "Prospects for Acceleration of Sociotechnical Transitions for Deep Decarbonization." In Handbook of Sustainable Cities and Landscapes, ed. Yizhao Yang and Anne Taufen. London: Routledge, 2022.

Berglund, Oscar and Daniel Schmidt. *Extinction Rebellion and Climate Change Activism: Breaking the Law to Change the World*. Cham: Palgrave MacMillan, 2020.

Bloom, Peter. *The Ethics of Neoliberalism: The Business of Making Capitalism Moral*. London, New York: Routledge, 2019.

Brook, Barry W. "An ecomodernist's manifesto: save wildlife by embracing new tech." *The Conversation*, April 22, 2015. https://theconversation.com/an-ecomodernists-manifesto-save-wildlife-by-embracing-new-tech-40239

Capstick, Stuart, Aaron Theirry, Emily Cox, Oscar Berglund, Steve Westlake, and Julia K. Steinberger. "Civil Disobedience by scientists helps press for urgent climate action." *Nature Climate Change* 12 (September 2022): 773-777.

Dryzek, John S. *Politics of the Earth*. 4th edition. Oxford: Oxford University Press, 2022.

Farrell, Justin, Kathryn McConnell, and Robert Brulle. "Evidence-based strategies to combat scientific misinformation." *Nature Climate Change* 9 (2019): 191–195. https://doi.org/10.1038/s41558-018-0368-6.

Friedlingstein, Pierre, Michael O'Sullivan, Matthew W. Jones, Robbie M. Andrew, Luke Gregor, Judith Hauck, Corinne Le Quéré, et al. "Global Carbon Budget 2022." *Earth Systems Science Data* 14, no. 2 (2022): 4811-4900. https://doi.org/10.5194/essd-14-4811-2022.

Fu, Hui-Zhen, and Ludo Waltman. "A large-scale bibliometric analysis of global

climate change research between 2001 and 2018." *Climate Change* 170, no. 35 (2022). https://doi.org/10.1007/s10584-022-03324-z

Gardner, Louise, and Claire, F. R. Wordley, "Scientists must act on our own warmings to humanity," *Nature Ecology and Evolution* 3 (September 2019): 1271-1271. https://doi.org/10.1038/s41559-019-0979-y.

Guterres, Antonio. "Secretary-General's video message for press conference to launch the Synthesis Report of the Intergovernmental Panel on Climate Change." (Speech, Interlaken, March 20, 2023), United Nations. https://www.un.org/sg/en/content/sg/statement/2023-03-20/secretary-generals-video-message-for-press-conference-launch-the-synthesis-report-of-the-intergovernmental-panel-climate-change

Hallam, Roger. *Common Sense for the 21*st *Century: Only Nonviolent Rebellion can now stop Climate Breakdown and Social Collapse*. White River Junction: Chelsea Green Publishing, 2019.

Haunschild, Robin, Lutz Bornmann, and Werner Marx. "Climate Change Research in View of Bibliometrics." *PLoS ONE* 11, no. 7 (2016). https://doi.org/10.1371/journal.pone.0160393.

IPCC. *Climate Change 2023*: *AR6 Synthesis Report*. Geneva: Intergovernmental Panel on Climate Change, 2023.

Isgren, Ellinor, Chad S. Boda, David Harnesk, and David O'Byrne. "Science has much to offer social movements in the face of planetary emergencies." *Nature Ecology and Evolution* 3 (November 2019): 1498.

Jensen, Derrick, Keith Lierre, and Max Wilbert. *Bright Green Lies – How the Environmental Movement Lost its way and what we can do about it*. Rheinbeck: Monkfish Book Publishing, 2021.

Johnston, Caleb, and Aphra Holland Bonnett. "Picturing these days of love and rage: Extinction Rebellion's 'Impossible Rebellion.'" *Cultural Geographies*, *30*(2), (2023) 315–323. https://doi.org/10.1177/14744740221096102

Klein, Naomi. *This Changes Everything: Capitalism vs. the Climate*. London: Allen Lane, an imprint of Penguin Books, 2015.

Kountouris, Yiannis and Eleri Williams. "Do protests influence environmental attitudes? Evidence from Extinction Rebellion." *Environmental Research Communications* 5 (2023). https://doi.org/10.1088/2515-7620/ac9aeb.

Lamb, William F., Giulio Mattioli, Sebastian Levi, J. Timmons Roberts, Stuart Capstick, Felix Creutzig, Jan C. Minx, Finn Müller-Hansen, Trevor Culhane and Julia K. Steinberger. "Discourses of climate delay." *Global Sustainability* 3, no. 17 (2020): 1–5. https://doi.org/10.1017/sus.2020.13.

Lawson, Anthea. *The Entangled Activist: Learning to recognize the Master's tools*. London: Perspective Press, 2021.

Luhmann, Niklas. *Ecological Communication*. Oxford: Polity Press, 1989.

Lynas, Mark. "We must reclaim the climate change debate from the political extremes." *The Guardian*, March 12, 2015. https://www.theguardian.com/commentisfree/2015/mar/12/climate-change-reclaim-debate-political-extremes

Lynas, Mark. "Ecomodernism launch was a screw-up of impressive proportions." The Guardian, September 30, 2015. https://www.theguardian.com/environment/2015/sep/30/ecomodernism-launch-was-a-screw-up-of-impressive-proportion

McGrath, Matt, and Georgina Rannard. "Scientists release 'survival guide' to avert climate disaster." *BBC*, March 20, 2023. https://www.bbc.com/news/science-environment-65000182.

Marshall, George. *Don't Even Think About It: Why Our Brains are Wired to Ignore Climate Change*. London, Oxford, New York, New Delhi, Sydney: Bloomsbury Press, 2015.

Oreskes, Naomi and Erik M. Conway. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York, London, New Delhi, Sydney: Bloomsbury Press, 2011.

O'Riordan, Timothy. *Environmentalism*. London: Pion, 1976.

O'Riordan, Timothy. "The Challenge of Environmentalism." In *New Models in Geography*, ed. Richard Peet, and Nigel Thrift. London: Unwin Hyman, 1989.

Osborne, Margaret. "Scientists Stage Worldwide Climate Change Protests After IPCC Report." Smithsonian Magazine, April 13, 2022. https://www.smithsonianmag.com/smart-news/scientists-stage-worldwide-climate-protests-after-ipcc-report-180979913/.

Peterson, David and Aaron Panofsky. "Metascience as a Scientific Social Movement." *SocArXiv* (August 2020). https://doi.org/10.31235/osf.io/4dsqa.

Pielke, R. A. *The Honest Broker: Making Sense of Science Policy and Politics*. Cambridge: Cambridge University Press, 2007.

Radford, Tim. "Conservatives Don't Like the Message on Climate Change, So They Want to Shoot the Messenger." Alternet, November 10, 2014. https://www.alternet.org/2014/11/conservatives-threatening-climate-scientists.

Read, Rupert and Samuel Alexander. *Extinction Rebellion: Insights from the Inside*. Melbourne: Simplicity Institute, 2020.

Singer, Peter. *Practical Ethics*. 3rd ed. Cambridge: Cambridge University Press, 2015.

Solnit, Rebecca. "Big oil coined 'carbon footprints' to blame us for their greed. Keep them on the hook." *The Guardian*, August 23, 2021. https://www.theguardian.

com/commentisfree/2021/aug/23/big-oil-coined-carbon-footprints-to-blame-us-for-their-greed-keep-them-on-the-hook

Steffen, Will, Johan Rockström, Katherine Richardson, Timothy M. Lenton, Carl Folke, Diana Liverman, Colin P. Summerhayes, et al. "Trajectories of the Earth System in the Anthropocene." *Proceedings of the National Academy of Sciences* 115, no. 33 (2018): 8352-8259. https://doi.org/10.1073/pnas.1810141115.

Thompson, Tosin. "Scientist Rebellion: Researchers join protesters at COP16." *Nature* 599 (18 November 2021): 357.

van der Linden, Sander, Anthony Leiserowitz, Seth Rosenthal, and Edward Maibach. "Inoculating the public against misinformation about climate change." *Global Challenges* 1, no. 2 (2017). https://doi.org/10.1002/gch2.201600008.

Yearley, Steven, David, Mercer, Andy Pitman, Naomi Oreskes, and Erik Conway, "Perspectives on global warming." *Metascience* 21 (2012): 531–559. https://doi.org/10.1007/s11016-011-9639-9.

7
SUSTAINABILITY JOURNEY TOWARDS ACHIEVING THE UN 2030 SDG'S

JACQUES BUITH

Thank you very much for having me in this seminar. As much as I like to be here with you virtually, I would rather like to be with you in Osaka, together in Japan.

I work for Deloitte as a Senior Partner. I am the lead partner responsible for the United Nations system. I have worked a lot in Japan and treasure the moments that I worked with my friends from Deloitte Japan together on project Dejima and my many visits to Tokyo, Kyoto and also to Nagasaki.

With that, I would like to present a sustainability journey. A journey that will support organizations in their transformation to a more sustainable world, with an overall objective to become responsible businesses and act as responsible businesses in everything they do. As the global lead partner of the United Nations, I started to working on the 2030 Global Sustainable Development Goals (SDGs) back in 2015 and what I have seen in the early days is that the SDGs were

predominantly used in the United Nations and within the member states. Gradually, after a couple of years, I saw that they were picked up and used by private sector organizations. This has caused me to wonder why businesses and private organizations were using the SDGs in their way of doing business. Now, in 2022, many organizations, including private sector companies, include the SDGs in their strategy. Reference to the SDGs is a best practice. As Professor Zwitter indicated about *SDG17:* the partnerships and how to develop and work together between private sector and other non-state actors is the most crucial element of this journey.

Are we there yet? Absolutely not. I view it as a long journey, to be headed towards incorporating well-being into strategies of organizations. The way we do it is that we help organizations move from an economic-driven to an impact-driven world. The stage we are currently in is an exploration phase into sustainability. We have now just started to create regulations about sustainability and its impact. In 2015 the SDGs were founded, the Paris agreement was the key headline and over the last couple of years we have seen more and more regulatory frameworks that come into play. In Europe we have the EU GreenDeal with the CSRD (Corporate Sustainability Reporting Directive)but also internationally the IFRS (International Financial Reporting Standards) foundation with its ISSB (International Sustainability Standards Board) framework is moving ahead.

Soon, we will be at a crossroads, where organizations are implementing sustainability because they want it to be part of their DNA and they want to be more regulatory-driven. The crossroads of this journey is where businesses and organizations have a very important role to play. Hence, it is my privilege to advise organizations in their journey from exploring sustainability to an actionable, impactful organization and ultimately becoming and being sustainable.

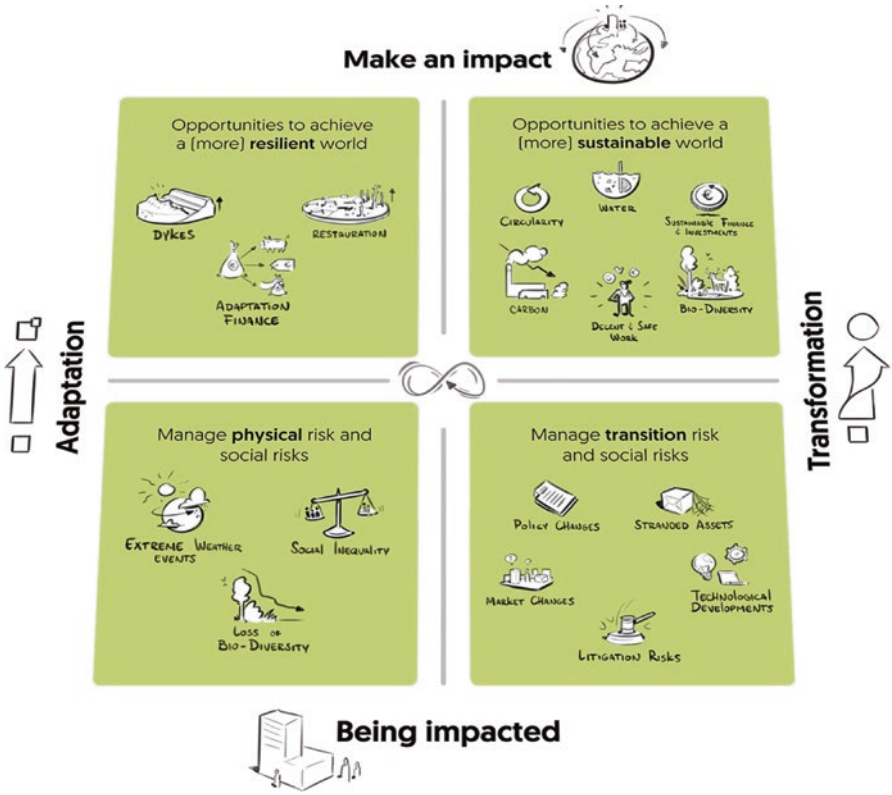
On the Matrix (which you can see in the picture above) what is important is the concept of double materiality. We all know that we have started this journey around sustainability too late… There has been too much damage already done to the world that we experience with respect to climate change, for example, which we see every day of our lives. Therefore, we need to adapt. We need to help organizations to adapt to the current situations, we have to manage the physical and social risks that are present every day. Ultimately, we help

organizations to become resilient in this world today. This is the first aspect of the double materiality: *Adaptations.*

The second aspect is how organizations can do better in order to transform into a better world, into an impact-driven world where sustainability is part of their DNA. And with these *Transformations* there are opportunities to take advantage of this new reality and attract new customers and employees in being part of their organizations. We see every day that those new organizations are stepping up and are getting the benefit of the employees' [loyalty]. Managing this transformation into a better world is very challenging, we also see companies that are experiencing some ups and downs.

I am positive that with the guidance and compass of the UN SDGs, companies can adopt the right things, and transform themselves into better players. The cross world you see in this picture is something that companies need to navigate and they should become conscious of how to implement becoming a responsible business in the DNA of the organizations. I believe the universities (Osaka and Groningen) need to play a very important role in educating students, the young generations, to become impactful business leaders.

With that, I thank you very much and wish you a pleasant symposium to come.



8
POLICING AND ITS SEARCH FOR MEANING: PROCEDURAL JUSTICE WITH *INOCHI*

MICHAEL MULQUEEN

INTRODUCTION

In a book concerned with meaning and complexity it seems appropriate to consider meaning derived from complex professional lives. Policing as a form of service to the public, often in moments of acute danger and risk, may appear, at least ostensibly, to be a career in which meaning is self-evident. Certainly, in the simplicity of training ground doctrine policing is constructed as a career of meaning because it is mainly about keeping people safe.[1] Does this

1 College of Policing, "Police training to change for all new officers to fight crime," College of Policing Press Release, 18 June, 2022, https://www.college.police.uk/article/police-training-change-all-new-officers-fight-crime.

straightforward account of purpose and effect giving rise to meaning, however that may be individually sensed, survive contact with the experience of time spent in a policing career? If its practitioners – i.e., police officers and civilian staff – instead perceive policing's daily "reality" as one mired within a convolution of legal, procedural and codified constraints, where is there a well of meaning to be found? Similarly, where is meaning recovered from the arid ground implied by "putting up with" the constant churn of management initiatives as well as from the ambiguities, dangers and, indeed, corruptions of policing culture? Is meaning resilient to or found through personal loss incurred in the course of a demanding career in policing? Such loss is witnessed in many police services internationally in various forms, including manifold negative mental and physical health implications among police personnel.[2] If meaning is acknowledged as inherently subjective and, so, is most coherently defined interpretatively in terms of indicators of its obverse, meaninglessness – including low staff morale, resignations and sickness rates – then policing, or, more correctly, its people, may well be experiencing a dearth of meaning.[3] In parallel, apparent among policing's own service user base – the public – is growing unease or rejection of police legitimacy, a loss of confidence in policing and, indeed, as experienced in at least some jurisdictions, an apparently increasing willingness to do physical harm to police personnel.[4]

Procedural justice, which Tyler, in his influential work, defines in terms of how people's experiences of policing impact significantly on their perceptions of its fairness and, thus, its legitimacy, may be potentially significant in terms of policing personnel recovering meaning to their professional lives.[5] Procedural justice suggests process that is justice "done with" rather than "done to" its

2 Rebecca Phythian et al., "Developments in UK police wellbeing: A review of blue light wellbeing frameworks," *The Police Journal: Theory, Practice and Principles* 95, no. 1 (2022): 24-49.

3 Police Federation of England and Wales, *Pay and Morale Survey 2022 – Headline Report December 2022* (Leatherhead: Police Federation, 2022), 25-28, 34-42.

4 Police Federation, *Pay and Morale Survey*, 43; Isabelle Kirk, "Confidence in the Police sinks in two years," *YouGov*, March 22, 2022, https://yougov.co.uk/topics/politics/articles-reports/2022/03/15/confidence-police-sinks-two-years; Cormac O'Keefe, "Serious assaults and violence against gardaí rise sharply," *The Irish Examiner*, March 03, 2023, https://www.irishexaminer.com/news/courtandcrime/arid-41084488.html.

5 Tom Tyler, "Procedural Justice, Legitimacy, and the Effective Rule of Law," *Crime and Justice* 30 (2003): 283-357.

participants. Conceptually, it thus seems to be situated between points of opposite polarity. At one polarity is individual agency to walk away from or towards how policing is done. At the other polarity is the structural power of policing institutions to enforce law and regulation using means including force. Procedural justice is, arguably, intended as an interplay between these polarities of agent and structure.[6] Practitioners may, therefore, perceive themselves to be party to an enterprise that unlocks personal agency to flourish for an agreed good – *bonum communis* – while inhibiting structural determinism's capacity to excessively inhibit agency.[7] Therein may well be meaning and a relief from the reductionist existence of being a mere functionary imposing the power of a rigid structure.

