

**The Expanding Universe  
of Writing Studies**  
*Higher Education Writing  
Research*

Kelly Blewett, Tiane Donahue, and  
Cynthia Monroe, Editors



PETER LANG

This edited collection arrives at a crucial moment in the evolution of Writing Studies research. It brings together well-known and emerging scholars in the field of Writing Studies, broadly defined, to explore the range of research methods and methodologies, the types of research questions asked, and the types of data in play in research about higher education writing in the 21st century. Its contribution is unique in the current landscape—a collection of carefully detailed descriptions of the research methods that constitute the field today, after fifty years of development—as marked by the 50th anniversary of the 1966 Dartmouth Seminar. The chapters focus on writing and writers in higher education, foregrounding research questions, methods, and data, while defining the areas of research that constitute this interdisciplinary field and offering examples of studies that employ the methods in these areas. Initial chapters address broad questions: the state of the field today, with a special focus on the field's methods and their (inter)disciplinary history. Contributions then cover domains such as sociological ethnography, cultural-historical activity theory, linguistics, decolonial translation, cognitive science, corpus linguistics in the study of writing in university first year and upper-level contexts, recurring features in writing across academic contexts, work from psychologists studying college writers' neuroplasticity, and many other domains of writing research. The final chapter argues for the value of lifespan writing research as an emerging domain, while the conclusion presents a synthesis of the major themes of the collection from leading scholars in the field.

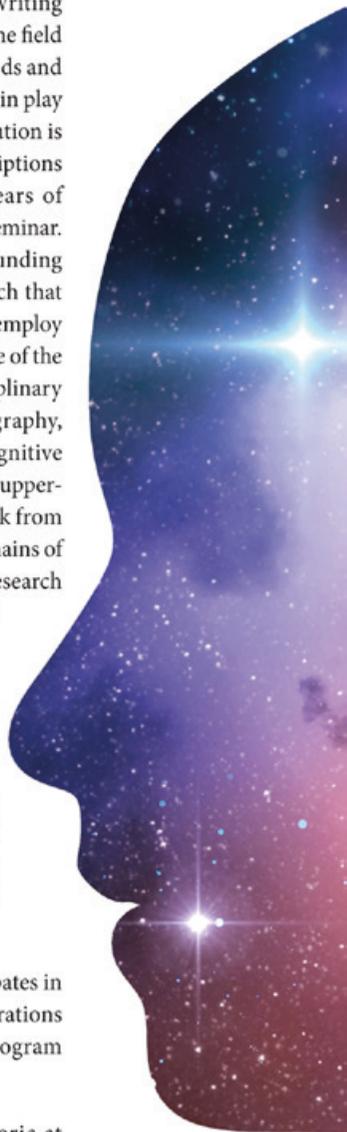
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STUDIES IN  
COMPOSITION  
AND RHETORIC



The Expanding Universe  
of Writing Studies



# STUDIES IN COMPOSITION AND RHETORIC

Alice S. Horning  
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Vol. 14

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The Studies in Composition and Rhetoric series is part of the Humanities list.  
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# The Expanding Universe of Writing Studies

Higher Education Writing Research

Edited by  
Kelly Blewett, Tiane Donahue,  
and Cynthia Monroe



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New York • Bern • Berlin  
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To the network of scholar-teachers, past and present,  
connected through our experiences at Dartmouth.

KB

To Frédéric François, who taught me everything I know about generosity.

TD

To my teachers and students.

CM



*“With the niceties of the opening session out of the way, forceful thinkers and speakers representing all shades of opinion [...] unblushingly challenged many of the basic assumptions on which most English instruction is based. Few participants who really cared about the teaching and learning of English escaped searching self-analysis; few, I think, remained unshaken in some of their basic convictions. For most of us, Dartmouth provided an experience unlike anything we have had before.”*

- James Squire, Executive Secretary of the NCTE, 1966

*“What [...] the Dartmouth Seminar has been creating is a methodology of generosity—that our method of doing research starts from a place of openness to many perspectives and of seeing what they might contribute, both to our own work and to our field of research more broadly (in contrast to starting from a place of critique). This methodology of generosity is making possible both collaborations and a depth of insight that we can’t get from our individual methodological silos.”*

- Dartmouth Conference Closing Session Participant, 2016





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# Introduction

KELLY BLEWETT, TIANE DONAHUE, AND CYNTHIA MONROE

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In late August 1966, about 50 leading scholars from the US, UK, and Canada, including such now-recognized luminaries as James Britton, Albert Kitzhaber, James Squire, Wayne Booth and James Moffett, came together at Dartmouth College in Hanover, New Hampshire for the Anglo-American Conference on the Teaching and Learning of English, three full weeks of exchange and debate. At what became known as the “Dartmouth Seminar,” scholars from several disciplines, including English studies, education, linguistics, and psychology gathered to debate the direction of English studies and English teaching in the academy. The debates and conversations quickly turned to a focus on language and writing, and arguably forever changed writing instruction in the US, as this event became a turning point for the way writing was taught and studied in higher education, indeed it catalyzed the start of a new discipline, composition, now often called writing studies.

The initial Dartmouth Seminar drew out questions that continue to be the heart of the future of writing in higher education: questions of international writing instruction, of languages and literacy, of digital revolutions. In Sanborn Library and across campus, small-group and plenary discussions around working papers drafted in advance of the Seminar drove the insights of the Dartmouth '66 Seminar. Participants intended to move the field forward decisively via this focused attention and debate, tackling ways to understand the world, confronting

each others' views and models over the three weeks; they likely did not imagine, however, the impact the exchanges would have.

The year 2016 marked the 50<sup>th</sup> anniversary of this event, which had been described in retrospect, in correspondence to the event sponsor Carnegie Corporation, as “A tremendous stimulation to the field” (T. Booth, personal communication, October 18, 1976) and “One of the more significant events likely to affect the future” (J. Squire, Executive Secretary of NCTE, and J. Fisher, Executive Secretary of MLA, personal communication, October 30, 1967). Squire noted in late 1966, “Few participants who really cared about teaching and learning escaped searching self-analysis; few, I think, remained unshaken in their convictions” (personal communication, September 23, 1966). Marking the 50<sup>th</sup> anniversary, we hoped to provoke this same searching and questioning, via exchange about writing research, by hosting an event at Dartmouth College in 2016. The current volume, whose title is borrowed from the title of Chris Anson’s plenary at the event as well as his contribution here, grew out of the event. In 1966 as now, there is this simple truth: writing well matters, and it matters in institutions of higher education across disciplines and around the world. Yet *how* writing instruction should work best, *why* writing matters, and just what *writing well* is, remain sites of controversy, study, and discussion. What is the state of the art of writing research today? And why does that question matter? Pursuing answers to these questions using a range of methods drawing from the sciences, the social sciences, the humanities, and trans- or interdisciplines is needed now more than ever.

Methods today might include those in the social sciences (ethnography, social construction analysis), sciences (eye-tracking, keystroke logging, cognitive research), squarely humanities (textual analysis, archival study), or unavoidably interdisciplinary and transdisciplinary domains, with fertile future possibilities for intersecting, inter-informing methods and frames. And yet, methods have been less centrally discussed and taught in writing studies in the past decades. In addition, scholars using methods from different disciplinary grounds have rarely worked together. The attendees of the Dartmouth ’66 Seminar represented a broad range of disciplines and backgrounds, which was part of what led to its depth and rich results. We have worked to match that disciplinary diversity, here, as we have focused on the methods used to productively study writing and writing instruction.

And, because the field is deeply invested in pedagogical questions, we also want to ask, what are the ramifications of our research for our practice? As Bazerman (2011) has noted, we are at heart “a practical discipline, no matter how far it wanders into arcane corners of history or psychology or sociology. As a field its motive comes from helping people to use written language more effectively, for both production and reception. It is also a discipline closely tied to making and interpreting

meaning of written signs within particular socio-historic circumstances, and is thus creative, hermeneutic, and contextual” (p. 15). This means that we must focus in on both research and the ways it informs practice. Any discussion of why writing well matters must also extend beyond writing scholars. The discussion should capture the knowledge that outstanding teachers and writers are already putting to work every day, as well as the knowledge about writing and speech in practice held by scholars in many other disciplines.

We also sought to bring together people from disciplines and writing research perspectives that don’t normally talk to each other, echoing this kind of encounter in 1966. While certainly disciplinary boundaries are always in some ways artificial, they are still foundational, creating the possibility for interdisciplines and for pushing against those boundaries. The event we imagined would encourage both “generous reading” of other methods and critical engagement with them. The purpose of the 2016 conference was thus to create the opportunity for an important moment in the field, a focus on the diversity of research traditions, the questions they try to answer, and how they should speak to each other. A focus on research traditions, methodologies, and methods in our field should, in part, broaden what “in our field” means. In the process, we hoped to engage and reframe questions of the distinctions and interactions between “method” (how a researcher collects, records, gathers, and analyzes data, the tools or processes used) and “methodology” (the justification for using a given method; the lens, paradigm, or frame a researcher brings to the method choices).

Building on the 1966 event, we offered a working institute followed by a three-day conference, drawing in national and international scholars across research disciplines to study writing and writing instruction in the twenty-first century. The volume’s contributors all study writing and writers in higher education in some form, with the intent to foreground research questions, methods, and data. Authors are both well-known and emerging. They offer various responses to *what is the state of the art in writing research today?* From which disciplinary frames? Using which diverse methods? Informing practice in what ways? Engaged via which twenty-first century digital tools and language realities? The focus on research also connects us to current topics such as evidence-based decision-making, the value of the Humanities, big data research, the usefulness of writing knowledge, writing in relation to post-college demands, and interdisciplinary innovation. Finally, the authors work in a variety of language traditions. Because our aim is to capture a multi-voiced conversation, we have opted to retain any linguistic variations of English as natural to the academic voices of the contributors.

It is typical to offer an overview of chapters in the introduction to a collection like this, but we do not do so, here, because of two unique features in this

volume: its interchapters, and its “Table of Research Methods.” We recommend that readers interested in gaining a sense of the work overall and the flow of our thinking read the brief interchapters and look at the table, provided following Chapter Two. The book uses a “guided path” organization. Rather than organizing around methodological camps, we were interested in the way that projects overlapped, in methodological approach, but also in terms of the phenomenon studied and the questions asked. Chapter Two provides an overview of the table’s creation, including the way that questions were foregrounded in the later editions of it. The interchapters serve as a way to draw out connections from chapter to chapter. The interchapters also connect to the table, but these connections are meant to be an invitation, not a definitive establishment. Readers will thus find brief references to the table but not exploration of the connection; we seek to encourage readers to look at the table and reflect on both the suggested connections and their own. They should also help readers to collectively think about the table itself, which was first conceived and crowdsourced at the 2016 event and is meant to be a living document, not an “establishment of truths.”

Contributions reflect on methods as various as sociological ethnography, interviews, surveys, archival history, cultural-historical activity analysis, linguistic analysis, corpus linguistics, decolonial translation, psychological experiment, and cognitive science. Some of the chapters include a response, because that response was built into the conference session from which the chapter developed. A late chapter argues, drawing from the range of methods in play, for the value of “lifespan” writing research as an emerging domain, while the concluding chapter presents a synthesis of the major themes of the collection, from leading scholars in the field. The volume thus makes a contribution that is unique in the current landscape—neither a manual on how to conduct research nor a set of contributions meant to inform teaching, but a collection of carefully detailed descriptions of many of the research methods that constitute the field today, after fifty years of development, though certainly with key gaps (for example, significantly insufficient attention to second-language writing, translanguing developments, neuroscience, reading/writing connection; disability studies; multimodal/digital composing). We imagine this collection will serve different purposes for different readers, and hope it will be a discussion-starter as well as a foundation for the next fifty years of writing studies research.

## References

- Bazerman, C. (2011). The disciplined interdisciplinarity of writing studies. *Research in the Teaching of English* 46(1), 8–21.