However, individuals birthing new professional beginnings from procedural justice may suffer vulnerability to the organisation's willingness to release itself from the safety of holding power and influence through those rigid structures whose outworking necessitates the need for procedural justice in the first place. Insight from institutional scholarship highlighting how organisations and sectors embracing change often drift back to previous "safe pathways" of control appears readily applicable to change aspirations in this context.[8] For example, the report entitled "A New Beginning: Policing in Northern Ireland" (1999) (also known as the "Patten Report"), which made 175 recommendations, is still widely considered to be the most significant and complex blueprint for police reform in the world.[9] The Patten Report might be viewed as a paradigm of procedural justice. It held that policing with the community should be the core function of

6 Anthony Giddens, *The Constitution of Society: Outline of the Theory of Structuration* (Cambridge: Polity Press, 1984).

7 Bonaventure Chapman, "St Thomas and the Common Good," *Dominicana*, November 10, 2014, https://www.dominicanajournal.org/st-thomas-and-the-common-good.

8 Simon Bulmer and Martin Burch, "Organizing for Europe: Whitehall, the British State and the European Union," *Public Administration* 97 (Winter 1998): 604-8; Michael Mulqueen, *Re-evaluating Irish national security: affordable threats?* (Manchester: Manchester University Press, 2009).

9 Independent Commission on Policing for Northern Ireland, *A New Beginning: Policing in Northern Ireland* (Belfast: Independent Commission on Policing for Northern Ireland, 1999); John Topping, "Beyond the Patten Report" (PhD diss., Ulster University, 2009), 22.

the police service.[10] It opened the prospect of community leaders attending police training courses in neighbourhood policing problem-solving techniques.[11] Yet this moment of ostensibly momentous change cautiously maintained the safe pathway of policing being the sole job of the police service, albeit with scope for partners and community leaders to share some responsibilities and conduct oversight. Policing "done with" only went as far as those with sufficient power and ability to access the structures for policing design and oversight. The Patten commission did not appear to foresee police, partners and the public – especially policing's most frequent users, including vulnerable and marginalised people – working together as equals to jointly design, deliver and oversee policing. Translation of report into legislation through political process saw further weakening of possibilities. Indeed, it was "undermined everywhere…the Patten Report had not been cherry-picked, it had been gutted…"[12] In this regard, it has been argued that the post-Patten era has been concerned primarily with the superficial correction of police-community relations.[13] This is not to deny meaningful changes in policing in Northern Ireland since the end of the Troubles, including embedding police in a human rights framework and devolution of policing powers to the local assembly government.[14] However, the Patten Report's conceptualisation of procedural justice was structural: designed into the process of change is prescription solely by powerful elites of the change required. In such a context, overall public confidence in the Police Service of Northern Ireland remains good (86% in 2020/1) but a minority (42%) believe that the police and other agencies "seek people's views about the anti-social behaviour (ASB) and crime issues that matter."[15] The police representative body, the Police Federation for Northern Ireland, campaigns vociferously on issues

10 Independent Commission, Recommendation 44, para. 7.9.

11 Independent Commission, Recommendation 51, para. 7.17.

12 Topping, *"Patten Report,"* 23.

13 Topping, "*Patten Report*," 17.

14 Michele Lamb, "A Culture of Human Rights: Transforming Policing in Northern Ireland," *Policing: A Journal of Policy and Practice* 2, no. 3 (2008): 386-93.

15 K. Ross and A. Gilligan, *Findings from the 2020/21 Northern Ireland Safe Community Telephone Survey* (Belfast: Department of Justice, March 2022), 14, 17.

including "a mental health crisis in policing" and officers feeling undervalued.[16] Whither meaning?

The PSNI example is but one. Arguably, retaining structure at its centre raises questions as to whether it is possible to comprehensively achieve urgent foundational reform of policing as recommended by, among others, the Casey Review of London's Metropolitan Police and articulated at ground/street levels in the transnational Black Lives Matter movement.[17] This study emerges partly out of concern regarding the repetition of such structuralism and its chilling effect upon meaningful lives in policing. It focuses away from internal reform of structure, workforce, process, culture and so on and towards the journey policing personnel must make to recover or recognise meaning in their lives. In this regard, Parrott refers to a "paralysing roadblock" for the individual's journey arising from being locked into "shame" about what they did or did not do or can or cannot do. Something both outside and internal to the individual is needed for them to navigate the complexities and problems hindering meaningful lives.[18]

In this context, the chapter develops a case for procedural justice infused in practice by what is termed *Inochi*.[19] It argues that from conscious self-awareness of *Inochi* flows a coherent way through to practicing procedural justice whereby the police service is but one of many actors in policing and equal to all. Beyond organisational plurality, *Inochi* is a meaningful way of living that seems akin to

16 Police Federation of Northern Ireland, "Mark Lindsay set to retire as Chair of PFNI," Police Federation of Northern Ireland press release, accessed March 27, 2023, https://www.policefed-ni.org.uk/media-centre/2022/february/mark-lindsay-set-to-retire-as-chair-of-pfni.

17 "About," Black Lives Matter, accessed March 27, 2023, https://blacklivesmatter.com/about; Baroness Casey of Blackstock, *An independent review into the standards of behaviour and internal culture of the Metropolitan Police Service: Final Report*, March 2023, https://www.met.police.uk/SysSiteAssets/media/downloads/met/about-us/baroness-casey-review/update-march-2023/baroness-casey-review-march-2023.pdf.

18 Shannon Parrott, "Cause me to Understand Your Ways, O Lord: A Journey through Psalm 25," *Search: A Journal of the Church of Ireland* 46, no. 1 (Spring 2023): 23.

19 Ueda Shizuteru, Victor Forte, and Michiaki Nakano, "Inochi: Three Japanese Concepts of Life," *The Eastern Buddhist*, 45, no. 1 and 2 (2014): 253-74; Hase Shōtō and Michael Conway, "Faith and Inochi as Infinite Life," *The Eastern Buddhist* 45, no. 1 and 2 (2014): 275–98, http://www.jstor.org/stable/26261420; Masahira Marioka, "The Concept of 'Inochi': A Philosophical Perspective on the Study of Life." *Japan Review* 2 (1991): 83–115, http://www.jstor.org/stable/25790898.

what Thomas Merton calls "nothingness" – inner calmness and strength found in, and so welcoming of, simplicity by the loss of power.[20] What follows, in that context, is an attempt to set out an approach that normatively espouses the urgent need for deep and sustained oneness to characterise the future of policing. It is radical in the sense that deep oneness underpinning policing's quest for meaning through procedural justice is considered outside of what the philosopher John Moriarty describes as "the gable end walls" of who we sociologically are.[21] How meaning may be derived in procedural justice is, thus, examined through lenses informed by traditions of Eastern as well as Western mystical thought, and, so, arguably beyond the boundaries of scientific method as it might otherwise be applied to questions of how we know or understand life. Perhaps something of the direction of enquiry is captured in reflections of former *Financial Times* columnist Lucy Kellaway. Upon retraining as a teacher and moving to work at a deprived northeast England school, Kellaway reported listening in disbelief on being informed by her employer that her job was "to love all our students – especially the ones who are hardest to love."[22]

> This emphasis on love seems to me oddly profound, because from it everything else flows. If you force yourself to care deeply for every one of your students, you work harder for them, you want the best for them. All the other stuff I learnt in teacher training after leaving my job as a columnist in the *Financial Times* – differentiation and assessment for learning – seems a bit by the by.[23]

Kellaway's realisation, achieved, according to her narrative, through opening out to love as a professional motivation, concerns her place in equality with all. She does not abandon the role of teacher, with its power over others, but teaches by cherishing even the most difficult to encounter pupil and gaining "oddly

20 Thomas Merton, *Conjectures of a Guilty Bystander* (New York: Image Books, 1968), 158.

21 John Moriarty, "Interview with John Moriarty," interview by Andy O'Mahony, *Dialogue*, RTÉ Radio 1, Dublin, 1997, https://www.youtube.com/watch?v=CmB-G-16qNQ, accessed March 27, 2023.

22 Andrew Brown, "*Guardian* lauds archbishops past and present," *Church Times*, January 6, 2023: 23.

23 Brown, "*Guardian* lauds archbishops," 23.

profound" wisdom from so doing.[24] In this context, it is worth noting Frankl's doctrine of Logotherapy to discern meaning in life and, therein, how he contends that "Love is the only way to grasp another human being in the innermost core of their personality. No one can become fully aware of the very essence of another human being unless he loves him."[25] Understanding the very essence of another human being is, surely, foundational to the quest for fair and proportionate criminal justice outcomes as well as personal meaning.

In its focus on oneness and, therefrom, equality, this chapter could instead confine itself within a Frankfurt School critical studies perspective, holding in perpetual suspicion police exercises of power over others as exclusionary, totalitarian and even violent.[26] However, the chapter seeks a way to mitigate the risk arising from perpetual suspicion of othering those in authority: such othering may well be at odds with achieving the buy-in of powerful actors to radical diminution of their own power. Moreover, it may manifest as a form of coercive, exclusionary power as and of itself. Especially egregious, in the context of this chapter, would be othering that glossed over policing personnel being motivated to serve through a social justice lens and, indeed, who might continue to serve as such despite suffering personal as well as professional harm and injury. Somewhat softer and more inclusive boundaries may, thus, yield utility to – and, indeed, imbue greater fairness in – scholarship. This is not to argue against the need for effective mechanisms of containment (e.g., defunding), transparency and accountability over structures of policing, education or other endeavours characterised by unequal power relationships. Nor is it to dispense with rigorous questions that might be posed from an emancipatory critical studies lens, such as "whose policing is it?" and "in whose interests is policing being done?" and "by what speech act is policing being legitimised"? Instead, below, the chapter will suggest as essential a practice of radical inclusivity, echoing, perhaps, something of Habermasian discourse ethics.[27] The chapter

24 Brown, "*Guardian* lauds archbishops," 23.

25 Viktor Frankl, *Man's Search for Meaning* (New York: Penguin Random House, 2013), 148, Kindle.

26 João Nunes, "Reclaiming the political: Emancipation and critique in security studies," *Security Dialogue* 43, no. 4 (2012): 345.

27 Suzanne Metselaar and Guy Widdershoven, "Discourse Ethics," in *Encyclopedia of Global Bioethics*, ed. Henk ten Have (Cham: Springer, 2022): 895-902, https://doi.org/10.1007/978-3-319-09483-0_145.

does so with reference to resources including transcendent ones that seek to diminish othering by cherishing.

INOCHI AS A WAY THROUGH TO MEANING

Sometimes referred to as "the founder of modern policing," British politician Sir Robert Peel famously stated that "the police are the public and the public are the police."[28] Peel's aspiration that policing should, in standards and practice, mirror if not exceed public expectations appears in a contemporary context to be but partially fulfilled. Over the last fifty years, public, political and judicial dismay at a series of crises besetting policing has led policymakers in multiple jurisdictions to invest in significant efforts to position the practices of policing within carefully assembled ethical codes and human rights principles.[29] Yet appalling scandals involving errant police officers, up to and including offences of rape and murder, continue to engulf policing.[30] Findings of institutionalised racism, sexism and homophobia pose fundamental questions about policing's capacity to reform.[31] The collapsing credibility of policing in the second decade of the twenty-first century, articulated in, for example, "defund the police" movements, is a narrative that has been familiar to many states.[32] Initiatives to foster – often through police training and education – values including integrity and trustworthiness, ethics and human rights in response to scandal, seem, ostensibly, aligned to procedural justice's onus upon policing "done with" communities.[33] Arguably, the act of incubating reformed culture and values acknowledges, if nothing else, both a yearning and need for

28 The Police Federation of England and Wales, *Your police service: putting the public first* (Leatherhead: Police Federation, undated), accessed 28 March 2023, https://www.polfed.org/media/13687/putting_the_public_first.pdf.

29 Peter Neyroud et al., *Policing, Ethics and Human Rights* (London and New York: Routledge, 2001).

30 Casey, *Independent Review.*

31 Casey, *Independent Review.*

32 Jennifer E. Cobina-Dungy and Delores Jones-Brown, "Too much policing: Why calls are made to defund the police," *Crime and Punishment* 25, no. 1 (October 2021): 10.

33 Tara M. Kane, "The Pursuit of Procedural Justice and Police Legitimacy: A Case Study of Community Police Officers' Perceptions of the Perceived Benefits of Higher Education" (PhD diss., Eastern Michigan University, 2020), 1-2, 8.

police to embed its efficacy in moral purpose. Yet the crises continue, public perceptions of policing legitimacy are weakening and so too is police morale.[34] Deepening divisions seem to characterise what it means to be police and policed.

It is posited that what remains elusive – despite manifold efforts to develop police behaviours that imbue policing with a meaning that is ethical and trustworthy as well as effective – becomes apparent when *Inochi* is allowed into conscious consideration. As noted earlier, when translated into English, *Inochi* means life.[35] But in Japanese, we find three words for life, each distinctive in meaning.[36] If transposed into an academic context, the first word, *Sei*, refers to the study of the philosophy of living. *Seimei*, which is the second, is life as studied in the natural sciences – so medicine, molecular biology, genetic engineering and the like.[37] Scholarship of *Inochi*, the third word, posits it as both intuitive and crucial. Scholars hold that it cannot be systematised into a field of study.[38] Rather, it is in encounter with literature, arts, and religion that our self-consciousness of *Inochi* is accomplished.[39] Without *Inochi*, life within the contexts of the more sociological and scientifically concrete works of *Sei* and *Seimei* are missing an essential third dimension.

At the root of *Inochi* is humility and selflessness.[40] As with Abrahamic theologies, much symbolism and metaphor are involved. Japanese meditative tradition critiques how humans seek to stand tall in the world.[41] Similarly, the biblical Adam and Eve allegory suggests how, since earliest times, the human way, sociologically, is to seek to dominate, to be constrained by rules or laws, and to impose consequences when rules are broken.[42] In domination is implied

34 Casey, *Independent Review*; Police Federation, "Pay and morale survey."

35 Shizuteru, Forte, and Nakano, "*Inochi*"; Shōtō and Conway. "Faith and Inochi"; Masahiro, "The Concept of 'Inochi'."

36 Shizuteru, Forte, and Nakano, "Inochi," 265.

37 Shizuteru, Forte, and Nakano, "Inochi," 265-66.

38 Shizuteru, Forte, and Nakano, "Inochi," 268.

39 Shizuteru, Forte, and Nakano, "Inochi," 268.

40 Shōtō and Conway. "Faith and Inochi," 279-83.

41 Shizuteru, Forte, and Nakano, "Inochi," 261.

42 Genesis 2 (NIV).

an order of structure over agent. In contrast, the *Inochi*-inspired (in)action of consciously sitting in quiet stillness is instructive. Figuratively and actually this meditative disposition brings its participants to ground level where their poise embodies equality with nature and with all living things.[43] A narrative to illuminate the value of *Inochi* in how lives are lived is as follows:[44] we live life contained within the boundaries of *Sei* and *Seimei*. So, we may be living. But are we really living? We are alive and dominating, but we are destroying the planet that sustains life. We have technology but our time for aliveness is smothered in our addiction to our devices. We aim to change the world, but we run headlong into the complex traffic rules of unfair society. We are, as such, set up to have the meaning of conscious oneness with all things drained from our lives, despite our best intentions.[45]

Moriarty's gable end walls image captures this well.[46] It implies that we play out much of our existence within the fixed constraints of who we sociologically are, or acceptably can or desire to be.[47] While we do, our world becomes scarred by our human intention and purpose.[48] We become diminished not just environmentally, as the language may, at first glance, suggest, but in what we can see of the *veritatis splendor*, or truth of the splendour of life.[49] According to Moriarty, we must be transformed into our fullness or we are nothing more than an existential virus to the earth.[50] There is no meaning to us or for us. Correspondingly, *Inochi* upturns what seems the logical inclination to measure success in life in terms of career, material ownership and so on. Life lived conscious of *Inochi* is life patiently accepting the certainty of death.[51] Death, the

43 Shizuteru, Forte, and Nakano, "Inochi," 261.

44 Masahiro, "The Concept of 'Inochi'," 30-42 provides excellent data on public understandings of *Inochi*.

45 I owe this insight to a conversation with Professor Takuo Dome, Meta-Science Society, September 2, 2022, Zoom.

46 Moriarty, interview with Andy O'Mahony (see FN 22).

47 John Moriarty, interview with Tommy Tiernan, *OK Baby DVD*, 2000, ASIN: B00122VFNQ.

48 John Moriarty, interview with Tommy Tiernan.

49 Moriarty, interview with Andy O'Mahony, 20:39.

50 Moriarty, interview with Andy O'Mahony, 23:47.

51 Shizuteru, Forte, and Nakano, "Inochi," 267-9.

great leveller, denotes equality and, by resting in this certainty, we can practice easy joy and selfless giving. No value can be found for dominance of one over the other. Exercising power for power's sake is a disturbance to peaceful, patient, level coexistence. The Franciscan philosopher Richard Rohr is, arguably, in similar territory with what he calls "Falling Upward."[52] To Rohr, our careers, ambitions and noble aspirations to change the world are, when we fail to fulfil them, waypoints to divine wisdom. To fall deeper into failure is to fall "upward" to ever closer proximity to where God is to be found. Jesus executed so that religious leaders could reinforce their standing by casting his life as one of abject failure, is both a moment of powerlessness *in extremis* and one in which the utter meaninglessness of worldly power is exposed. Wisdom is in accepting that in our nothingness we are not freed from suffering but can escape meaninglessness to practice love, mercy and oneness with all.[53]

If *Inochi* cannot be studied and the Christian God is cast as unfathomable love and mercy, then at play, it seems, is the committal of an act of faith which is, as such, distinguishable from norms of scientific enquiry. Consequently, while *Inochi*, *Sei* and *Seimei* are relational they are also distinctive because the carefully limited boundaries of the scientific latter cannot fully capture the limitless possibilities of the faith-based former. Some may see in traditional linear mathematics, with its polarities, its beginnings and ends, similarities with *Sei* and *Seimei* but perceive *Inochi* in quantum physics, whereby polarities are found here and there all at once. There is perhaps some ideational similarity with the Christian belief of a God who is one in three and three in one, Father, Son and Holy Spirit.[54] Such a scheme may suggest that we cannot think of another or indeed engage in othering anything or anyone and at the same time grasp fullness of meaning (even if the gendered Christian language is, in itself, an othering). In such a construct, the polarities of structure and agent emerge as incomplete and even inadequate to the possibilities suggested by remaining distinct yet continuously intermingling.

52 Richard Rohr, *Falling Upward: A Spirituality for the Two Halves of Life* (San Francisco: Jossey-Bass, 2011).

53 Rohr, *Falling Upward.*

54 1 John 5:7–8 (NIV).

PROCEDURAL JUSTICE AND *INOCHI*

Having considered how consciousness of *Inochi* may ease a way through to oneness in living, it seems both appropriate and intriguing to move into further reflection upon what conscious awareness of *Inochi* implies for the power structures of policing and, therefrom, meaning to policing personnel. Having noted, earlier, death as the great leveller, it is worthwhile to point out how in police practice, professional encounter with death or injury can be both a moment to exercise lawful powers but also a reminder that powers, however draconian, cannot undo the fate awaiting us all. So, what has policing done since Peelian times? Arguably it has, from an *Inochi* perspective, stood tall, putting itself above others. In being the controller distinct from the controlled, it upholds a linear and even polarised order. It is neither quantum nor relational. Ever practicing othering, ever sticking to process, it risks squeezing out the spaces in which *Inochi* can be encountered. And so, it may be posited that policing's people find themselves sociologically hemmed within, as it were, gable end walls where a thirst for meaning grows.

Again seemingly prescient is the parallel drawn, above, with institutional scholarship, which posits the stickiness of structural power.[55] Such stickiness, or reluctance to cede power for reasons including the capacity to remain safe, relevant and to control policy, finance, budget and employment, can render anaemic the hoped-for fullness of agency-structure interplay.[56] Policing's institutional resistance to change – what in the language of *Inochi* may be termed its insistence upon "tallness" as a power-holder over its communities – can be examined through the development of procedural justice approaches, now discussed. Such scholarship, in the main, makes interests-based cases as to beneficial impacts for policing and public arising from a procedurally just focus upon improved interaction. Donner, Maskaly, Fidell and Jennings draw upon forty-six studies to derive a twofold conclusion: firstly, organisational attention to becoming procedurally just in how it delivers its services beneficially impacts upon employee perceptions of the organisation and the value they derive from their own role in it. Correspondingly, service users – the public – report greater trust, confidence and satisfaction with policing and, thus, more

55 Mulqueen, *Re-evaluating Irish national security.*

56 Mulqueen, *Re-evaluating Irish national security.*

solidly view the police service as legitimate.[57] Bottoms and Tankebe connect legitimacy of power to the ability of police "to reflect agreed values, norms and beliefs with wider society, attained through dialogue.[58] Assumed, however, is power resting with "power-holders" even if legitimacy is conceptualised as interactive, involving "both power-holders and audiences."[59] Similarly, Tyler, writing some 17 years after his influential early work on procedural justice, contends that consensual models – such as procedural justice – motivate public cooperation in fighting crime and heighten police identification with and engagement in communities.[60] However, he also continues to conceptualise in terms of policing being the task of a structure – primarily the police service – and, thus, reform being about change within that structure so that the police organisation can better operate as principle service provider.[61] "It is likely that (*a*) the practices of the police can be crafted to raise perceptions of procedural justice, (*b*) police training can alter officer behavior, and (*c*) redesigning police organizations internally can motivate their members to treat community members more fairly."[62] Evidently structuralism retains much currency in such problem-solving scholarship. Love, even as mediated within professionally structured channels, is seemingly not considered. But as to procedural justice's efficacy, Tagin and Cody, importantly, distinguish between perception and actual change in how procedurally just practice impacts upon communities and police.[63] On the one hand, public perceptions of procedurally just policing link to perceptions of policing legitimacy. However, yet to be established is whether actual change towards procedurally just police treatment of people leads to

57 Christopher Donner et al., "Policing and procedural justice: A state-of-the-art review," *Policing* 38, no. 1 (2015): 153–172, https://doi.org/10.1108/PIJPSM-12-2014-0129.

58 Anthony Bottoms and Justice Tankebe, "Beyond procedural justice: A dialogic approach to legitimacy in criminal justice," *Journal of Criminal Law and Criminology* 102, no. 1 (2012): 119–170.

59 Bottoms and Tankebe, "Beyond procedural justice," 119.

60 Tom Tyler, "Procedural justice and policing: A rush to judgment?" *Annual Review of Law and Social Science* 13 (2017): 29–35, DOI: 10.1146/annurev-lawsocsci-110316-113318.

61 Tyler, "Procedural justice," 29.

62 Tyler, "Procedural justice," 29.

63 Daniel Negin and Cody Telep, "Procedural justice and legal compliance," *Annual Review of Law and Social Science* 13 (2017): 5–28, https://doi.org/10.1146/annurev-lawsocsci-110316-113318.

changes in legal compliance and perceived legitimacy.[64] Flowing from such uncertainty is the intriguing question of what will motivate police to "do the right thing" and turn their practice towards procedural justice, when moving beyond words into action may prove unrewarding in terms of stimulating a more law-abiding, trusting and satisfied community? Indeed, such behaviour might well run contrary to the organisation's resistance to change, where such resistance is emboldened by institutionalised uncertainty concerning the rewards of ceding power. As such, a deeply sedimented barrier to a less powerful police organisation working in equality with all is a ready possibility.

INOCHI AS NECESSITY?

The chapter is rooted in addressing an apparent absence of meaning besetting policing and, therein, the challenge of recognising or recovering meaning. Advocated here, in the context of *Inochi*, is policing done in equality and a profound sense of oneness with each other and all things. Thus, it is, arguably, reflective of a crisis of meaning being painted on a canvas much wider than policing. It is a crisis characterised by seemingly accelerating decay in the standing and credibility among the public of democratic institutions, public bodies and settled forms of governance associated with them.[65] Arguably, hyper-mediated, post-economic crash, post-Covid 19 societies are less likely to accept themselves as being reflected in, and represented by, "partnership" modes of public governance, such as those familiar in much contemporary policing. Such partnerships often comprise an elite of public service providers (e.g., police), governmental bodies and well-established NGOs. Rappaport, in a powerful critique of efforts to "democratize" policing through partnership, warns how such structures favour those with the "time and wherewithal to participate, and the human capital to dominate."[66] Noteworthy here is Landemore's "rule of the many" thesis urging towards norms of seeking shared perspectives and

64 Negin and Telep, "Procedural justice and legal compliance," 5.

65 William A. Galston, "The Enduring Vulnerability of Liberal Democracy," *Journal of Democracy* 31, no. 3 (July 2020): 8.

66 John Rappaport, "Some Doubts About 'Democratizing' Criminal Justice," *The University of Chicago Law Review* 87, no. 3 (May 2020): 750.

community self-rule so as to legitimise public life.[67] So too are practical responses in the form of, for example, powerful institutions dispersing research funding, to spark radical modelling of inclusive democracy.[68] Common to all appears to be interest in service providers and service recipients embracing each other's wisdom, leading, perhaps, to co-design, co-creation, co-implementation and co-accountability.

Partnership policing's traditional authority and standing is, thus, arguably, being outmanoeuvred. So too the traditional social contract between policing and the policed whereby the trade-off in provision by the police of the public's safety is the public's tolerant eschewing of freedom.[69] It may follow in terms of meaning to their policing lives that policing personnel are being marooned in structures in which their decisions are at increasing risk of failure to impact, because they are losing the traction of credibility. In this context, how procedural justice is designed, built and practiced seems crucial. Growing public distance from traditional structures would appear to suggest the urgency of innovating procedural approaches that provide equality of opportunity to/with those who are losing or have lost trust in police and who see its legitimacy in diminished terms.

Stakeholding in such innovation, therefore, moves from the neat elite binary of police and partners working tightly together to a messier, less predictable placing on an entirely equal footing of the police, partners and the public. Such a mutual embrace of each other's wisdom, value, role and responsibilities in the policing endeavour denotes a direction of travel along which the police service is but one of multiple actors actively intermingling to discern the style, pace and scale of policing a community desires and accepts. Intrinsic is a move towards recovering and amplifying voices drowned out or silenced by the dominant players party to, or influencing, the partnership model, despite its strengths. An

67 Hélène Landemore, *Democratic Reason: Politics, collective intelligence and the rule of the many* (Princeton: Princeton University Press, 2012).

68 "Cluster 2: Culture, Creativity and Inclusive Society," European Commission, accessed March 29, 2023, https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-2-culture-creativity-and-inclusive-society_en.

69 Gonzalo Herranz de Rafael and Juan S. Fernández-Prados, "The Security Versus Freedom Dilemma. An Empirical Study of the Spanish Case," *Frontiers in Sociology* 7 (2022): 774485–774485, https://doi.org/10.3389/fsoc.2022.774485.

obvious corollary would be, as noted above, policing and partners working in oneness with, and treating as their equal decision makers, policing's most vulnerable, marginalised and frequent service users. In this setting is achieved, perhaps, not only a shared meaning to policing as it is practiced but, arguably, meaning shared among all of policing's practitioners.

Remaining at issue, of course, are moments of threat, risk and harm when the deployment of specialist functions of skilled police service personnel is proportionate to the prevailing insecurity and danger. These are moments when, perhaps, meaning to policing is clearest of all. However, they are also moments when police engagement may turn to rigidly enforced, top-down police instruction with little by way of room for individual agency. A police service taking decisions for the public may be entirely reasonable, at the higher end of risk, in cases where criminal behaviour or immediate threat to life or of serious injury is self-evident. But across a much wider plain matters are less clear-cut. Police routinely justify decisions made within a police-recognised framework of what is "objectively" proportionate, lawful, accountable, necessary and ethical (PLANE).[70] Multiple policing thinking tools are in play to support the goal of "fact"-based decisions. (In the UK the principal tool to discern PLANE is the National Decision Model (NDM)).[71] Critical policing research, being normatively concerned with police structural power replicating structure by excluding individual agency might ask: whose proportionality? Whose accountability? Whose necessity and in whose interests?[72] The answers depend on from where one sees the question. Critics may argue that the police service not only justifies but replicates its power by routinely reserving onto itself the ability to elevate its subjective claims for its decisions and actions to the status of objective fact and knowledge. The accused or a bystander may, from a different perspective, see what the police claim to be unbiased fact/knowledge as but one of several competing, subjective understandings of what has occurred. In such circumstances, where we stand on knowledge versus understanding may determine whether positive engagement between police

70 The College of Policing, *Code of Ethics: A Code of Practice for the Principles and Standards of Professional Behaviour for the Policing Profession of England and Wales* (Ryton-on-Dunsmore: The College of Policing, 2014), 4.

71 The College of Policing, *Code of Ethics*, 17-8.

72 Michelle D. Bonner, "Reclaiming citizenship from policing violence," *Citizenship Studies* 25, no. 3 (2021): 318, https://doi.org/10.1080/13621025.2021.1903396.

service and policed can proceed. One side – the police service – dominating the other on the strength of "objective" truth claims runs contrary to trust-building engagement among equals. As such, the bedrock of trust for policing by consent and cooperation is weak or absent. It would seem, therefore, that to the greatest degree feasible, the police service and all stakeholders must arrive at decisions and take action on the basis of competing understandings, fully accounting for the subjectivities of each actor. This approach would designate the police service as, again, holding but one subjective perspective to navigating in oneness with all a world of immense complexity. Future policing emerges as an endeavour that will necessitate multiple stakeholders, including the police service, all on equal standing. Even when the particulars of criminality or risk denote the job as one for a police service holding specialist skills and training, other particulars may be understood as requiring design with the community of an alternative community-based resolution and implementation. The working assumption is that room for a wider range of understandings giving rise to a wider range of engagements – perhaps visibly involving the police service but perhaps not – is likely to optimise conditions for procedurally fair outcomes.

THE PRACTICE OF BUILDING TOWARDS *INOCHI* IN POLICING

Inochi, rooted as it is in profound oneness among all, suggests an elegant and attractive philosophy on which to build policing in a time defined by revelation of ugly, institutionalised malpractice on the part of its practitioners. *Inochi* corresponds with, the chapter argues, a wider unsettlement of belief in and acceptance of the legitimacy of traditional institutions of government, state and democracy. It presents a compelling and unifying challenge: if policing is to be equal, it needs to cherish all, even the most difficult to cherish. In turn, even the least cherished must be supported in cherishing policing. As per Kellaway's reflection on love in teaching, love in policing may be no less a profound underpinning for all outputs and outcomes, especially if extended when those who have broken the law, in turn, experience rigorous learning in a restorative system.[73] But what, in practical ways, may be the steps to such a model? Stimulating an environment for oneness giving rise to equality in policing – a sitting posture that eschews institutional tallness – suggests, as articulated

73 Brown, "*Guardian* lauds archbishops," 23.

earlier, an environment in which police services are but one actor in a multi-actor policing endeavour, with each contributing skills and perspectives to the wider whole. The cast of actors, as noted above, would move beyond the current elitism associated with partnership policing to include the wider public and, notably, policing's most frequent service users – vulnerable and marginalised people, including, where it is considered safe practice, those with perpetrating histories.[74] Flowing from the goal of equality of standing among police service, partners and public would be policing that would be co-designed, co-implemented and co-evaluated.

Clearly, novel approaches would be required to support the police service workforce, partners and users, especially those with least heard voices heretofore, to face each other equally in loving oneness and, then, to radically reimagine and practice the collaborative effort, risk and reward that policing would become. This *Inochi*-infused renaissance would need to operate at all policing levels – policy, strategy, operations and tactics – while being highly adaptive to complex community as well as post-conflict and other settings of acute humanitarian vulnerability. To go beyond deeply sedimented societal views of what a police service "is," "looks like" or "comprises," powerful cultural and creative tools would need to provoke, disarm, unify and crystalise new routes of thinking. The specifics of such measures and their scope, in terms of mixing wholly new innovation with techniques already proven as powerful but used here in an entirely new context – policing – is beyond the remit of this chapter. But perhaps feasible in terms of initially breaking down barriers between previously distanced groupings would be such techniques as body movement in dance,[75] ethnomediaology (i.e., immersive storytelling through, for instance, filmmaking),[76] or a "citizens social science approach" to socially just outcomes.[77] Effectiveness of these tools would be measurable in how they

74 Rappaport, "Some Doubts."

75 Lucy Nicholson, "Return To The Body: An approach to working with those in disconnect," accessed March 28, 2023, http://dancercitizen.org/issue-8/lucy-nicholson.

76 Storylab, "Welcome to Storylab," accessed 28 March 2023, https://www.storylabonetwork.com.

77 Suzanne Wilson, "'Hard to reach' parents but not hard to research: a critical reflection of gatekeeper positionality using a community-based methodology," *International Journal of Research & Method in Education* 43, no. 5: 461-77.

reinforced existing equality initiatives[78] and sustained open, fully participative dialogue between unfamiliar and distrustful partners to the ends of restoring confidence, legitimacy, efficacy and, indeed, meaning to policing. Supporting stakeholders to recover and amplify unheard voices, negotiate changes, recognise safe choices, and to jointly participate in the policing of their communities in previously unimagined ways, would likely involve creation of educational content and delivery tools. Support might also, if considered appropriate, include mental and spiritual resources. Accountable and value-conscious modernisation would, inevitably, require foresight methods to ensure the short-, medium-, and long-term cost control and impact. Police leaders and external expertise (e.g., academics) would not prescribe outcomes but create an environment in which solutions could be co-conceived, co-designed and co-implemented. Familiar role expectations of senior players in a fixed policing hierarchy exercising power to prescribe solutions would, thus, ease.

INOCHI AND POLICING: THE RISK OF FAITH-BASED CERTAINTY

The case for *Inochi* as a philosophy and experience to move policing from structural othering towards oneness with and, thus, equality of all is developed here in a narrative that also deploys, notably, Abhramic theological resources. Doing so in this way is intended to highlight resonance with other belief systems emanating from the *Inochi*-inspired wisdom of police services letting go of their powerful "tallness" and positioning themselves as but one actor equal to the most vulnerable. However, recent scholarship connects use of faith-based resources with serious, indeed, deadly risk from policing. Griffith notes a concerning trajectory emerging from the growing influence in policing of Evangelical Christianity associated with practices of selective biblical literalism.[79] US Evangelical leaders cite scripture to champion anti-police reform

78 Cachella Smith, "MOPAC continues funding to involve communities in recruit training," *Police Oracle*, March 30, 2023, http://www.policeoracle.com/news/race_and_diversity/2023/Mar/30/MOPAC-continues-funding-to-involve-communities-in-recruit-training_110786.html.