# After the Big Bang: The Expanding Universe of Writing Studies

CHRIS M. ANSON

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Fifty years ago, the energy driving a swirling mass of questions about the nature and development of writing—energy felt no more tangibly than at the famous Anglo-American Conference on the Teaching and Learning of English (Dartmouth ‘66 Seminar)—led to an eventual explosion of research that sees no sign of abating. Over the five decades since, entire worlds of inquiry formed, each revolving around its own methodological system and pulled inward by the gravitational force of its focus. As their ecosystems flourished, inhabitants of these worlds have found it increasingly difficult to keep up with the activity within them, much less turn their gaze outward. But not exploring and exchanging with scholars in those other worlds of research—no matter how alien their methods and assumptions—limits our collective understanding, hems in our imagination, and leaves us without a basis for theorizing models of writing across contexts. Using several indices of growth, this chapter first explores the remarkable development of the field since the Dartmouth ‘66 Seminar, and then considers the intellectual consequences of that development for the future of research and the extent to which writing scholars can afford to hyper-specialize at the cost of intellectual dissociation and fragmentation.

## The Big Bang of Writing Studies

The Dartmouth '66 Seminar has come to represent a major catalyst in our thinking about writing and in the trajectory that scholars established for inquiry into its nature, processes, uses, and development. In both scholarship and professional lore, the meeting has taken on almost mythical significance. Brereton and Gannett (2016) documented it as a “milestone,” a “watershed event,” a “formative source for modern composition studies” (Miller, 2011, p. 20), a “Copernican shift” (Harris, 1991, p. 631), even a “revelation” (Gold et al., 2012, p. 239). For Durst (2015), it was “instrumental in countering the current-traditional approach” (p. 389), and Trimbur (2008) remarked that the conference now has “legendary stature in the annals of U.S. composition” (p. 142).

Before the 1966 conference, the universe of writing studies was obviously not dark and void. Five years earlier, the National Council of Teachers of English (NCTE) invited three eminent language scholars to identify a dozen empirical studies that could explain and support the most effective methods for teaching writing (Braddock et al., 1963). The team collected over 1,000 possible studies, suggesting considerable existing inquiry into the teaching of writing. But there were strict criteria for inclusion: studies had to employ scientific methods such as controlled experimentation and textual analysis. These criteria cut the list by half, and then, with the help of 17 additional language and literacy scholars, it was further reduced to 100. Of those, only five exemplary studies ended up informing the report, published as *Research in written composition* (“under the supervision & with the assistance of the NCTE Commission on the State of Knowledge About Composition”). Reflecting on their rigorous process of elimination, the authors concluded, “Today’s research in composition, taken as a whole, may be compared to chemical research as it emerged from the period of alchemy. [...] The field as a whole is laced with dreams, prejudices, and makeshift operations” (p. 5). By today’s standards, even the five “distinctly superior” studies the team identified are clearly limited in their scope, understanding, and accessibility; two were already out of print and three were available only as mimeographed documents. Although there is plenty to commend in the report, including a call for more research on environmental, psychological, instructional, and rhetorical factors affecting composing, it is easy to see how much is missing in both perspective and content.

Still, in light of this and other research activity that preceded the Dartmouth '66 Seminar, why is the conference so often invoked as the genesis of the field of writing studies? In answering this question, scholars point not to the event itself but to the complex discussions it provoked, especially differences that emerged between the positions of the attendees. Harris (1991) described a palpable tension

that arose between interest in the “profession” of English (said to be strongly represented by American participants) and in the experiences students should have of it—the “growth” model represented by the British attendees, including James Britton and John Dixon. As Trimbur (2008) put it, the Dartmouth ‘66 Seminar set up “a trans-Atlantic encounter of the British growth model and the American curriculum-sequencing model, pitting process and personal growth against the logical development of subject matter” (p. 142).<sup>1</sup> These and other accounts suggest that the impact of the Dartmouth ‘66 Seminar came less from resolution than from a collision of ideas and traditions—albeit Anglophone in focus—in the midst of an interest in new questions.

Additional accounts of the field’s origins (see, for example, Nystrand et al., 1993) historicized the exigencies, and the educational and political climate, surrounding the discussions at Dartmouth. But there is little question that the Dartmouth ‘66 Seminar now represents a kind of symbolic Big Bang of writing studies involving a collision of views that blasted new ideas out into the unpopulated space of inquiry, pointing toward the need for serious, well-designed research into the nature and development of writing. Satellite structures and new bodies soon formed from the fragments, such as the establishment of the International Federation for the Teaching of English (IFTE). The IFTE’s chief operatives, representing the NCTE, the National Association of Teachers of English (NATE), and other bodies, then helped to organize further important events such as a conference in York said to be the “first official successor to Dartmouth” and a UNESCO-supported conference in Sydney, among many other activities (Watson, n.d.). Dartmouth itself spawned many influential publications and papers, including Dixon’s *Growth through English* (1967) and Moffett’s *Teaching the Universe of Discourse* (1968), which served as the foundation for further work.

## The Expanding Universe of Writing Studies

But what exactly followed the Dartmouth ‘66 Seminar? Positioning the conference in the context of key indices of the field’s development shows the importance of its historical moment. These indices include the growth of graduate programs and dissertations, faculty specialization, professional journals, influence on other disciplines, undergraduate majors and writing centers, and the development of new research methods.

By many standards, fields of inquiry both nourish and are nourished by graduate programs where high-level research can be taught, learned, and generated. At the time of the Dartmouth ‘66 Seminar, there were no organized graduate

programs where students could take research-related coursework and write dissertations on the development of written literacy. Doctoral students interested in researching writing processes had difficulty pursuing their interests. Nystrand (2003) documented the serious challenges Janet Emig faced in writing her dissertation at Harvard, which became the groundbreaking and highly influential NCTE monograph *The composing processes of twelfth graders* (1971). Although Emig's roadblocks included attitudes toward women scholars and a lack of suitable mentors, research on writing was also so nascent that it was not seen as an important area of inquiry. In Emig's own words, "There was really no true acceptance of the fact that [composition] could be studied and/or taught" (qtd. in Nelms, 1994, p. 111).