79 Aaron Griffith, "'Policing Is a Profession of the Heart': Evangelicalism and Modern American Policing," *Religions* 12, no. 3 (2021): 194-212, https://doi.org/10.3390/rel12030194.

narratives such as "defend, don't defund" the police.[80] Nation and God are cast as one when condemning as ungodly protests against policing excess.[81] In such a charged environment, various scriptural passages are used within policing to justify police action as God's will. One such is St Paul's exhortation: "Let everyone be subject to the governing authorities."[82] Such self-reinforcement in exegesis has apparent consequences. One memorable example is the police officer who, at a US Christian police retreat, recalls shooting dead a drug dealer: "By the grace of God he missed. By the wrath of God, I didn't."[83] Such knowing certainty about the Christian God's policing purpose may well be juxtaposed with the doctrine of faith in an unseen God offering unknowable depths of love and mercy.[84] Consequently, structure confident in its "objective knowledge" self-assuredly and sometimes lethally surpasses the necessity for oneness with all. Urgently awaiting its researcher is how and to what degree such narratives are heard in policing in jurisdictions other than in the US, such as that of the UK, in which populist right-wing politics and evangelical Christian police associations are, at the time of writing, prominent.

CONCLUSION

What commenced with the conundrum of how to address a loss of meaning among police personnel concerning their professional lives concludes by noting how the suggested route to meaning recovery – procedural justice practiced in consciousness of *Inochi* – may well stir wider public transformation too. The state of being at oneness with each living thing and, so, conditioned to eschew power over others, points, inevitably, at social endeavour done equally and as one. In policing terms, this shifts the meaning of policing from coercive power enforced by structure to public, partners and police co-designing, co-implementing and co-overseeing the service they want, so as to achieve agreed ends. In this context, the police service, as primary law enforcer, moves

80 Griffith, "Policing is a Profession," 204.

81 Mia Bloom and Rachael Rollings, "Losing My Religion: Evangelicalism and the Gospel of Q," *Religion watch* 38, no. 1 (2023).

82 Romans 13 (NIV).

83 Griffith, "Policing is a Profession," 207.

84 Rohr, *Falling Upward.*

from its posture of "holding power over" to "sharing power with." One actor works among multiple actors in the policing arena, albeit one that is a repository of specialist skills and resources. Consequently, policing may become more reflective of a society in which, currently, sentiment towards policing and other democratic institutions is hardening. Suggested here is that such mirroring would manifest in the police gaining legitimacy, confidence and trust in policing and in a concomitant recovery of meaning among policing's personnel. It is a remedy promising much hope but requiring fieldwork evaluation. Empirical analysis in various policing contexts is, thus, called for.

Conceptually, it breaks new ground to contend, as this chapter does, that procedural justice can be reimagined as an agent-centred, normative approach to the recovery of professional meaning among police personnel. Most novel is how this re-imagining is achieved through conscious awareness of the Eastern tradition of *Inochi* and, so too, other transcendent resources that resemble it. Not least of the counter-intuitive outflows of recasting procedural justice in this way is, Frankl-like, considering the potency of love as a professional quality in policing reform.[85] However, whereas the chapter is encouraging of the benefits faith-based transcendent perspectives may have for analysis, it also suggests significant risks. Religious certainty, as the antithesis of faith, may prompt egregious excess in the use or promotion of structural power. Such dangerous reductionism seems oblivious to the intermingling of agency and structure and, with it, total oneness and equality conceivable in the context of *Inochi*. Indeed, *Inochi* consciousness appears to both render meaningless police engaging in acts of gaining power and, by the conscious cherishing of vulnerable and marginalised people, to provide to policing's people a pathway to meaning in their practice.

BIBLIOGRAPHY

Black Lives Matter. "About." Accessed March 27, 2023. https://blacklivesmatter.com/about.

Bloom, Mia, and Rachael Rollings. "Losing My Religion: Evangelicalism and the Gospel of Q." *Religion watch* 38, no. 1 (2023).

Bonner, Michelle D. "Reclaiming citizenship from policing violence." *Citizenship Studies* 25, no. 3 (2021): 317-32. https://doi.org/10.1080/13621025.2021.1903396.

85 Frankl, *Man's search*, 148.

Bottoms, Anthony, and Justice Tankebe. "Beyond procedural justice: A dialogic approach to legitimacy in criminal justice." *Journal of Criminal Law and Criminology* 102, no. 1 (2012): 119–170.

Brown, Andrew. "*Guardian* lauds archbishops past and present." *Church Times*, January 6, 2023. https://www.churchtimes.co.uk/articles/2023/6-january/comment/columnists/press-guardian-lauds-archbishops-past-and-present.

Bulmer, Simon and Martin Burch. "Organizing for Europe: Whitehall, the British State and the European Union." *Public Administration* 97 (Winter 1998): 601-28.

Casey, Baroness of Blackstock. *An independent review into the standards of behaviour and internal culture of the Metropolitan Police Service: Final Report*. March 2023. https://www.met.police.uk/SysSiteAssets/media/downloads/met/about-us/baroness-casey-review/update-march-2023/baroness-casey-review-march-2023a.pdf.

Chapman, Bonaventure. "St. Thomas and the Common Good." *Dominicana*, November 10, 2014. https://www.dominicanajournal.org/st-thomas-and-the-common-good.

Cobina-Dungy, Jennifer E., and Delores Jones-Brown. "Too much policing: Why calls are made to defund the police." *Crime and Punishment* 25, no. 1 (October 2021): 3-20.

College of Policing, The. *Code of Ethics: A Code of Practice for the Principles and Standards of Professional Behaviour for the Policing Profession of England and Wales.* Ryton-on-Dunsmore: The College of Policing, 2014.

College of Policing, The. "Police training to change for all new officers to fight crime." College of Policing press release. Accessed March 27, 2023. https://www.college.police.uk/article/police-training-change-all-new-officers-fight-crime.

Donner, Christopher, Jon Maskaly, Lorie Fridell, and Wesley G. Jennings. "Policing and procedural justice: A state-of-the-art review." *Policing* 38, no. 1 (2015): 153–172. https://doi.org/10.1108/PIJPSM-12-2014-0129.

European Commission. "Cluster 2: Culture, Creativity and Inclusive Society." Accessed March 29, 2023. https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-2-culture-creativity-and-inclusive-society_en.

Frankl, Viktor. *Man's Search for Meaning*. New York: Penguin Random House, 2013. Kindle.

Galston, William A. "The Enduring Vulnerability of Liberal Democracy." *Journal of Democracy* 31, no. 3 (July 2020): 8-24.

Giddens, Anthony. *The constitution of society: Outline of the theory of structuration.* Cambridge: Polity Press, 1984.

Griffith, Aaron. "'Policing Is a Profession of the Heart': Evangelicalism and Modern American Policing." *Religions* 12, no. 3 (2021): 194-212. https://doi.org/10.3390/rel12030194.

Herranz de Rafael, Gonzalo, and Juan S. Fernández-Prados. "The Security Versus Freedom Dilemma. An Empirical Study of the Spanish Case." *Frontiers in Sociology* 7 (2022): 774485–774485. https://doi.org/10.3389/fsoc.2022.774485.

Independent Commission on Policing for Northern Ireland, The. *A New Beginning: Policing in Northern Ireland.* Belfast: Independent Commission on Policing for Northern Ireland, 1999.

Kane, Tara M. "The Pursuit of Procedural Justice and Police Legitimacy: A Case Study of Community Police Officers' Perceptions of the Perceived Benefits of Higher Education." PhD diss., Eastern Michigan University, 2020.

Kirk, Isabelle. "Confidence in the Police sinks in two years." *YouGov*, March 22, 2022. https://yougov.co.uk/topics/politics/articles-reports/2022/03/15/confidence-police-sinks-two-years.

Lamb, Michele. "A Culture of Human Rights: Transforming Policing in Northern Ireland." *Policing: A Journal of Policy and Practice* 2, no. 3 (2008): 386-93.

Landemore, Hélène. *Democratic Reason: Politics, collective intelligence and the rule of the many*. Princeton: Princeton University Press, 2012.

Marioka, Masahira. "The Concept of 'Inochi': A Philosophical Perspective on the Study of Life." *Japan Review* 2 (1991): 83–115. http://www.jstor.org/stable/25790898.

Merton, Thomas. *Conjectures of a Guilty Bystander.* New York: Image Books, 1968.

Metselaar, Suzanne, and Guy Widdershoven. "Discourse Ethics." In *Encyclopedia of Global Bioethics*, ed. Henk ten Have, 895-902. Cham: Springer, 2022. https://doi.org/10.1007/978-3-319-09483-0_145.

Moriarty, John. "Interview with John Moriarty." Interview by Andy O'Mahony, *Dialogue*, RTÉ Radio 1, Dublin, 1997. Audio, https://www.youtube.com/watch?v=CmB-G-16qNQ.

Moriarty, John. Interview by Tommy Tiernan. *OK Baby*, 2000, DVD. ASIN: B00122VFNQ.

Mulqueen, Michael. *Re-evaluating Irish national security: affordable threats?* Manchester: Manchester University Press, 2009.

Negin, Daniel, and Cody Telep. "Procedural justice and legal compliance." *Annual Review of Law and Social Science* 13 (2017): 5–28. https://www.annualreviews.org/doi/10.1146/annurev-lawsocsci-110316-113310.

Neyroud, Peter, Alan Beckley, Paul Collier, and Julia Clayton. *Policing, Ethics and Human Rights.* London, New York: Routledge, 2001.

Nicholson, Lucy. "Return To The Body: An approach to working with those in disconnect." Accessed March 28, 2023. http://dancercitizen.org/issue-8/lucy-nicholson/.

Nunes, João. "Reclaiming the political: Emancipation and critique in security studies." *Security Dialogue* 43, no. 4 (2012): 345-61.

O'Keefe, Cormac. "Serious assaults and violence against gardaí rise sharply." *The Irish Examiner*, March 03, 2023. https://www.irishexaminer.com/news/courtandcrime/arid-41084488.html.

Parrott, Shannon. "Cause me to Understand Your Ways, O Lord: A Journey through Psalm 25." *Search: A Journal of the Church of Ireland* 46, no. 1: 13-8.

Phythian, Rebecca, Nathan Birdsall, Stuart Kirby, Emily Cooper, Zoe Posner, and Laura Boulton. "Developments in UK police wellbeing: A review of blue light wellbeing frameworks." *The Police Journal: Theory, Practice and Principles* 95, no. 1 (2022): 24-49.

Police Federation of England and Wales, The. *Your police service: putting the public first*. Leatherhead: Police Federation, undated. https://www.polfed.org/media/13687/putting_the_public_first.pdf.

Police Federation of England and Wales, The. *Pay and Morale Survey 2022 – Headline Report December 2022*. Leatherhead: Police Federation, 2022.

Police Federation of Northern Ireland, The. "Mark Lindsay set to retire as Chair of PFNI." Police Federation of Northern Ireland press release, accessed March 27, 2023. https://www.policefed-ni.org.uk/media-centre/2022/february/mark-lindsay-set-to-retire-as-chair-of-pfni.

Rappaport, John. "Some Doubts About 'Democratizing' Criminal Justice." *The University of Chicago Law Review* 87, no. 3 (May 2020): 750.

Rohr, Richard. *Falling Upward: A Spirituality for the Two Halves of Life*. San Francisco: Jossey-Bass, 2011.

Ross, K. and A. Gilligan. *Findings from the 2020/21 Northern Ireland Safe Community Telephone Survey*. Belfast: Department of Justice, March 2022.

Shizuteru, Ueda, Victor Forte and Michiaki Nakano. "Inochi: Three Japanese Concepts of Life." *The Eastern Buddhist* 45, no. 1 and 2 (2014): 253-74.

Shōtō, Hase and Michael Conway. "Faith and Inochi as Infinite Life," *The Eastern Buddhist* 45, no. 1 and 2 (2014): 275–98. http://www.jstor.org/stable/26261420.

Smith, Cachella. "MOPAC continues funding to involve communities in recruit training." *Police Oracle*, March 30, 2023. http://www.policeoracle.com/news/race_

and_diversity/2023/Mar/30/MOPAC-continues-funding-to-involve-communities-in-recruit-training_110786.html.

Storylab. "Welcome to Storylab." Accessed 28 March, 2023. https://www.storylabnetwork.com.

Topping, John. "Beyond the Patten Report." PhD diss., Ulster University, 2009.

Tyler, Tom. "Procedural Justice, Legitimacy, and the Effective Rule of Law." *Crime and Justice* 30 (2003): 283-357.

Tyler, Tom. "Procedural justice and policing: A rush to judgment?" *Annual Review of Law and Social Science* 13 (2017): 29–35. https://doi.org/10.1146/annurev-lawsocsci-110316-113318.

Wilson, Suzanne. "'Hard to reach' parents but not hard to research: a critical reflection of gatekeeper positionality using a community-based methodology." *International Journal of Research & Method in Education* 43, no. 5: 461-477.

9
MEANING, HOPE AND THE COLLECTIVE: SUBSTANTIATING 'THE WANT'

CLÍONA SAIDLÉAR

I want to reflect on what has been said at the symposium[1] and bring some reflections of my own as well. As I am new to this grouping, I have been looking at how you have thus far described metascience and wondering where I can make an intervention here that might be useful. One of the things that strikes me is the wording used in how metascience has articulated the problem. In Ireland, we speak Hiberno-English, its idiosyncrasies largely the result of our English being layered on top of our own disappearing language. These differences not only crop up in adopted words and in structure but most

1 Meta-Science – Towards a Science of Meaning and Complex Solutions, Mini-Symposium Commemorating the 20th Anniversary of the Osaka University – University of Groningen Agreement, 7th November 2022.

importantly in concepts and attitudes. In Hiberno-English one of the phrases, you might hear is when we refer to someone as having *a want.*

As I reflect on the synopsis of how this interdisciplinary collaboration has begun to articulate the problem it seems to me that metascience articulates the dominant project of science and modernity as having a *want* and that want is a want for meaning. The missing piece. The question that follows, particularly if our focus is on the SDGs, is what tools to use to go about fixing this want. When we start into the "how," we immediately encounter the traces of science, in the tools and concepts we bring with us as we try to articulate the new.

But let me pause. One of the things that interests me is how the definition of the problem is being shaped in this international group of experts. Where I come from, *a want* is a thing of lack around which we might be appropriately anxious and which we seek to fix and eradicate in some way. Whereas in the Eastern philosophies, I understand, absences and nothingness are often conceptualised as having substance, status and even value in their own right. This is an important difference. What tools become appropriate to apply to the problem of sustainability and inequality if meaning is not something to be sought and built but rather is something substantive to be perhaps uncovered or evolved into.

Let me take you right back to the personal, because I am here to provide a perspective from work "on the ground" as opposed to from the spaces of ideas. What does "meaning" mean in in the work that I do?

My job is working in Rape Crisis. Given the subject matter and the goals of my organization to address and prevent sexual violence, the general and common consensus would be that my job is worthy and is purposeful. Yet, if I look at my day, at the mission of ending sexual violence, and after working almost two decades in this sector; if I gather the data and the metrics, it is hard to argue with the conclusion that I have failed. Sexual violence has not decreased; indeed, it may be increasing. Even as I talk to you today, I am failing, and I can predict with a high degree of confidence that I will fail tomorrow. Yet I will quite happily go to work tomorrow with purpose. That is a piece of evidence of a disjuncture between the metrics we are using and the meaning that is attached to my professional life.

A concrete way that this disjuncture has manifested itself is in the relationship of the NGO sector with academia. This is a relationship heavily scaffolded by the State's commissioning of academia to provide evidenced assurances about what is "out there," who we are and what we are doing. This client relationship

of academia to the State for this purpose, exalts the "out there" while simultaneously pressing it into service and dependence.

In that relationship the demand on the NGO sector is that we describe our meaning in ways that can be seen, measured and given value. We have been challenged, at risk of our survival, to measure our impact. We are pressured to find data points that describe our place within the very systems we seek to problematise. And on the system's own terms. Then based on this evidence the system tells us who we are and how to be. Community engagement with academia, or more particularly the institutions of academia, under these conditions is fundamentally unsustainable. This is a challenge not unfamiliar to those considering the future of the academia, I have no doubt.

For people working on endemic social justice issues, sustaining our hope in the face of persistent failure is likely enabled through our analysis. In feminism, we understand sexual violence to be a powerful indicator of the dominant overarching system's purpose. Therefore, sexual violence is not an anomaly, it is part of the design. With this analysis our struggle and importantly, our failures, illuminate rather than discourage.

The challenge in metascience in terms of finding the good *we* is that we find a way to engage with the meaning that is already there. This meaning has not disappeared simply because it has not been measured. The challenge is how we bend to that meaning. I envision it as how we should bend to a flower instead of plucking it when we want to examine it closely.

The search for data and meaning manifests in mostly highly unequal relationships between the institutions of learning and ideas and the target beneficiaries, communities and NGOs serving those communities. Perhaps that is the move towards something "out here," that is the "we" – spoken of by Professor Deguchi – but the metrics is still in the "*I*." In the NGO sector a persistent existential question is how we hold onto our meaning and our mission when we are asked to measure ourselves in these ways and, of course, in doing so, self-sabotaging our efforts to achieve the mission of our work.

First, because we lose something as we are trying to "elevate" ourselves to these metrics. I say elevate, as these metrics are how we evidence and earn our worth and therefore funding. These metrics rarely bend to find meaning that is already there. We are *a want* that needs fixing rather than a space that has substance that cannot be articulated without violation to our meaning. The metrics we are using to recognise and understand meaning is critically important. So, when I look at metascience and the related projects, one of the

questions that I have is: I wonder whether "meaning" will become another iteration of *progress*. And one of the areas we spoke about, indeed Professor Zwitter has mentioned, is that oftentimes this collective work slides into the search for more: more profit, more money and more progress. Even as we direct ourselves towards the existential crisis of progress in addressing environmental unsustainability and catastrophic inequalities, we may inadvertently carry with us tools which describe progress when what we need are new ways of describing our collective being. I wonder how we can safeguard meaning from yet again becoming another iteration of progress. I think that, possibly what Professor Deguchi has spoken about in terms of the *we turn*, is some part of the answer to that question.

So, I leave this with you. What is the substance of this *want* for meaning? Could it be that sustainability, and how we shape the next SDGs, is less about moving forward and more about finding ways to see/face, value and substantiate what is already here? Is meaning, and its twin hope, something we must invent or create, or is it already present? Does surviving sustainably into the future depend, at least in part, on how we make it possible to observe and engage with presence?

10
HOW TO ESTABLISH A SOCIETY OF COEXISTENCE BASED ON EMPATHY

CHIHIRO TAKAYAMA

I would like to focus on empathy because empathy can create the future to establish the human healthcare community. I founded the medical venture KNOCK-ON-THE-DOOR Inc. which aims for an open community of people with intractable diseases.

I work for Eisai Co., Ltd. and used to be the director of Aricept, a drug and treatment for Alzheimer's disease which became a global standard drug for Alzheimer's treatment and which launched in 1997. Furthermore, the CEO put me in charge of corporate philosophy to make Eisai Co., Ltd. an innovative company. During that time, I founded the KNOCK-ON-THE-DOOR Inc.

AN EMPATHY-BASED SOCIETY OF COEXISTENCE

How to establish a coexistence society by means of empathy? Human beings consist of two kinds of selves: the extrinsic self and the intrinsic self. In the case of the extrinsic self, we tend to be able to strive for power, assessment, position and money. On the other hand, in the case of the intrinsic self we can express sincerity, generosity, kindness, seriousness and so on for others.

Aristotle stated that human beings must be strong and weak at the same time. As long as we are strong by being a living creature, and as long as we are weak so we can understand the heart of the weak such as those who are vulnerable and suffering from diseases or disabilities and so on.

Adam Smith sets out to show in his book *The Theory of Moral Sentiments (1761)* that our morality and how it governs our actions is a product of the social nature of human society. It proposes that the way humans relate socially is a better guide than reason to understanding how morals develop; from this it considers how justice and prudence are social values, as are altruism and charity. Empathy plays an important role for social order and prosperity. Empathy is the work to imagine the feelings of others. Sympathy is the work of the heart to copy the feelings of individuals into our own minds and to create the same emotions. Human beings intend to create a society of coexistence in which they belong together throughout their growth and in which they can exchange empathy with other people.

"Self-centeredness" has been widespread in the world these days, but a pandemic and limitation of the current economic system can be an opportunity to restore humanity's humility and gratitude, and the preciousness of cooperation beyond national and ethnic groups. From the perspective of "humanity's well-being and better survival," we seek the construction of a new social system triggered by a pandemic and limitation of the current economic system through bridging and integrating natural science, humanities, social science and art in order to practice a more precious future for humanity.

The forgotten "altruism" becomes more brilliant, and I realize that the "warm heart" that cares for others in symbiosis leads to my own happiness. Death of individuals is discontinuous in life, while survival of modern humans is continuous to seek and practice a more prosperous future for humanity. Innovation also follows the "discontinuous continuum" theory. While individual innovations are discontinuous transitions, social innovations are continuously emerging on the integration of transitions, enriching human survival.

In such a society, wise leadership, in other words, Aristotle's Phronesis, makes

quick decisions and creates the future. This wise leadership is increasingly important in the interaction of common and real reality that one should aim for in today's world. The foundation of wise leadership is empathy, to directly face people, things and the environment "here and now." Through empathy, people discover new knowledge and execute it systematically and autonomously. In addition, people will consolidate a network of world knowledge, including grassroots, over the interests of "common good." It is time to advocate the dynamic synthesis of altruism and selfishness, and reconstruct the origin of Japanese management represented by *Sanpou Yoshi* with a scrum and send it to the world.

Figure 1 shows a chart of the institutional and ethical limitations of current capitalism. On the inside of the economics rationality limit curve (red line) are people in need, living with despair as a general public and excluded from benefits. On the outside of the curve are the people in poverty who have been targeted by disparities, the people with illnesses and disabilities and the people in the Global South where resources are applied. However, the important thing is that the people with disease who are physically or intellectually handicapped have the "spark of life" that liberates human beings and contributes to the future of society.

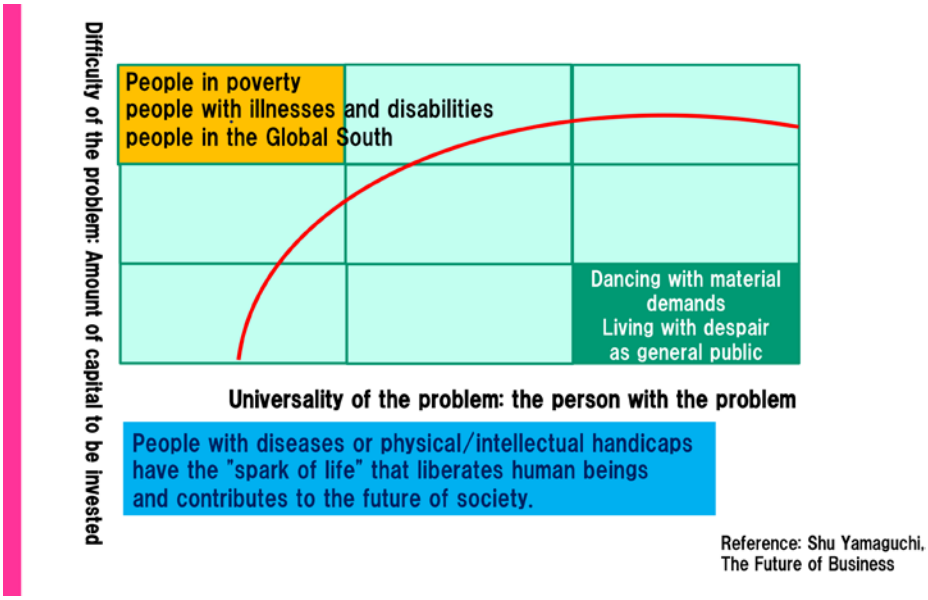


Figure 1: Institutional and Ethical Limitations of Capitalism Economic Rationality Limit Curve

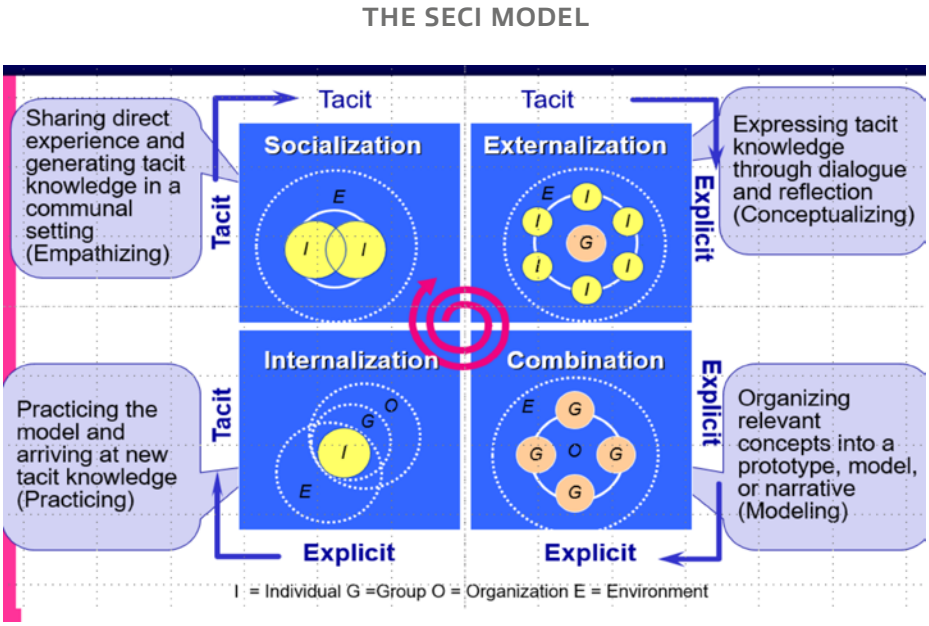


Figure 2: Introduction of SECI model (Professor Emeritus Ikujiro Nonaka) Spiral theory of Knowledge Creation

Empathy, in terms of how people live, and how people ought to be, is the power to live. Empathy is the precious, irreplaceable source that is generated when people's own meaning and value in their minds change through their thoughts, emotions, and ideals for others. I meet with Professor Ikujiro Nonaka once or twice a week, where he provides me with guidance. He teaches me, "'Knowledge creation' is a dynamic social process that works to justify individual beliefs into truths." Without utilizing the tacit knowledge that leads to each and every person's beliefs, we cannot externalize these truths, and thus we cannot change the world. It is the existence of patients and those with disabilities that could make us aware of a way to live more fruitfully. This process is the SECI model, and the realization of the human healthcare concept is its core engine. The socialization component allows us to open up and empathize unconsciously with the patients, practicing intersubjectivity and essentially becoming one with the patient in order to sympathize with their feelings (acquiring tacit knowledge). The drive "to do something for these patients," a pure-hearted motivation that derives from the inner self, leads to the externalization of this tacit knowledge, which leads to dialogue within the organization. The concepts for solving the issue (converting to explicit knowledge) will, through

combination, lead to the proposal of practical strategies by all in-house and external members who experienced the socialization process. I learned that the SECI model is an innovation model for recovering humanity and driving human growth up to the internalization of these strategies, and is backed by the altruistic behaviors of individuals and organizations.

THE ESSENCE OF THE SECI MODEL SPIRAL TO SPIN UP BETWEEN TACIT KNOWLEDGE AND EXPLICIT KNOWLEDGE

The essence of the first phase of the SECI model is "knowing." Knowing here is different from conscious perception; rather, it is about empathy, where people dedicate themselves to acquiring tacit knowledge at the level of the unconscious dimension. In practice, the employees working for a corporation such as Knock-On-The-Door Inc. introduce humanity into mission work with a sense of genuine encounter wherein they completely identify themselves with patients. According to the philosopher Martin Buber (I and Thou by Martin Buber 1878-1965), this type of encounter involves a selfless attitude in which a person becomes one with another person. It even goes beyond the level of the "I-Thou" relationship such as the mother-child relationship. This supreme encounter is free from the conscious distinction between a subject and an object. One interacts with another person wholly in the "here and now" and becomes one and together. The philosopher Edmund Husserl (The Idea of Phenomenology by Edmund Husserl 1859-1938) calls this state of oneness "intersubjectivity" – a totally selfless, creative activity of intertwined subjectivity.

Without establishing this type of empathy, knowledge creation cannot proceed to the next phase. This is an important point. In the Yogacara school of Mahayana Buddhism, human consciousness is divided into eight layers, of which the deepest is the *alaya-vijnana*, made up of unconscious memories. The *alaya-vijnana* is said to store an enormous amount of the impressions of previous experiences including not only memories from this lifetime, but also from those of ancestors. Tacit empathy arises from this deepest part of human consciousness.

In the case of certain Corporation employees, tacit empathy drives them to work wholeheartedly for patients, through which they eventually discover the meaning of work and life. Socialization means the significance of this first phase of the SECI model. Without experiencing and sharing the emotions of these patients in person, those employees cannot acquire the source of

knowledge from which they extract new concepts. The quality of the first-hand experience is the key to creating innovative concepts.

In the next phase of the SECI cycle, Externalization means "consideration." Consideration is synonymous to the process of sympathy. After embracing and empathizing with the thoughts and emotions of another person, one intentionally and analytically objectifies that person's situation. Carefully considering different aspects of the situation, one thoroughly examines the essence of the issue at hand. Through this process, one spontaneously feels motivated to do something for that person. At this stage, empathy turns into a conscious act of sympathy. This is "consideration" in essence.

Another meaning of consideration is care for another person. Care means not only physical care, but also emotional and mental care that goes deep into the heart of another person. In order to verbalize discoveries in the deepest reservoir of tacit knowledge, writing is an important part of the process. The philosopher Toshihiko Izutsu (1914-1993) says that there are special words infused with the power of spirit – *kotoba*. One must come face to face not only with another person, but also with oneself. By reflecting on one's own experience and tacit knowledge accumulated in one's body, one delves into the deepest reservoir of tacit knowledge. Only at this point, *kotoba* arises out of one's unconscious dimension, which then generates new concepts and encounters. At this point, one's hand moves almost spontaneously and jots down *kotoba*.

In today's digital world, words are reduced into and processed as mere signs. However, self-dialogue based on empathetic experience can give birth to *kotoba*, revealing the essence of consideration. With this base well established, one can understand subtle nuances of another person's concern, just like how a streak of light shines from above in the deep ocean. From the deepest part of the heart, one spontaneously feels motivated to devote oneself to that person. This is how the SECI model proceeds to the Externalization phase.

In the Externalization phase, certain Corporation employees who share the same empathy thoroughly discuss the essence of consideration. They work together to verbalize what they saw as the real issues for patients. In this phase, the employees pursue the essence of the issue, conceptualize it, and brush up the concept.

Then, the "binding" part is equivalent to the Combination phase of the SECI model. At this point, the employees combine newly created concepts with existing explicit knowledge and integrate them into collective knowledge such as a model or narrative. Storytelling is an important skill here, as the focus is

now on distribution and reproduction of knowledge. Hence, it is helpful to utilize the power of digital technology, which enables the SECI spiral to spin up even faster. In fact, certain corporations make great use of digital technology including AI. The firm excels at distinguishing what only humans can do from what machines can do. This is a good example of co-existence of the analogue and digital in this age.

The next part of the SECI model is "execution." Execution here is Internalization not merely about doing something but about persevering with grit. No success can be achieved by one go. For every failure, the employees must reflect on themselves, return to the original source of empathy and consideration, and thoroughly pursue the SECI spiral toward the vision of human healthcare. With each cycle of the SECI spiral, the firm as a whole moves closer to Truth, Goodness, and Beauty.

I learned from Professor Emeritus Ikujiro Nonaka the essence of the SECI model spiral to spin up between tacit knowledge and explicit knowledge into innovation. It is clarified that the SECI model is an innovation model for recovering humanity and driving human growth up to the internalization of these strategies, and is backed by the altruistic behaviors of individuals and organizations.

KNOCK-ON-THE-DOOR INC. WITH HUMAN HEALTHCARE CONCEPT INCORPORATING THE SECI MODEL

My friend and I established the medical venture in order to "knock on the door," because there is a voice we want to hear from patients. KNOCK-ON-THE-DOOR Inc. incorporates humanity into our mission focusing on the patients and their families, and tries to empathize with their unmet medical needs. Through KNOCK-ON-THE-DOOR we must change our own modes of thinking and behavior by opening ourselves up from the individual limited by economic rationality and improve ourselves based on empathy for patients and their families. We incorporate the principle of humanity within the economic system (economic) as the operating logic through impulses based on joy, anger, sorrow and pleasure (empathy). It is because we introduce the SECI model by Professor Emeritus Ikujiro Nonaka. From this tacit knowledge to implicit knowledge through the SECI model we can spiral upward these types of knowledge into innovation to support patients and their families. This mechanism enables the realization of cooperative philosophy through daily business behavior. KNOCK-

ON-THE-DOOR Inc. can lead patients with intractable diseases to be a light of the world and to create awareness for necessary change in a society.

Here you can get closer to the patient journey of mothers who have children that suffer from intractable diseases. From their voices on socialization, we can create the interface and application for smartphones. This procedure is being done by team building with patients and families, on which we can manage symptoms though smartphone apps and eliminate the mental and physical burden from them. Remote diagnosis and treatment by AI are devoted to their diseases including dementia and overseas development. Our medical system can reduce time for care, relieve anxiety, improve the authority of medical care services and also reduce costs. With this we can also bring them to QOL improvements.

Human beings understand themselves according to what "everyone else" takes for granted according to the scale of what the world says (non-intrinsicity). Having handed themselves over to the world, the present existence (human beings) thinks as the world thinks and acts as the world acts. In other words, they read the atmosphere of the moment and follow the norms and social conventions that "everyone else is doing this too" (irresponsibility). The actual being (human being) understands itself as "self" according to its inherent selfhood (originality). Martin Heidegger (1889-1976) mentions in his book *Sein und Zeit* (Being and Time) the "call of conscience" that makes them realize that they are open to many possibilities. Patients and families, especially those suffering from intractable diseases, will be the kind of person who, while enduring uncertainty, while enduring the fact that there is no right answer, can decide to "project" of their own lives to choose their own lives.