Not to be deterred, scholars interested in writing eventually helped to establish specializations within existing graduate programs as well as freestanding degrees in composition and rhetoric. According to Chapman and Tate (1987), the earliest graduate program was established in 1970. By 1986, there were 53 programs they described as nominally organized; just six years later, the count was 74 full-fledged programs (Brown et al., 1994; see also Skeffington, 2009). Although an update in 2000 showed slight declines in programs and faculty, there was a significant rise in the number of PhD students studying rhetoric and composition (1,276), an increase of over 100 students since the 1994 survey (Brown et al., 2000). Ackerman's (2007) analysis also depicted the dramatic rise of post-graduate degrees, displayed in Figure 1.1. Notice that the trend begins in earnest in the years following the Dartmouth conference.

The emergence of graduate programs paralleled many new jobs at institutions looking for writing program administrators (WPAs) who had more expertise in the subject than their mostly literature-trained predecessors.<sup>2</sup> First-year composition programs had grown steadily after the establishment of what historians believe to be the earliest such program at Harvard in the late nineteenth century (Brereton, 1995) but were not associated with research on writing. After the Dartmouth '66 Seminar, many programs experienced rapid growth and professionalization, with extensive curricular reform influenced by emerging theory and research. Universities mindful of their reputations and quality rankings hired WPAs with PhDs or concentrations in writing research. This trend is reflected in statistics reporting the number of faculty specializing in rhetoric and composition, from approximately 233 in 1987 to 567 by 1993 (Brown et al., 1994). The flourishing of the field and the relationship between research, instruction, and program development was bound to create innovations such as undergraduate writing majors (see Chapman et al., 1995; Estrem, 2007) and collaborations with experts in assessment, student development, and the scholarship of teaching and learning.

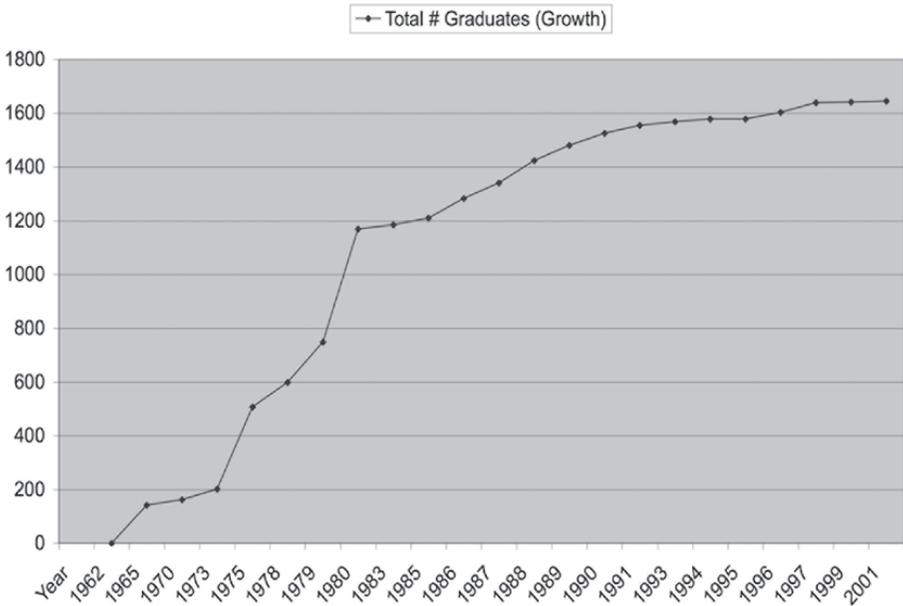


Figure 1.1. The rise of doctoral programs in composition. From Ackerman, 2007. Reproduced by permission of author.

As Goggin (2000) reminded us, the specialization of writing programs accompanied an exponential growth of scholarship and research on writing in all its forms and contexts. At this writing, CompPile, the most extensive database of publications in the field, includes over 112,000 records, yet is still far from comprehensive and is under continued development. Compilations of published scholarship now face challenges of representation; the 1,760 onion-skin pages in the *Norton Book of Composition Studies* (Miller, 2009) barely scratch the surface in representing what has accumulated, and recent handbooks synthesizing research on writing, such as Bazerman (2008), Smagorinsky (2006), and MacArthur et al. (2006) reference thousands of studies across multiple fields of inquiry (see Anson, 2010a). Research on writing now inhabits many *undergraduate* curricula, supported by texts such as Kinkead's (2016) introduction to methods for studying writing, and opportunities exist for undergraduate students to showcase their work, such as the CCCC's annual undergraduate research poster session.

The burgeoning of research activity can also be seen in the establishment of journals since the Dartmouth '66 Seminar. Figure 1.2 shows some of the main journals in the field of writing studies, arranged by the year in which they were founded. Early journals such as *College English* and *College Composition and Communication* still provide broad coverage, but as the field developed into more

specific domains of inquiry, it gave rise to journals devoted to specific populations of writers, genres or contexts of writing, or activities associated with writing, such as writing centers, basic writing, and writing assessment. Paralleling Nystrand et al.'s (1993) analysis of the field's development, we can also see the influence of various intellectual trends on the perceived need for more focused venues of publication (the social turn, the development of writing research and pedagogies in other disciplines, interest in service-learning, the advent of computer technology, and so on).

2017 *Rhetoric of Health & Medicine*  
 2017 *Journal of Writing Analytics*  
 2015 *Journal of Response to Writing*  
 2013 *Literacy in Composition Studies*  
 2011 *Technoculture*  
 2009 *Present Tense*  
 2008 *Journal of Writing Research*  
 2006 *Community Literacy Journal*  
 2003 *Journal of Writing Assessment*  
 2000 *Reflections*  
 1999 *Inventio*  
 1997 *Enculturation*  
 1996 *Kairos*  
 1994 *Assessing Writing*  
 1994 *Across the Disciplines*  
 1993 *Readerly/Writerly Texts*  
 1992 *Technical Communication Quarterly*  
 1992 *Journal of Second Language Writing*  
 1992 (?) *Composition Forum*  
 1989 *Writing on the Edge*  
 1989 *The WAC Journal*  
 1987 *Journal of Business and Technical Communication*  
 1984 *Written Communication*  
 1984 *Journal of Teaching Writing*  
 1983 *Computers and Composition*  
 1982 *Rhetoric Review*  
 1981 *The Writing Instructor*  
 1981 *Pre/Text*  
 1980 *Writing Center Journal*  
 1978 *WPA: Writing Program Administration*  
 1975 *Teaching English in the Two-Year College*  
 1975 *Journal of Basic Writing*  
 1980 *JAC (was Journal of Advanced Composition)* 1980  
 1973 *Composition Studies*  
 1968 *Rhetoric Society Quarterly* 1968  
 1968 *Philosophy and Rhetoric*  
 1967 *Research in the Teaching of English*  
 1962 *College English*  
 1950 *College Composition and Communication*

Figure 1.2. The rise of journals in Writing Studies.