KNOCK-ON-THE-DOOR Inc. intends to create an architecture to try and access and establish an ecosystem with patients and families composed of members and partners. The purpose is that patients and their families understand themselves according to their inherent selfhood (originality). KNOCK-ON-THE-DOOR tries to establish right now this ecosystem model with patients care solutions on how to create better lives for them just while trying to be empathetic, because empathy creates the future.

KNOCK-ON-THE-DOOR makes the foundation of knowledge into the knowledge creation theory of socialization, externalization, combination, and internalization in order to establish the Living Labs for patients with intractable diseases. First of all, as a joint initiative, KNOCK-ON-THE-DOOR leads the true needs of patients through a community-based socialization/workshop (Future

Session), conceptualized as living laboratory, and matched with the resources of the corporation federation in consolidation. Corporations that join the Living Labs should have the positive sequence between patients first and profits based on a totally new future-oriented business model of interdependent and co-creative types in the community. Further internalization will demonstrate the hypothesis about the use of products and services with patients as monitors and subjects. By spiraling up such knowledge creation activities, KNOCK-ON-THE-DOOR will create "new life" (community), "new industry" (market creation) and "new regional capital" (regional social security) based on regional resources.

KNOCK-ON-THE-DOOR envisions the future positioning of a mutual-aid society based on empathetic economy under the Living Labs which can open to everyone.

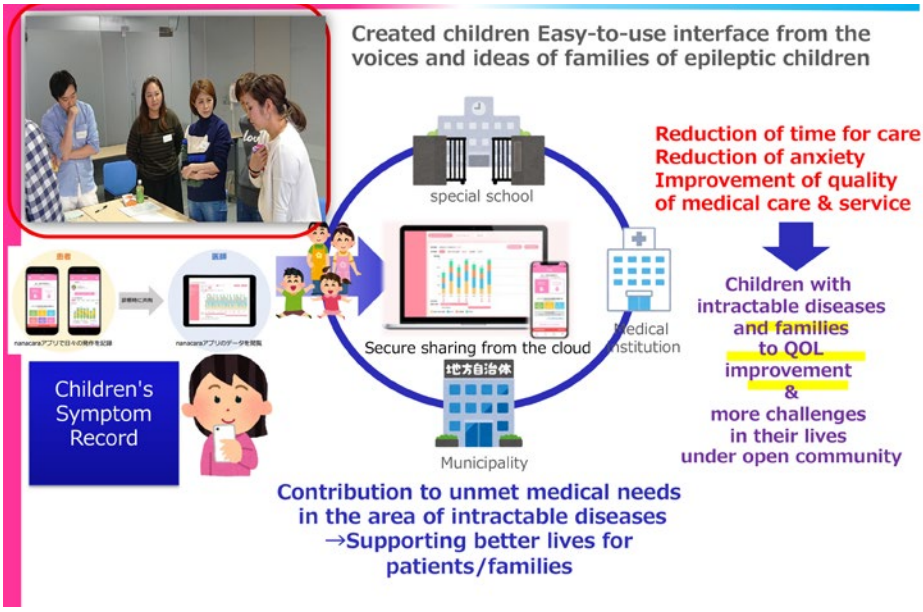


Figure 3: Medical venture KNOCK-ON-THE-DOOR, Inc. aims for an open community of people with incurable diseases.

11
HOPING FOR A MUTUAL-AID SOCIETY SUPPORTED BY AN ECONOMY OF EMPATHY

TAKUO DOME

INTRODUCTION: HAZARDS PRODUCED BY THE MODERN AGE

In contrast to the Middle Ages, which was "the era of the soul," the modern age can be regarded as "the material era," in which people's focus shifted from gods to humans, from the afterlife to the world of the living, and from eternal life to bodily life.

The collapse of religious authority in Europe was triggered by the Reformation beginning in 1517, and after the long religious conflicts, brought the actual shift from religious to secular rule with the establishment of the Westphalian system in 1648. Those who ruled a country decided religion and sovereignty became inviolable. Tensions between states replaced inter-religious tensions.

Around the same time, from the latter half of the seventeenth century, people

began to accept the idea of understanding the world not literally as written in the bible, but rather through observation and logic – in other words, scientifically. The sun-centered system, which thinkers such as Galileo Galilei and Nicolaus Copernicus had promoted at significant personal risk, became safe and widely accepted. Gottfried Wilhelm Leibniz, Isaac Newton, and other scientists made their mark, and the "scientific worldview" took shape.[1] This worldview gave rise to many technological innovations.

Aided by the discovery of the New World, the influx of silver, and the influence of Protestantism, the pursuit of material wealth became widely accepted. This was the establishment of "material happiness" and the beginning of the economic growth.

Most of the many phenomena that are distinct to the modern era can be explained as a combination of these "inviolable sovereignty," "scientific worldview," and "material happiness." For example, as tensions between nation-states grew, governments in Europe used technological innovations to develop weapons, and they established standing armies. In order to finance this military buildup reliably and effectively, they promoted economic growth and secured tax income, creating "fiscal-military states."[2] Finally, it was through the combination of "scientific worldview" and "material happiness" that the Industrial Revolution came about,[3] and became a symbol of economic growth driven by technological innovations. Dramatic increases in the variety and volume of goods and services extended the market, in which production, exchange, and consumption came to be left to personal choice.

Following the Industrial Revolution, further progress was made in science and technology, wealth was accumulated, and per capita GDP rose continuously. As a result, lifestyles became incomparably more affluent than they were in the Middle Ages. Highly varied, large-scale consumption enabled most humans to

1 H. Butterfield, *The Origins of Modern Science: 1300-1800* (first published in 1949, reprinted by New York: MacMillan, 1951). Butterfield called this phenomenon the "Scientific Revolution."

2 J. Brewer, *The Sinews of Power: war, money and the English state, 1688-1783* (London: Unwin Hyman, 1989). The term "fiscal-military state" was coined by Brewer.

3 A. Toynbee, *Lectures on the Industrial Revolution in England* (first published in 1884, reprinted by New York: A. M. Kelley, 1969). The term "Industrial Revolution" was popularized by Toynbee.

live in more fantastic luxury and comfort than ever before. However, something unexpected happened. The population grew.

The world population is currently about 8 billion, but it is predicted to exceed nine billion by 2050 and reach 10 billion by 2100.[4] The human population only reached the one billion mark in the nineteenth century, and this milestone took humanity more than 100,000 years to achieve. Since then, the population has increased eight times in just 200 years. We must understand that this growth means that our species is in a period of dramatic proliferation.

In contrast, Japan's population is around 125 million, but it is moving in the opposite direction to the global population. It will continue to decline into the future and is expected to be around 75 million by 2100.[5] Japan's population is aging, and soon more than 30 percent of people will be aged 65 or over. This proportion is expected to be 35 percent or more in 2050.[6] These trends will be experienced by many other countries in East Asia and across the world in the future.

The issues the world needs to tackle now are population growth and the problems that accompany it, such as poverty, inequality, environmental degradation, infectious disease, civil conflict, energy, and so on. In 2015, the United Nations General Assembly adopted the Sustainable Development Goals (SDGs). Meanwhile, in Japan, we must contend not only with population decline, but also with aging, low birthrate, rural and regional decline, and growing income disparity, as well as earthquakes and other natural disasters.

I suggest we imagine the world as a giant luxury cruise ship. The ship, built with the best of science and technology, enjoyed an elegant voyage, but at some point, a number of holes opened in the hull, and water began to flow in.[7] We are at deck level and above, unaware of the holes, or ignoring them. But if we do

4 See *World Population Perspective 2022*, UN; https://population.un.org/wpp/Graphs/Probabilistic/POP/TOT/900.

5 See *World Population Perspective 2022,* UN; https://population.un.org/wpp/Graphs/Probabilistic/POP/TOT/392.

6 See *World Population Perspective 2022,* UN; https://population.un.org/wpp/Graphs/Probabilistic/PopPerc/65plus/392.

7 Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William B. Behrens, *The Limits to Growth: a report for the Club of Rome's project on the predicament of mankind* (New York: Universe Books, 1972). More than fifty years ago, the Club of Rome appealed to the world for limits to growth.

nothing, the ship will surely sink eventually. We need to not escape to the first-class cabins on the upper floors, but rather go down to the lowest level and fix the holes. I believe that if we can fix the holes, humanity will launch a new era. But how can we fix the holes, and in what direction should we steer the ship? In other words: what kind of society should we be hoping for?

Several economists of the modern era have tried to answer these questions. In the following section, I will discuss three economists: namely, Adam Smith, John Stuart Mill, and Amartya Sen. Although they envisioned different societies in different historical contexts, they had a common view that placed people able to contribute to producing goods and services at the center of society. In the third section, I will show an alternative society that transcend the modern view, namely, a mutual-aid society supported by an economy of empathy. The final section will discuss the mindset that each of us must have in order to achieve social change.

VARIOUS SOCIETIES ENVISIONED BY ECONOMISTS

A SOCIETY SUPPORTED BY FAIR COMPETITION: ADAM SMITH (1723-1790)

Adam Smith is a British moral philosopher of the eighteenth century. Britain at that time was achieving several technological innovations, which later became known as the Industrial Revolution. At the same time, it engaged in repeated wars with France to acquire colonies and gain supremacy in Europe. In 1775 the British colony in America embarked on its War of Independence, and became independent from Britain in 1783. The French Revolution took place in 1789, and Britain was drawn into more than two decades of war against France, which finally ended with the defeat of Napoleon Bonaparte in 1815.

Adam Smith lived through this period, and published two major works during his life: *The Theory of Moral Sentiments* in 1759, and *An Inquiry into the Nature and Causes of the Wealth of Nations* in 1776. *The Theory of Moral Sentiments* is a book on ethics, while *Wealth of Nations* is about economics. These two books made Smith extremely well-known in his lifetime. However, the *Wealth of Nations* is undoubtedly the one that ensured later generations remembered his name. The most famous phrase from the *Wealth of Nations*, is probably an "invisible hand."

Smith used the words "invisible hand" only once in the *Wealth of Nations*. He argued as follows.

> As every individual, therefore, endeavors as much as he can, both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value, every individual necessarily labors to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. [...] He intends only his own gain, and he is in this, as in many other cases, led by *an invisible hand* to promote an end, which was no part of his intention. Nor is it always the worse for the society, that it was not part of it. By pursuing his own interest, he frequently promotes that of the society, more effectually than when he really intends to promote it.[8]

Based on those sentences, the "invisible hand" has been interpreted as meaning how competition in a market leads the self-interested, profit-seeking behavior of individuals to prosperity for society as a whole. This kind of interpretation is the one that earned Smith his enduring reputation as a philosopher who captured the self-interested nature of humans, and as an economist who emphasized competition in the market.

However, Smith did not think that self-interested behavior by individuals in the market leads unconditionally to social prosperity. His view was that competition is only fair in the presence of moral controls based on empathy, which enables the invisible hand to operate. At the beginning of *The Theory of Moral Sentiments*, Smith states:

> How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion which we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner. That we often derive sorrow from the sorrow of others, is a matter of fact too obvious to require any instances to prove it ... Pity and compassion are words appropriated to

8 Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, in *The Glasgow Edition of the Works and Correspondence of Adam Smith*, no. 2, ed. R. H. Campbell, A. S. Skinner, and W. B. Todd (Oxford: Oxford University Press, 1976), 456. Emphasis added.

> signify our fellow-feeling with the sorrow of others. Sympathy, though its meaning was, perhaps, originally the same, may now, however, without much impropriety, be made use of to denote our fellow-feeling with any passion whatever.[9]

Here, "sympathy" means a process of the mind that involves replicating the emotions – what Smith often called "passions" – of others in one's own mind, to generate the same passions in oneself.[10]

Smith argued how the mechanism of empathy would lead to social order as follows. Let's say that someone, the person concerned, has some passion, or is engaged in some behavior. For example, the person feels a sense of joy at having secured a job at a good company, or is laughing loudly as an expression of that joy. Or imagine a person who has recently lost a loved one and is feeling sadness or has broken down crying because of this sadness.

As a spectator, how should I interpret and evaluate that person's passion and behavior? Usually, I would first imagine how I would feel and behave if I were in the same situation. In other words, I adopt the same relationship with the object in question in my imagination. I try to imagine how delighted I would be to secure a job at a good company, or how sad I would be if a loved one died.

If the passion and behavior that I imagine match those currently being displayed by the person concerned, I approve of the passion and behavior; if they do not match, I disapprove. If my approval is conveyed to the person concerned, they will surely be pleased. If they experience joy, that joy will be all the greater; if they are sad, their sadness may be lessened. Having approved, I too will be satisfied. On the other hand, if the person concerned comes to know that I disapprove, they will probably feel unhappy, and I too will experience discomfort.

Through ongoing social interaction with others, we understand that others also view us, and approve or disapprove of us, in the same way. In this case, I am the "person concerned" with passion and behavior, and the other person is the spectator. We feel good when others approve of our passion and behavior,

9 Adam Smith, *The Theory of Moral Sentiments*, in *The Glasgow Edition of the Works and Correspondence of Adam Smith*, no. 1, ed. D. D. Raphael and A. L. Macfie (Oxford: Oxford University Press, 1976), 9-10.

10 Smith himself used the term "sympathy," but in this chapter, I will use "empathy" as a modern term that more accurately conveys Smith's concept, rather than "sympathy," which has a meaning closer to pity.

and unhappy when they disapprove. We hope to receive the approval of as many people as possible, but in reality, this is not so easy. The real world is a complex web of different interests, and none of us can gain the approval of everyone.

Therefore, based on our own experiences so far, we form in our hearts an idea of an "impartial spectator" who has no particular interests.[11] We imagine whether or not the impartial spectator, if placed in the same position as us, would have the same passions and engage in the same behaviors as we do – in other words, whether or not the spectator would approve of our passions and behaviors. That becomes our reference point for judging their appropriateness.

In this way, I gain approval or disapproval from actual spectators who are others on the one hand, and from the "impartial spectator in the heart" who is another self on the other hand. Although I establish my impartial spectator through the experience of interacting with others, once it is established, it may provide me with feedback that is different from the feedback I get from other people or society. This is because other people cannot have accurate knowledge of my internal feelings, the motivations for my behavior, or the chain of events leading to it. The impartial spectator in our heart, on the other hand, is me, so it has the complete store of information on these topics. Visible outcomes strongly influence how other people evaluate me, but my impartial spectator evaluates me considering motivations and a chain of events that cannot be seen.

Smith used the term "wise man" to denote a person who always behaves following the voice of the impartial spectator in the heart and seeks tranquility. In contrast, one who is concerned about their reputation from others, seeking visible wealth and fame, is a "weak man." In practice, every person could be said to have both the attributes of a wise man and a weak man – in other words, wisdom and weakness – and to live with some kind of balance, or inconsistency, between the two. Smith viewed humans as having facets of both wisdom and weakness.

If we can improve our social reputation and obtain wealth and fame, we can lead more convenient and comfortable lives. But to get the true foundation of happiness, which Smith thought was "tranquility,"[12] we need to be guided by the

11 Smith, *Moral Sentiments*, 130-131.

12 Smith, *Moral Sentiments*, 149. Smith defined happiness as follows. "Happiness consists in tranquillity and enjoyment. Without tranquillity there can be no enjoyment; and where there is perfect tranquillity there is scarce any thing which is not capable of amusing."

impartial spectator in our hearts. We know this to be the case and therefore establish the following kinds of general rules in our hearts, and try to observe them.

- General rule 1: we must avoid all behavior that the impartial spectator in our hearts would judge worthy of punishment (or censure).
- General rule 2: we must seek every possible opportunity to engage in all behavior that the impartial spectator in our hearts would judge worthy of reward (or praise).[13]

General rule 1 obliges us to uphold "justice": namely, not to harm the life, body, property, or honor of others. The second general rule urges us to practice "beneficence": namely, to devote ourselves to the happiness of others. Notably, the general rule of "justice" is given the strict form of "law." Social order is maintained through a law-abiding attitude.

Thus, starting from the essential human tendency to take an interest in others, Smith demonstrated how a society could form general rules and keep order. The setting of general rules and the law-abiding attitude could be seen as a function of reason, but the process that leads to them is a function of empathy, or more widely, the working of our sentiments. Morals are founded on sentiments. This is the key message of *The Theory of Moral Sentiments*.

Having described the mechanism of social order in *The Theory of Moral Sentiments*, Smith turned his attention to the prosperity of society in the *Wealth of Nations.* To Smith, social prosperity meant that the wealth needed to live was spread throughout society, right down to people in the lowest echelons. Smith thought that capitalists, employers of laborers, could achieve social prosperity in this sense through fair competition among them. Fair competition means competition in which the participation of others is not deliberately impeded by such things as monopolization, collusion, and falsification.

Smith envisioned a society in which fair competition among capitalists enabled all the available capital to be used most effectively, and in which the benefits, in terms of employment and the income derived from it, would flow down to the people in the lowest class of society who could not participate in the competition: namely, the laborers who accounted for the majority of the

13 Smith, *Moral Sentiments*, 159.

population in those days.[14] The society envisioned by Smith is illustrated in Figure 1.