When displayed in five-year intervals from their first issues (see Figure 1.3), the titles clearly show the steady, unabated increase in peer-reviewed outlets for scholars and practitioners. Of all these journals, only two were available to the scholars who convened at Dartmouth in 1966. The list in Figure 2—hardly exhaustive—contains 39 professional channels for the distribution of work in writing studies, two of them added in the past few years (the *Journal of Writing Analytics* and *Rhetoric of Health and Medicine*, both launched in 2017).

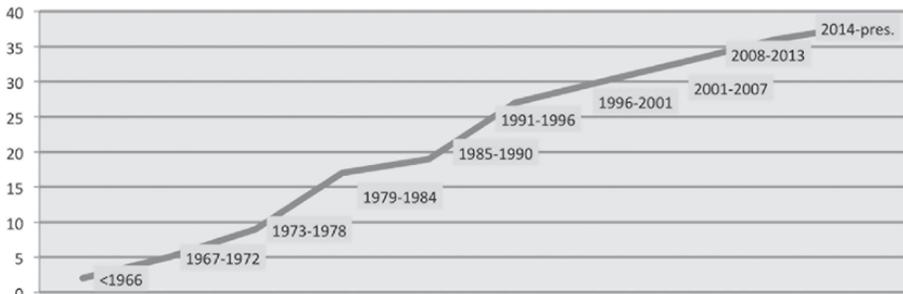


Figure 1.3. Cumulative increase in the establishment of journals, 1950–2020.

But even this extensive list does not reflect all of the journals that publish research on writing as a transdisciplinary phenomenon. In a project conducted in 1986 and repeated twice, I contacted the editors of journals in fields with potential interest in written communication and writing processes, such as *Brain and Language*, *Memory and Cognition*, and *Discourse Processes*, to gauge their interest in or practices publishing articles relating to writing. The positive responses yielded a list of over 100 journals (Anson, 1986; Anson & Miller, 1988; Anson & Maylath, 1992). The growing interrelationships between composition and other fields is also reflected in work explored and cited in composition journals—from philosophy, educational research, research on reading, artificial intelligence, cultural studies, communication, linguistics, analytics, and race and gender studies, to name a few.

Just as writing scholars were expanding the scope of their work, they also began influencing instruction in other disciplines. This influence can be traced through pedagogically-oriented journals across the curriculum, such as the *Journal of College Science Teaching* and *Teaching Sociology*. In a study of twelve such journals published over a 40-year period (deliberately starting the year after the Dartmouth '66 Seminar), I noted every article that focused in some way on the role of writing and its instruction within the discipline. These were further categorized by their orientation toward the development of skills or the enhancement of students' subject-matter learning (Anson, 2010b; Anson & Lyles, 2011). Figure 1.4

shows the growth of articles in both categories over time. While almost no articles focused on writing around the time of the Dartmouth '66 Seminar, the numbers increased thereafter, especially dramatically in the 1980s. Articles about writing to learn soon outstripped those about the development of writing skills—again a testament to the focus on process and development—along with major growth in the number of articles referencing scholars of writing. The theoretical orientations of some scholars who attended the Dartmouth '66 Seminar—with their focus on language development across contexts and across years of schooling—unmistakably influenced the Writing across the Curriculum / Writing in the Disciplines (WAC/WID) movement, which continues to expand: a recent survey shows that by 2010 there were over 560 established WAC/WID programs in the United States (Thaiss & Porter, 2010).

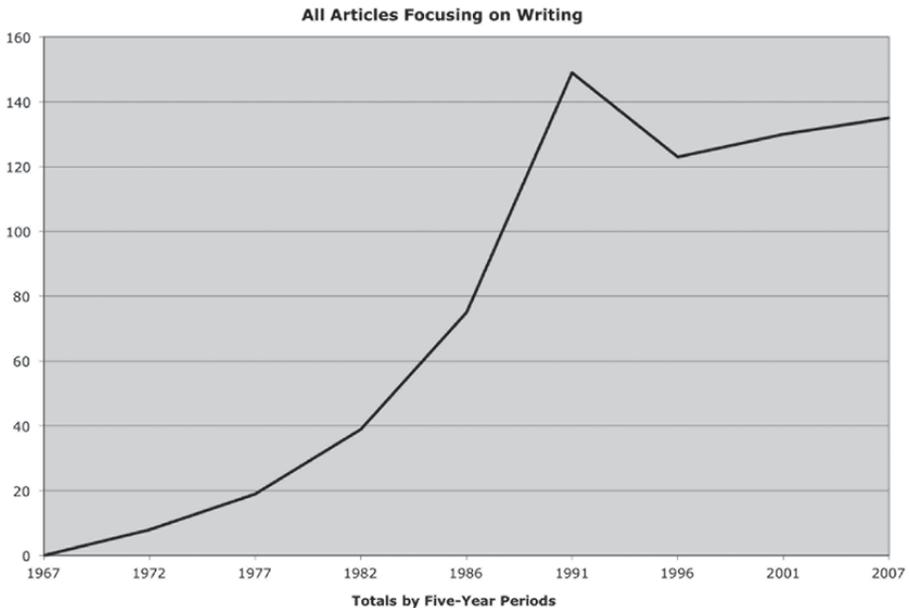


Figure 1.4. Articles in pedagogical journals across the curriculum focusing on writing instruction. From Anson & Lyles, 2011. Reproduced by permission of authors.

The Dartmouth '66 participants included skilled researchers who employed a variety of methods for their studies. But those methods were limited and had not undergone extensive refinement provoked by scholarly debate and application. As the field developed, it borrowed methods from a variety of other disciplines and also innovated new ways to tap into usually hidden processes underlying composing. Composing-aloud protocols, first used by Emig (1971), paved the

way for highly influential cognitive models of composing (e.g., Flower & Hayes, 1981). Procedures for text analysis, many borrowing from linguistics, flourished (Cooper, 1983). New methods of talking with writers about their work, such as the discourse-based interview (Odell et al., 1983), allowed for usually tacit composing decisions to be surfaced for analysis.

Just as ways of tapping into writers' thinking processes became more sophisticated, the field also embraced methodological self-critique, as demonstrated in Tomlinson's (1984) assessment of the validity of retrospective accounts. Battles between qualitative and quantitative researchers eventually calmed with the advent of mixed-methods research, further expanding the possibilities for inquiry. And writing research widened into many new scenes of inquiry, as documented in Roozen and Lunsford's (2011) analysis of studies of college and adult writing published over 100 years in NCTE journals. By the mid-1980s, North's *The making of knowledge in composition* (1987) could subdivide the field into historians, philosophers, critics, experimentalists, clinicians, formalists, and ethnographers, along with practitioners whose contributions included various kinds of experiential and lore-based evidence. Not without its critics, North's taxonomy still reflects the diversification of inquiry into writing since the point of departure for this analysis, the 1960s.

Today, researchers employ dozens of research methodologies, some imported and others created and refined within the field (Bazerman & Prior, 2008; Kirsch & Sullivan, 1992). The extraordinary methodological scope of the field is elegantly displayed in Dryer's table of inquiry (Chapter 2, this volume). Methods such as eye tracking and keystroke logging, or approaches such as cultural-historical activity theory (CHAT), would have been either unknown or unavailable to those who convened in 1966. Meanwhile, the rhetorical, situational, and modal aspects of written communication continued to diversify, requiring the development or extension of appropriate research methods. Hine's *Ethnography for the internet: Embedded, embodied, and everyday* (2015) or Baldry and Thibault's *Multimodal transcription and text analysis* (2006) would have been unimaginable in 1966.

At this juncture, it's interesting to wonder what the Dartmouth '66 Seminar participants might have thought if a time telescope had shown them what would follow their meeting in the future: a fully-developed field populated by thousands of researchers world-wide; abundant, well-established graduate programs; dozens of professional and academic journals; independent writing departments with their own faculty and students; a range of national and international organizations and conferences, some (such as CCCC) drawing thousands of delegates; and, thanks to the work of Louise Wetherbee Phelps and others involved in the Visibility Project, disciplinary recognition for writing studies by the National Research Council and

inclusion in the Federal Classification of Instructional Programs (CIP) (Phelps & Ackerman, 2010). But more importantly, what might the Dartmouth '66 attendees have thought about what became of research on writing—the questions asked, the methods used to answer them, and the epistemological underpinnings of those methods? And how might they have responded to the diversification and specializations that now make up the field? If Dartmouth created a new community of disparate scholars brought together across the continents to establish common goals and interests, what is that community now?

## The “We” in Writing Studies and the Need for Boundary Crossing

The explosion of writing studies has given rise to a striking diversification of questions, contexts, and methods for research along with the development of many subareas pursuing specialized interests. Yet scholars continue to invoke a single field populated by like-minded groups of researchers united in common pursuits. The term “we,” ubiquitous in published scholarship and conference presentations, gives the impression of a homogeneous field of inquiry pursuing common goals in common disciplinary contexts. But “we” deceptively creates an invented territory, masking important differences among those who might identify with the disciplinary and professional structures associated with the field. This problem is already evident in this chapter’s brief historical sketch, which leaves out parallel developments in other international settings and problematically places North America at the center of the writing-studies universe (see Hesford, 2006, for a helpful analysis).

Today, scholars of writing are quick to shape their identities around specific areas of research and the pedagogies it informs. These identities are reflected in the alignment of many doctoral programs, which variously emphasize digital technology, cultural rhetorics, applied linguistics and discourse studies, or rhetorical and professional communication, to name a few (see <http://rhetmap.org/doctoral>). They are reflected in scholars’ biographical statements, which position them along narrow bandwidths of research (assessment, reading/writing relationships, game theory, corpus linguistics, genre theory, big data, and so on). They are reflected in the scholarly orientations graduate students are urged to identify with in job applications. They are reflected in the lifeblood of each disciplinary identity and academic history, the research each reads, the language each uses, the lenses through which each defines what needs to be known.

The expansion of writing studies initially reflected an interdisciplinarity that *defined* an emerging field (Lauer, 1984; for a personal account, see Anson, 1993).

That continued expansion, however, has come at the cost of an increasingly fragmented community. Today, new writing scholars often identify with areas of inquiry defined by the populations they study, by their foci, by their methods and tools of analysis, and by their underlying epistemological orientations and assumptions. These specializations are reflected in the journals shown in Figure 2, most of them constrained in scope, purpose, or context, and in Dryer's synthesis in Chapter 2 of this volume. They are inscribed in the special-interest strands at conferences, so that attendees can stay in familiar territories and avoid adapting to other worlds of inquiry. As Bazerman (2011) has argued,

People pursue rhetorical analyses, or historical tracing of forms or ideas, or ethnographic studies of classrooms and other sites of writing, or psychological experiments or linguistic examinations of forms [...] often with great skill and subtlety, and often with the expense of long and rigorous training that helps keep their methods precise, their conceptualizations consistent, and their inquiries pointed. [...] Yet each of these disciplines reduces the phenomena we are concerned with, providing monotonic accounts, and, even more seriously, monotonic approaches to the teaching of writing (pp. 9–10).

Of course, the expansion of writing studies since the Dartmouth '66 Seminar was bound to form new clusters of work, each with the centripetal pull of its focus and methods. But while that process yields an intensity and coherence of inquiry, it also can limit the heuristic potential of exposure to other realms of research, and it can reify existing assumptions instead of pressuring them. Scholars in tightly circumscribed areas are skeptical of language they don't use, of methods that feel alien to them, and of larger paradigms that seem antithetical to their assumptions about the best way to know things. The resistance is reflected in Schendel and Macauley's (2012) desire to bring research on writing assessment (a "blind spot") into the work of writing centers. Citing Johanek (2000), they feared that "composition studies tend to appreciate narrative and literary types of research methods over quantitative ones" (p. 3). Numbers, Johanek wrote, "rouse math anxiety and are frequently accompanied by dry writing that argues from a position of objectivity that few in our field would support or accept" (p. 3). Schendel and Macauley have made a compelling case to extend writing center scholarship into these "feared" assessment methods—but they are not among the majority in aspiring to be *boundary crossers*.