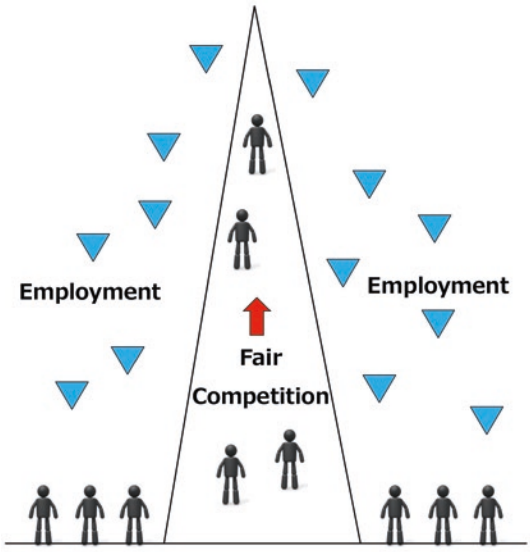


Figure 1

Smith's vision was a radical one at a time when profits were monopolized by a few companies and guilds which were granted exclusive privileges by monarchs and parliaments. Looking at later historical developments, however, we can see that Smith also left some questions unanswered. The first is how to include people unable to participate in competition. The second is how to share a sense of morality – that is, the perspective of the impartial spectator – beyond differences in nation, race, culture, and religion. Put simply, the issue is how to overcome division and extend empathy.

Several economists have taken up this challenge since Smith's time. One example is the nineteenth-century philosopher and economist, John Stuart Mill.

14 Adam Smith, *Wealth of Nations*, 96. Smith's attention was focused on the well-being of the lower classes. For example, Smith argued as follows. "Is this improvement in the circumstances of the lower ranks of the people to be regarded as an advantage, or as an inconveniency, to the society? The answer seems at first abundantly plain. Servants, labourers, and workmen of different kinds, make up the far greater part of every great political society. But what improves the circumstances of the greater part, can never be regarded as any inconveniency to the whole. No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable."

A SOCIETY OF EQUAL OPPORTUNITY: JOHN STUART MILL (1806-1873)

Mill lived in the era when the fruits of the Industrial Revolution were beginning to appear on a full scale. The world's first railroad opened in 1830 between Manchester and Liverpool. British government repealed protectionist rules such as the Corn Laws and the Navigation Acts, and the era of full-scale free trade began. The Election Laws were amended to give more people suffrage. The Great Exhibition, the world's first international exposition, was held in London.

However, in Mill's era, shadows of industrialization became more apparent, such as in the serious growth of the London slums. A binary division was replacing Britain's former class system into people who could ride the wave of industrialization and those who could not. Inequality was growing wider and wider. Moreover, several revolutions took place in 1848 on the European continent.

In this context, while supporting Smith's idea of fair competition, Mill argued that to make competition fair in the truest sense, the opportunity to participate in competition needed to be opened up to a larger number of people. Mill's major work in economics is *Principles of Political Economy*, published in 1848. In addition to this work, Mill wrote many other works in various fields, such as *On Liberty* (1859), *Considerations on Representative Government* (1861), "Utilitarianism" (1861), and *The Subjection of Women* (1869).

Mill drew on Jeremy Bentham's idea of utilitarianism, which treated pleasure as good and pain as evil, and placed the achievement of the greatest happiness for the greatest number as the basic standard of policymaking. However, Mill took good in an individual sense to mean high-quality pleasure, not simple pleasure. High-quality pleasure is one that is actively sought by an individual who has already experienced many kinds of pleasure.[15]

For example, suppose a laborer who has never experienced pleasure other than in the form of drinking alcohol continues to drink alcohol. In that case, this cannot be called the pursuit of high-quality pleasure, no matter how

15 John S. Mill, "Utilitarianism," in *Collected Works of John Stuart Mill*, vol. 10, ed. J. Robson et al. (Toronto: University of Toronto Press, 1969), 211. In "Utilitarianism," Mill defined the quality of pleasure as follows. "If I am asked, what I mean by difference of quality in pleasures, or what makes one pleasure more valuable than another, merely as a pleasure, except its being greater in amount, there is but one possible answer. Of two pleasures, if there be one to which all or almost all who have experience of both give a decided preference, irrespective of any feeling of moral obligation to prefer it, that is the more desirable pleasure."

satisfied the laborer is. To raise the quality of pleasure, we must identify something that we find genuinely pleasurable after experiencing other types of pleasure, such as education, artistic appreciation, and political participation.

In order to enable individuals to seek pleasure freely in accordance with their personalities, society must accept diversity, and offer opportunities for all types of individuals to pursue a variety of activities. Limiting the types of pleasures people can pursue, based on attributes such as origin and gender, will prevent an individual's quality of pleasure from rising, and society from reaching the greatest happiness for the greatest number in any true sense.

On this basis, Mill envisioned a society based on the principle of liberty, that is, a society where diversity is accepted. In *On Liberty*, Mill argued as follows.

> If the claims of Individuality are ever to be asserted, the time is now, while much is still wanting to complete the enforced assimilation. It is only in the earlier stages that any stand can be successfully made against the encroachment. The demand that all other people shall resemble ourselves, grows by what it feeds on. If resistance waits till life is reduced *nearly* to one uniform type, all deviations from that type will come to be considered impious, immoral, even monstrous and contrary to nature. Mankind speedily become unable to conceive diversity, when they have been for some time unaccustomed to see it.[16]

Founded on this liberty principle, Mill formulated plans to promote equal opportunity. He argued, for example, that the opportunity to receive an education should be open to all people, including the working classes, and that political participation should be expanded to a wider range of people, including women.[17] He also proposed using inheritance taxes to establish an equal

16 John S. Mill, *On Liberty*, in *Collected Works of John Stuart Mill*, vol. 18, ed. J. Robson et al. (Toronto: University of Toronto Press, 1977), 275.

17 John S. Mill, *The Subjection of Women*, in *Collected Works of John Stuart Mill*, vol. 21, ed. J. Robson et al. (Toronto: University of Toronto Press, 1984), 340. In 1865, Mill became a member of the House of Commons and served for women's suffrage. However, women's suffrage was not incorporated in the 1867 amendment to the electoral law. In *The Subjection of Women*, Mill wrote as follows. "When we consider the positive evil caused to the disqualified half of the human race by their disqualification—first in the loss of the most inspiriting and elevating kind of personal enjoyment, and next in the weariness, disappointment, and profound dissatisfaction with life, which are so often the substitute

starting line as possible for economic competitions within the same generation. Moreover, in preparation for the socialist world of the future, Mill established the Land Tenures Reform Association and promoted experiments such as founding production cooperatives in which laborers owned capital and participated in its management.

Figure 2 shows the kind of society Mill had in mind. There is a clear difference from the society envisioned by Smith. In Mill's society, equality of opportunity would enable all citizens to be included in the competition and more people to pursue a wider variety of activities, leading to greater material wealth, and in each citizen's share. Mill's vision was compatibility of equality and economic growth. Although it was still tied to materialism, it opened the door to cast an eye on the socially vulnerable.[18]

for it; one feels that among all the lessons which men require for carrying on the struggle against the inevitable imperfections of their lot on earth, there is no lesson which they more need, than not to add to the evils which nature inflicts, by their jealous and prejudiced restrictions on one another."

18 John S. Mill, *Principles of Political Economy*, in *Collected Works of John Stuart Mill*, vol. 2-3, ed. J. Robson et al. (Toronto: University of Toronto Press, 1965), 756. Mill argued that humanity should stop economic growth of its own volition considering the global environment. In 1848, he argued as follows. "Nor is there much satisfaction in contemplating the world with nothing left to the spontaneous activity of nature; with every rood of land brought into cultivation, which is capable of growing food for human beings; every flowery waste or natural pasture ploughed up, all quadrupeds or birds which are not domesticated for man's use exterminated as his rivals for food, every hedgerow or superfluous tree rooted out, and scarcely a place left where a wild shrub or flower could grow without being eradicated as a weed in the name of improved agriculture. If the earth must lose that great portion of its pleasantness which it owes to things that the unlimited increase of wealth and population would extirpate from it, for the mere purpose of enabling it to support a larger, but not a better or a happier population, I sincerely hope, for the sake of posterity, that they will be content to be stationary, long before necessity compels them to it."

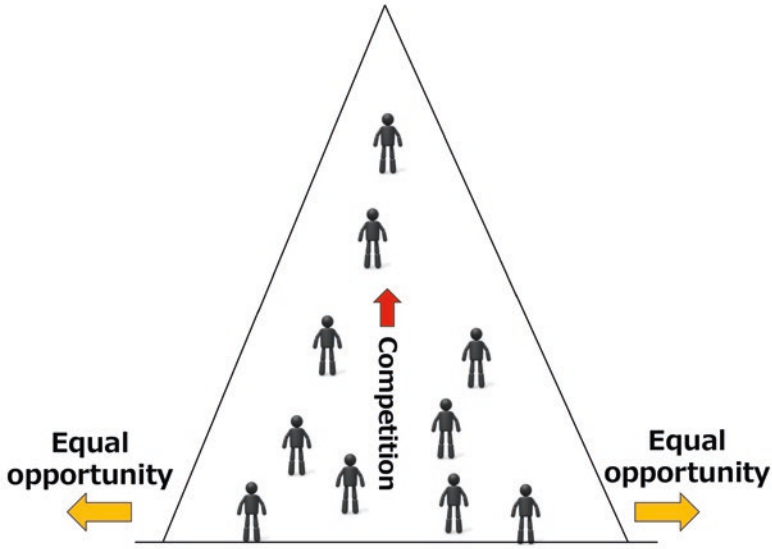


Figure 2

A SOCIETY FOR HUMAN DEVELOPMENT: AMARTYA SEN (1933-)

Amartya Sen was born in 1933 into a Hindu family in Bengal, British India (now Bangladesh). In 1942, when Sen was nine years old, the Great Bengal Famine occurred. A man delirious from hunger entered Sen's elementary school and died there. Sen was very shocked to see this and wished for a society where this kind of thing would never happen. Sen wrote numerous academic papers and books as an orthodox modern economist. But inheriting the ideas of Smith, particularly that of the impartial spectator,[19] Sen developed his vision of society from the perspective of "human development."

Sen proposed that life is a time given to us to expand our "capability": the range of available choices. Individuals, in Sen's view, should behave as "agents" to maximize their capability. An agent is someone who takes the initiative to act for themselves, rather than waiting for others to help them. In order to enable individuals – especially those whose expansion of capability is restricted by

19 Amartya Sen, *Development as Freedom* (Oxford: Oxford University Press, 1999), 92. Sen argues as follows. "Adam Smith's concern with the interests of the poor (and his outrage at the tendency for those interests to be neglected) related naturally to his use of the imaginative device of what it would look like to an "impartial spectator" – an inquiry that offers far-reaching insights on the requirements of fairness in social judgment."

natural or social factors – to behave as agents, society should provide the following five means: namely, economic facilities, political freedom, social opportunities, transparency guarantees, and protective security.[20]

Economic facilities mean material wealth; political freedom means equal political participation; social opportunities mean the opportunities to receive education, healthcare, and other services; transparency guarantees mean freedom of access to information; and protective security means preparedness for famine, disaster, and other risks. We should note here that economic facilities are no more than one way of human development. Sen's idea of development is about improving society in balance, rather than being weighted toward economic conveniences.

What is essential is that everyone must be an agent, obtaining the five means through their own action, rather than waiting for them to be given. This need to act applies not only to those whose capability is already well developed, but also to those whose capability is undeveloped. Naturally, this kind of action cannot be taken if individuals are divided from one another. This means that people need to be in solidarity. If everyone acts in solidarity with one another to secure the five means of human development, before we know it, each capability will be greater than before. This is the schema of human development formulated by Sen.[21]

Sen's idea of human development was adopted in the United Nations Development Programme (UNDP). Since 1990, a Human Development Index (HDI) has been published to indicate how seriously each country is working on human development, or in other words, how much they have furnished an environment enabling individuals to expand their capability.

From his standpoint of human development, Sen also aims to build an open society based on the plurality of identity. According to Sen, many different attributes make up our individual identity – meaning our own perception of who we are. These include age, gender, race, nationality, residence, occupation, religion, political convictions, hobbies, and so on. In a free society, individuals can select which of these attributes prioritize, depending on the time and place, to form a variety of interpersonal relationships.

20 Sen, *Development as Freedom*, 38.

21 Sen, *Development as Freedom*, 81-84; Amartya Sen, *The Idea of Justice* (Cambridge, Mass.: Allen Lane & Harvard University Press, 2009), 231-235.

On the other hand, some societies plant in people's minds an absolute sense of identity, based on a unitary standard such as nation, race, or religion. Such societies may appear to achieve greater cohesiveness, but individual thinking and behavior become one-dimensional and rigid, limiting the capability expansion. Moreover, connections with people in different societies are apt to be broken, and the risk of conflict and violence increases.[22]

Sen believes that we should engage more widely with diverse others and expand our capability, recognizing that we have multiple aspects of identity unrestricted by any specific identity. As the information age progresses, it has become more realistic than it used to be, to reach beyond the borders of nation, race, and religion, and interact with a diverse range of people.[23]

Sen's vision of society is illustrated in Figure 3. In the trapezoid, the individuals at the top have developed capabilities. On the contrary, the individuals at the bottom are prevented from developing their capabilities by natural or social factors. Sen's idea is to allocate resources to the individuals who cannot make full use of the opportunities open to them to develop their capabilities in the same way as others, by eliminating disincentives, even if doing so does not lead to economic growth. The dotted triangle represents the wealth that would have been produced if the society had not carried out such reallocation.

22 Amartya Sen, *Identity and Violence: the illusion of destiny* (New York: W.W. Norton, 2006), 16-17.

23 Amartya Sen, *The Idea of Justice*, 151-152. Using Smith's concept of impartial spectator, Sen argues as follows. "In today's world, global dialogue, which is virally important for global justice, comes not only through institutions like the United Nations or the WTO, but much more broadly through the media, through political agitation, through the committed work of citizens' organizations and many NGOs, and through social work that draws not only on national identities but also on other commonalities, like trade union movements, cooperative operations, human rights campaigns or feminist activities. The cause of open impartiality is not entirely neglected in the contemporary world. [...] it is hard to accept that we simply cannot understand each other across the borders of our polity. Rather, it is the firmly 'open' outlook, which Smith's 'impartial spectator' invokes, that may be in some need of reassertion today. It can make a substantial difference to our understanding of the demands of impartiality in moral and political philosophy in the interconnected world in which we live."

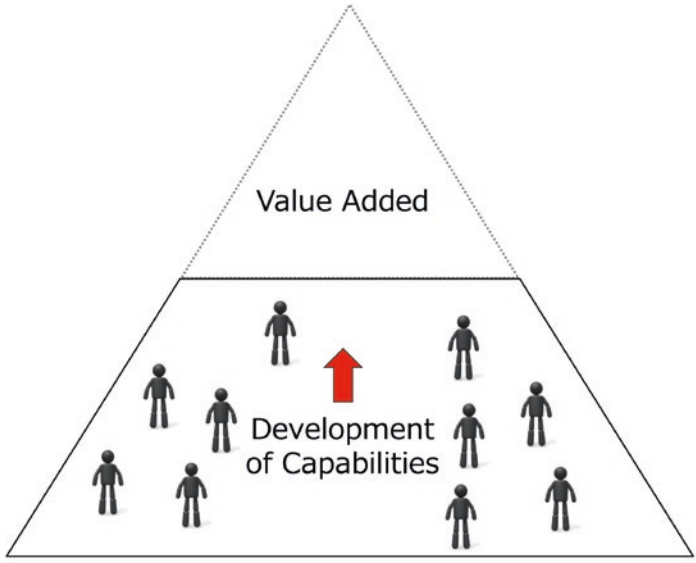


Figure 3

One might think that it is better to concentrate resources on people with developed capabilities, accelerate economic growth, and then distribute the results to those with underdeveloped capabilities. However, rather than promoting human development as a product that follows economic growth, Sen's idea is for society to prioritize the human development of those who are most disadvantaged.

BEYOND THE MODERN VIEW OF SOCIETY

The societies envisioned by Smith, Mill, and Sen are different in their ideas. However, what they have in common is that they place people able to contribute to the production of goods and services – let us call them the "capable" – at the center of society. They consider what methods can be used to distribute goods and services to people who cannot contribute to the production and simply consume those goods and services – let us call them the "vulnerable." If you ask them what "inclusion" means, they will all tell you that it means that the "vulnerable" become "capable" as much as possible. This is the modern view of society and what the actual social structure tells us. It is a system for increasing and distributing the material means of life, not for finding the meaning of life and flourishing life. This mistaking of ends for means is the root cause of many societal problems, including environmental destruction, widening inequality,

war, and conflict. Now is the time to return to the original relationship between ends and means.

MUTUAL-AID RELATIONSHIPS BETWEEN "*INOCHI* IN NEED OF ASSISTANCE" AND "*INOCHI* GIVING ASSISTANCE"

There is a place in Shizuoka City called *Kana no ie*, a home for people with an intellectual disability. The feature of *Kana no ie* is that it is *not* a facility for helping people with intellectual disabilities be more independent and bringing them closer to non-disabled people to participate in mainstream society. Instead, it has non-disabled people live together with the residents with disabilities, to help the non-disabled, overcome their fears, discriminatory attitudes, and other barriers within themselves.

According to the principles on which *Kana no ie* is run, people without disabilities do not simply assist those with disabilities. Rather, people without disabilities open up their hearts, thereby breaking down the barriers within their own hearts, by living together with people with disabilities, engaging with these people's emotional wounds and desires for friendship.