Narrow sub-areas can also subtly reinforce scholarly myopia because their different methods and genres mask their shared focus. Scholars working in research microcosms because they were trained as experimentalists or ethnographers or corpus linguists, or because they work only with fourth-graders or college majors or members of tightly-knit community groups, may create a research trajectory and a feeling of academic membership with like-focused peers, but when sealed

off from other scholars, their work may not help to answer questions about writing in a broad-based and contextually diverse way.

A thought experiment demonstrates the advantages of boundary crossing. I asked a group of nine established writing researchers, most in attendance at the fiftieth anniversary Dartmouth conference, to imagine how and why they would want to gain a clearer understanding of a specific area of inquiry: response to writing before or during revision (which instructionally often takes the form of peer critique). Haswell (2008) claimed that peer critique is “one of the least studied of practices now very common in college writing classrooms” (211)—a concern also true for many other settings where writers provide feedback to each other. Some of the scholars who agreed had already studied response in their research; some were continuing to study it or planned to do so; and some did not have it on their research agenda but were happy to speculate about what and how they would want to explore it if it were an area of interest to them. I asked them to respond to four questions:

1. What *population* would you be most interested in studying?
2. What *questions* would you ask?
3. What *method(s)* would you use to try to answer those questions?
4. What *broader orientation* to the research would you be working from?

Table 1.1 represents a condensed version of the responses. Admittedly, the researchers responded relatively informally to my (informal) request, without the kind of depth and precision of a research proposal or an Institutional Review Board submission.

Although all would consider themselves members of “our” field of writing studies, the range of their interests, favored methods, and epistemological orientations is clear. In some cases, the distance between these features might predict that they would pass each other by. It’s understandable that someone steeped in qualitative research focusing intensively on specific contexts and writers or groups of writers might miss research that data-mines 25,000 electronically mediated peer reviews using corpus linguistics to ferret out patterns correlated with other variables. But both researchers are studying the *same* phenomena. Putting them together in a room to share the aims and results of their research could only generate a “Dartmouth effect”—an explosion of new ideas emanating from discussions of a complex process affecting virtually all writers and strongly linked to writing development. Easy consensus, however, is not the goal. After all, Dartmouth ‘66 “was not a feel-good event; its lessons appear in the form of conflicts rather than agreements” (Harris, 2015, p. x).

Table 1.1. Writing Scholars' Questions and Methods for Studying Response

Researcher	Population	Question(s)	Method(s)	Orientation
Paul Prior	Biologists	Who is responding, how, and to what effect?	Semi-structured and text-based interviews; analysis of documents and response interactions	Dialogic semiotics and cultural-historical activity theory; actor-network theory
Deborah Brandt	Editors across a range of contexts	What do they do in their practice? What does that reveal about their thinking?	Unobtrusive observation, text collection/analysis, interviews	Grounded theory and situated practice
Joe Moxley	Undergraduates at both ends of the ability scale	What's reflected in the language used in peer review?	Computational analysis of corpora generated through a digital peer review system	Data analytics and "big data"
Les Perelman	College juniors and seniors writing in their disciplines	What kind and how much feedback helps the transfer of writing ability to specific disciplinary expertise? Does efficacy of feedback vary across disciplines?	Focus groups, interviews, and surveys yield treatment groups; holistic analytics scoring of early and last assignments; regression analysis based on score differences as dependent variable	Transfer theory; genre theory; disposition toward hard data as persuasive in light of institutional politics

*Continued*

Table 1.1. *Continued*

Researcher	Population	Question(s)	Method(s)	Orientation
Ellen Barton	Rhetoric and Composition PhD students working with an experienced scholar on a research team	What's the relationship between single-authorship first drafts and team revisions relative to levels of authority?	Observations of team communication through tapes and transcripts of meetings, emails, drafts and revisions; then discourse analysis	Literature on graduate mentoring in rhetoric and composition; identifying unstudied contexts of high-stakes collaborations
Laura Aull	Middle- and low-performing students in writing classes	What feedback translates into (a) writing/grade/assignment improvement, (b) substantive writing changes and argument-level changes, and (c) commentary that students indicate helps clarify writing, genre, and/or assignment expectations?	Corpus analysis of feedback and students' writing along with qualitative and corpus analysis of assessment parameters, cues, and criteria	Theory of threshold concepts and linguistic reflection of assumptions and perceptions; relationship of feedback to discourse choices in revision
Clay Spinuzzi	Entrepreneurs learning to pitch innovations to stakeholders	How do multiple rounds of feedback help firms to develop a coherent argument relative to the genre conventions of a pitch?	Interviews of trainers/trainees; observations of training sessions and oral feedback; observations of judges' deliberations; interviews of previous years' trainees; text analysis	Interpretivist paradigm: combination of actor-network theory and genre theory

Table 1.1. *Continued*

Researcher	Population	Question(s)	Method(s)	Orientation
Neal Lerner	Graduate students in STEM fields	From whom, how, and why do grad STEM students seek feedback on their writing? What role does it play in their composing processes? What do they do with this feedback?	Open-ended survey followed by individual interviews and case studies	Social constructivism and theories of relationship between writing and power dynamics keyed to contexts and fields
Bradley Dilger	Writers transitioning into new workplaces, especially those who bring prior skills, knowledge, and experience (SKE)	What do participants understand as writing-related SKE and why? How do they understand the contexts, based on prior SKE which is or is not seen as relevant? What response choices and use of responses do they make for important documents that put SKE together?	Discourse-based interviews	Activity theory

Of course, it's hard to imagine that today's writing researchers can easily elbow their way out of the swelling crowd of scholars with shared interests in order to cross research boundaries. In light of serious constraints on inquiry—especially time to do it—aren't focus and specialization to be desired?