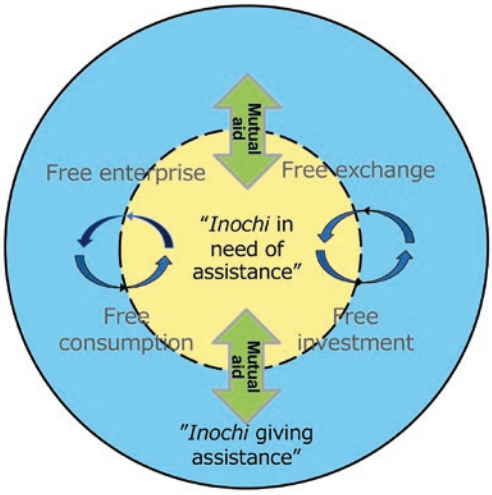
All humans protect themselves by building barriers in their hearts that lock away the emotional wounds and fears that they have experienced in the past. They also tend to dislike people who bring those wounds and fears to mind and avoid or exclude them. These kinds of internal barriers in people who want to think themselves "capable" are among the origins of attitudes like discrimination and violence.

For humankind to move forward towards a peaceful society free of discrimination and violence, we must turn our attention to those that have been excluded, engage with them, live together with them, and build friendships with them. It is not the excluded who need to eliminate the barriers within their hearts, but rather the people responsible for the exclusion. By being included by people living in difficulties, we can accept the weakness within us, feel the true meaning of life, and live vibrantly in any situation. In this sense, we see that people with intellectual disabilities and others who are excluded as the "vulnerable" from society are the ones with the hidden "capabilities" needed to liberate humanity and contribute to the future of our society.

Then, what kind of society should we be aiming for? The novel coronavirus pandemic has taught us that we live in an era where anybody can be vulnerable. Maybe it would be better to say that anybody can become "somebody in need of assistance." People who used to enjoy healthy lives suddenly become infected

one day, isolated, and, in some cases, leave this world without even being allowed to see their loved ones again. On the other hand, where emergency declarations are issued and lockdowns imposed, people can no longer earn their livelihoods, and life becomes a struggle.

The potential for people living ordinary lives to become "people in need of assistance" exists not only in the coronavirus case, but also in sudden health issues, earthquakes, typhoons and other natural disasters, climate change, energy shortage, wars, and any other social problems. So, we need to understand that we will continue to be in an era when anybody may become a "person in need of assistance." The most precious product of the pandemic might be the experience of sharing, across the whole of humanity, the knowledge that anybody may become vulnerable, or already is vulnerable.



* *Inochi* means something worthy to be protected, nurtured, and bonded, not only for humans but also for other creatures to live well.

Figure 4

Figure 4 shows the kind of society we should hope for in the new era. This society places "*Inochi* in need of assistance" at the center, surrounded by "*Inochi* giving assistance." (Here, the Japanese word *Inochi* means something worthy to be protected, nurtured, and bonded, not only for humans but also for other creatures to live well.) Each *Inochi* cannot exist in isolation, but is interconnected with each other, and forms one *Inochi* as a whole. The suffering of any *Inochi* is

the suffering of *Inochi* as a whole, which affects every *Inochi*. It is important to recognize that *Inochi* is inseparable, both spatially and temporally, and this recognition is the basis for mutual aid actions.[24] There are mutual-aid relationships between *Inochi* in need of assistance and *Inochi* giving assistance. Moreover, there is no fixed idea of who is "in need of assistance" and who is "giving assistance": the categories are fluid.

Each *Inochi* constantly helps another while switching roles, and flourishes itself as well as *Inochi* as a whole. This is the goal of a mutual-aid society.

THE ECONOMIC SYSTEM FOR THE MUTUAL-AID SOCIETY

Can the economic system which supports the mutual-aid society be established with keeping individuals' freedom of choice? In other words, can such a society be supported by an economy founded on free enterprise, free exchange, free investment and free consumption, where goods and services are produced and allocated through the free market? If individual choices were based on empathy for the lives affected by corporate activity, such an economy would be viable. We shall call it an "economy of empathy," and illustrate it in Figure 5.

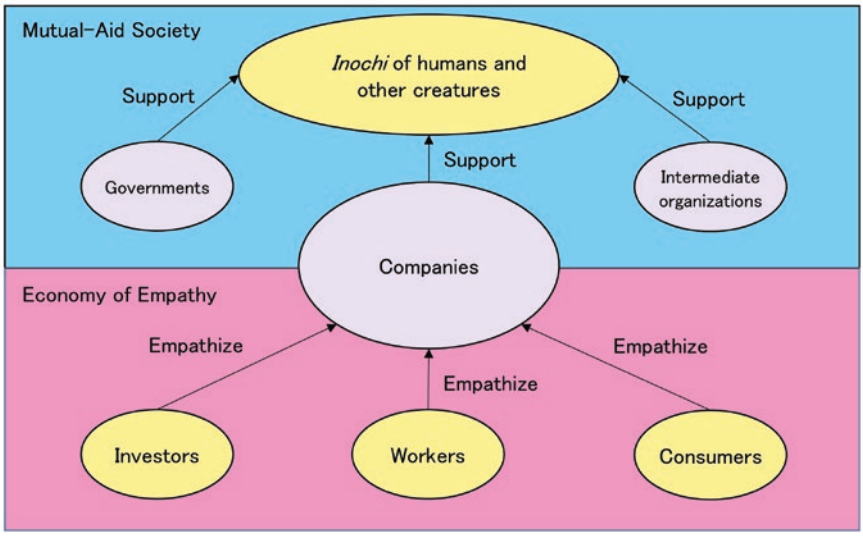


Figure 5

24 As for the "I" is inseparable from the "WE," see Chapter 2 of this book. See also Chapter 4 for how *Inochi* inhabits space.

The upper part of the figure is a mutual-aid society. The yellow part shows the *Inochi* of human nature and other creatures. In society, they are supported by governments, companies, and intermediate organizations. Among them, companies provide goods and services through the market.

The lower part of the chart shows how investors, workers, and consumers support such companies through empathy. Investors will support companies by investing preferentially in companies that care for citizens and nature. This is the so-called ESG investment.[25] Workers provide their labor services to companies based on similar criteria. Ethical job hunting by students is one example. Finally, there is ethical consumption. In other words, consumers do not just look at the price or the quality of the product, but how the product came to be, namely its supply chain.

In such an economic system, investors, workers, and consumers need to make choices, considering how the company affects employees, subcontractors, residents, and nature during the process of production, distribution, and consumption. To make such a choice possible, how the company supports people and nature, and the degree to which it does so must be measured and evaluated.

It is important to note that all people, whether investors, workers, or consumers, are human beings with lives. The bottom three ellipses in the diagram originate from the top ellipse. Therefore, viewed as a whole, this economic society is a self-help system in which *Inochi* supports *Inochi* using the vessels of companies, governments, and intermediate organizations.

Making this kind of society and economy a reality may seem like a pipe dream. But there are already several signs that we are moving toward that reality.[26] One example is the declaration in the SDGs that "no one will be left behind"; another is the Osaka-Kansai Expo, to be held in 2025 under the theme of "designing future society for our lives."[27] I myself have established a think

25 For example, the United Nations Development Programme has presented SDG impact criteria for enterprises, private equity funds, and bond issuers. See https://sdgimpact.undp.org/practice-standards.html.

26 See Chapter 10 of this book for models and practices of business organizations that support an economy of empathy.

27 See https://www.expo2025.or.jp/en. Osaka University established the *Inochi* Forum, with three economic organizations in the Osaka-Kansai area. The *Inochi* Forum

tank, the Social Solution Initiative (SSI), in Osaka University to envision a sustainable society looking ahead to 2050.[28]

CONCLUSION: WHAT WE SHOULD DO

This chapter has shown a mutual-aid society supported by an economy of empathy as a new stage to overcome the crisis and flourish in all life. It is also an answer to the question Smith left us, namely how to overcome division and extend empathy. Needless to say, the answer is not perfect.

Thus, a first thing we need to do is continuing to envision the society we should be hoping for. Like the scholars I have introduced – Smith, Mill, and Sen – we must grasp the context of the era we are living in, and think about what kind of society should come next. Ideas may not spring to mind straight away, but we must always be thinking, as we turn our gaze to many different social phenomena.

Next, keeping in mind the type of society we are aiming for, we must consider questions such as: what are the issues facing society in our own country, or globally? And what is needed, or what can be done to solve those issues?

Lastly, in our universities, workplaces, communities, and other places given to us, we must put our ideas into action. The action doesn't need to be something big. Nor does the action need to be taken alone. We can do it together with like-minded people. Such people can always be found.

The impact of individual activities may appear small and meaningless. But this is not the case. Each thought, opinion, and action propagates in other people and other organizations. As the network spreads wider, it is possible eventually to launch a social movement. History shows us that this is how transformations take place. Luther alone did not initiate the Reformation. It was made possible by the collaborators of his contemporaries and the unknown pioneers.

The important question is not whether it is "possible" or "not possible," but whether "we will do it" or "we won't." By doing it, we may find the meaning of life. The challenge to complex solutions is also the road to a flourishing life.

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will formulate the *Inochi* Declaration in 2025, which declares what humanity must do for a future society of flourishing life.

28 See https://www.ssi.osaka-u.ac.jp/en.

BIBLIOGRAPHY

Brewer, J. *The Sinews of Power*: *war, money and the English state, 1688-1783*. London: Unwin Hyman, 1989.

Butterfield, H. *The Origins of Modern Science: 1300-1800*. New York: MacMillan, 1951.

Meadows, Donella H., Dennis L. Meadows, Jørgen Randers, and William B. Behrens. *The Limits to Growth: a report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books, 1972.

Mill, John S. *Principles of Political Economy*. In *Collected Works of John Stuart Mill*, vol. 2-3, edited by J. Robson et al. Toronto: University of Toronto Press, 1965.

Mill, John S. *On Liberty*. In *Collected Works of John Stuart Mill*, vol. 18, edited by J. Robson et al., 213-310. Toronto: University of Toronto Press, 1977.

Mill, John S. "Utilitarianism." In *Collected Works of John Stuart Mill*, vol. 10, edited by J. Robson et al., 203-259. Toronto: University of Toronto Press, 1969.

Mill, John S. *The Subjection of Women*. In *Collected Works of John Stuart Mill*, vol. 21, edited by J. Robson et al., 259-340. Toronto: University of Toronto Press, 1984.

Sen, Amartya. *Development as Freedom*. Oxford: Oxford University Press, 1999.

Sen, Amartya. *Identity and Violence: the illusion of destiny*. New York: W. W. Norton, 2006.

Sen, Amartya. *The Idea of Justice*. Cambridge, Mass.: Harvard University Press, 2009.

Smith, Adam. *The Theory of Moral Sentiments*. In *The Glasgow Edition of the Works and Correspondence of Adam Smith*, no. 1, edited by D. D. Raphael and A. L. Macfie. Oxford: Oxford University Press, 1976.

Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. In *The Glasgow Edition of the Works and Correspondence of Adam Smith*, no. 2, edited by R. H. Campbell, A. S. Skinner, and W. B. Todd. Oxford: Oxford University Press, 1976.

Toynbee, A. *Lectures on the Industrial Revolution in England*. New York: A. M. Kelley, 1969.

CONCLUSION
HOW CAN A RENEWED CONCEPTION OF META-SCIENCE AID IN GLOBAL CHALLENGES?

ANDREJ ZWITTER AND TAKUO DOME

The book and its individual chapters discuss the concept of meta-science as the study of science itself while highlighting the limitations of the dominant scientific method in addressing questions of meaning, purpose, and human flourishing. We argue that the current scientific framework, influenced by materialism and secularization, neglects non-material aspects of human experience and diverse cultural perspectives as reflected in many of the chapters. The book calls for a more inclusive and holistic approach to meta-science that incorporates both Western and Eastern conceptions of what it means to be human and seeks solutions to societal problems. The chapters in the book explore various topics related to meaning, ethics, economics, justice, education, and decision-making from a meta-scientific and interdisciplinary perspective. Overall, we mean to emphasize the importance of considering non-

material aspects of human experience and cultural diversity in the study of science and the pursuit of a meaningful human existence.

The focus of inquiry in this context lies on the intricate nature of the human condition and the essential requirements for achieving flourishing and well-being, known as *eudaimonia*. Recognizing the complexity of this objective, an interdisciplinary and transdisciplinary approach becomes crucial. Interdisciplinarity is necessary because a single discipline alone cannot fully explain the multifaceted aspects of the human condition. Transdisciplinarity[1] is also essential because viewing the human condition solely from a scientific standpoint fails to capture the richness of human experience, which encompasses immaterial elements like love, appreciation of beauty and art, spiritual encounters, and other intangible components that have profoundly influenced cultures and societies. Consequently, it delves into the fundamental questions surrounding the nature of meaning and consciousness and their interconnectedness in shaping the world we perceive.

The human condition of the twenty-first century is influenced by a range of external factors, including scientism, secularization, digitalization, socio-economic pressures, individualization, and more. Some of these forces have deep historical roots, tracing back centuries, while others have emerged more recently, particularly in Western societies as a result of the Enlightenment movement or advancements in digital technology. The second objective of this program seeks to identify the constraints that hinder human flourishing and well-being within the larger framework of nature. It specifically investigates the systemic barriers that impede the attainment of eudaimonia.

The implications of meta-science as explored in this book are not merely theoretical. They might for example affect how the United Nations Sustainable Development Goals (SDGs) can be redesigned and renewed in 2030 to better reflect the intricate and immaterial aspects of the human condition. Drawing lessons from initiatives like Bhutan's Gross National Happiness and embracing concepts such as positive mental health, our book aims to incorporate a broader understanding of human well-being beyond purely materialistic measures. By doing so, it acknowledges the importance of holistic and inclusive approaches to address the complexities of human existence as part of a larger framework and perspective on life as a whole – *Inochi*.

Rather than providing a finished alternative to the "traditional" Western

1 Defined as practice and science exchanging knowledge and experience.

materialist conception of meta-science and science, our book tried to illustrate the necessary conditions and anchor points along which to reframe and redevelop novel approaches to accompany the traditional scientific method to deduce objective knowledge. Bergson's critique of reason as the sole arbiter of truth hinges upon the fact that reason and its methodology of attaining objective knowledge through the application of the scientific method can dissect and analyze the individual factors that make part of life. But reason is incapable of appreciating the complexity and meaning of life understood as *Inochi.* In contrast, intuition and instinct, as well as the personal experience of the *Lebenswelt* in different cultures and philosophies might contribute substantially to broadening our understanding of collective archetypes, which as formative undercurrents express themselves in the way we assign meaning to our experiences. As such, intuition and instinct might contribute as alternative approaches to quantification and objectification to an understanding of objective and subjective meaning of life. We therefore need a new meta-scientific take on the sciences that include an intercultural and meta-physical dimension that draws its validity from the shared subjective experiences both immanent and transcendent. The present book is but merely a first step towards such a new appreciation of the role of intuition and instinct, of intercultural philosophy and wisdom to augment the philosophies that neglect *Inochi*, such as physicalism and other materialist and mechanist approaches to the sciences related to well-being.

No goal for human flourishing (and as such the SDGs) can be established solely based on where we have come from. Attainable utopias by necessity need to include where we want to go based on our shared understanding of the meaning of life as being a part of *Inochi.* The SDGs can be used as a global platform for flourishing lives. It goes without saying that as we advance the SDGs and take action to "leave no one behind," people who are currently facing a variety of difficulties and being "left behind," will receive assistance and gain a more "flourishing life." But there is more to it than that. People who leave no one behind also gain a "flourishing life" by engaging with, empathizing with, and overcoming challenges together with those being left behind. It is through mutual aid between those being "left behind" and those who "leave no one behind," that we will co-create a sustainable and harmonious world. The Osaka-Kansai Expo to be held in 2025, whose theme is "future society for our lives," can be seen as a good opportunity to make a global network to realize such a world.

To realize a sustainable and harmonious world where every life (*Inochi*) is

flourishing, we need sciences, metaphysics, and religions in a wider sense. Science is the intellectual activity that clarifies the laws of the earth, and metaphysics is the intellectual activity that opens up ideas that include good and evil. Religions and philosophical world views that extend beyond the material body deal with the health and well-being of our soul and the transcendental being. What we need to do is to integrate these activities on the basis of asking the meaning of life (*Inochi*) and make them work together for complex solutions. The meta-scientific approach attempts to do this.

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Science has lost its ethical imperatives as it moved away from a science of ought to a science of is. Subsequently, it might have answers for how we can address global challenges, such as climate change and poverty, but not why we should. This supposedly neutral stance leaves it to politics and religions (in the sense of non-scientific fields of social engagement) to fill in the values. The problem is that through this concession, science implicitly acknowledges that it is not of universal relevance. Objective knowledge, as Karl Popper calls for, might be less easily attainable in the world of ideas and within the confines of scientific idealism. However, if ideas, values and meaning have equal claim to be drivers of change in the sense of causation, aspiring to identify objective knowledge about the world of ideas and of meaning is necessary. If the sciences and disciplines aim to give objectively valid reasons for our actions (and for how to address global challenges), we need to elevate the study of meaning beyond the cultural, disciplinary and ideational delineations. We need to come to a meta understanding of values and meaning equal to objective knowledge about the material world. But differently than in the material world this meta-understanding needs to incorporate individual and subjective experiences as cornerstones of objectivity on a meta-level. We need a science of meaning; one that can scientifically answer Kant's third question of "what may we hope for".

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