When considering the merits of boundary crossing, first it helps to separate the production of research from its reception. Some scholars boundary-cross both methodologically and epistemologically, finding that moving out of their familiar worlds of inquiry gives them new perspectives, insights, and ideas for further work. Consider, for example, well-known writing scholar and past editor of *College Composition and Communication* Jonathan Alexander. Alexander participated in a study that investigated the relationship between 17 college students' responses to

a peer's essay and what they actually focused on as they read (Paulson et al., 2007). "Focus" was determined by fixations captured with eye-tracking technology. The results showed "an unexpected mismatch between what peer reviewers focus on, spend time on, and examine multiple times when reading and peer reviewing an essay and what they choose to give feedback about during the peer-review session" (p. 304). The study was clinical in nature, and in addition to descriptive analysis, included statistics reporting the duration of subjects' fixations in milliseconds, paired t-tests of the average fixations made on error words as compared with the average fixations made on all other words, and standard deviations of subjects' fixations on the prompt while reading.

This study represents a methodological boundary crossing for Alexander, who describes his research interests to include writing studies and rhetoric, literacy studies, New Media, queer theory, science fiction, and popular culture. Among his monographs are one on young adult fiction, one on auto-ethnography and queer theory in the digital age, and one on literacy, sexuality, and pedagogy. Parallel to his scholarship, his role for many years as a WPA compelled him to engage in empirical research, but it was not what he identified with publicly. "I never moved to publish [all this work]," he wrote, "because I felt I was doing the work locally and not really expanding a larger scholarly conversation" (personal communication, July 2016). The eye-tracking study was different because he had always had an interest in peer review, then "found a colleague who was doing eye-tracking studies, and figured we had a chance not only to find out something local but also contribute to the national conversation." Most importantly, participating in the study was "fun."

For those like Alexander who are drawn outside their usual realm of research, or who feel a lack of preparation in certain methods and want to expand their skills, initiatives such as the annual summer Dartmouth Research Seminars are attracting both experienced and newer members of the field. But such opportunities, although very popular, still draw a very small percentage of scholars and students of writing. For most, boundary crossing in the production of research represents a journey too far, into worlds too alien, to risk giving up the time and resources needed to be active at home.

But even if writing scholars are understandably reluctant to produce research beyond the specific domains of their interest or familiar methods and approaches, they can learn about that research through publications, conference presentations, and other outlets. A challenge facing the field is encouraging scholars to explore disparate ways of studying the same questions about writing even across different populations of writers producing different genres in different contexts. Bazerman (2011) posed this as a necessary challenge:

I am asking for a much harder task of rethinking the relation of disciplines to each other, respecting the accomplishments and perspectives of each, taking seriously especially the evidence each makes available, and then developing a disciplined account that makes sense of these multiple perspectives within an integrative discipline—and finally developing new research questions and inquiries coming from integrated perspectives. (p. 9)

Another dimension of the “we” in writing studies deserves attention. The Dartmouth ‘66 Seminar focused on both the professional and pedagogical aspects of writing and literacy: who “we” are as scholars, and what students experience as learners. Since then, research has moved well beyond the contexts of classroom instruction to explore the nature of writing in multifaceted ways, including the personal, civic, occupational, academic, and intellectual potential and practices of writing. But the core relationship between research and teaching remains a powerful and central part of the field, by far the most populated category at the CCCC convention. At the same time, this relationship is vexed in practice. Research on writing creates new understandings and alters the life of teaching, but it does so usually at a very slow pace. Tens of thousands of teachers may be influenced only in incidental ways by scholarship or not at all, passing on outdated and ineffective methods or missing newly supported approaches.

A second challenge, then, is to consider how the “we” represented by researchers can best unite with the “we” of teachers across the vast landscape of writing instruction. How can teachers best share in and learn from emerging research? How can researchers best understand the effectiveness of various theories and interventions when they are enacted in actual classrooms? For some, Dartmouth ‘66 didn’t readily translate into instructional change, as Harris (1996) documented with reference to critiques about whether it was possible to transform teaching on a large scale, and as Hamilton-Weiler (1988) asserted after a study of classroom instruction; “we seem left now,” she wrote, “with only ‘empty echoes of Dartmouth,’ as students and teachers once again bow to the pressure of uniform tests and curriculums” (p. 633). Scholars know the challenge of bringing their research to educators, and much is made of reflective practice, teacher-generated action research, and the scholarship of teaching and learning. But few of these approaches are practiced at all levels. Conditions of employment for most writing teachers further deny them the opportunity to learn about new work in the field, much less participate in that work.

## The Infinitude Ahead

Astrophysicists disagree about the future of the universe. Some claim that the expansion starting with the Big Bang will eventually slow, stop, and then reverse course, resulting in a “Big Crunch” (Villanueva, 2015). Others offer a scenario called the “Big Freeze” (Siegel, 2016), when the universe’s expansion gradually “runs down” to maximum entropy over a hundred trillion years, leaving a temperature of absolute zero and cold, dead planets.

Neither analogy easily fits the field of writing studies. First, there is no dearth of questions worth exploring. If anything, they stretch ever further into the research cosmos, far beyond our lifetimes. Moreover, written communication will constantly evolve, mediated by as yet unimaginable technologies, learned in new ways by new generations of children and adults, in forms affected by language policy on a global scale, and through processes involving unexplored dimensions of personality, neurology, culture, and experience. Even questions that might be considered foundational beg to be re-explored. It is commonly assumed, for example, that over time and with practice and instruction, most writers can become more syntactically mature. But under what conditions? In what contexts? On what tasks and in what domains of knowledge? Which writers? With what purposes? Examined through which genres and media—test essays? Tweets or posts to Reddit and Facebook? Through which analytical methods? Using which frames of linguistic analysis? Correlated with which aspects of writers’ histories, self-efficacy, language backgrounds, and contexts of orality? With what regressions or false starts, caused by what factors? And with what possible habituations and sedimentations occasioned by the repeated practice of certain genres?

Dozens of new studies might add to and refine our understanding of syntactic maturity. These could include controlled experiments, corpus analyses, case studies and ethnographies, genre studies, linguistic analyses across very large data sets from different institutions or contexts, and so on. Boundary crossing by researchers will lead in turn to new questions that challenge our conventional thinking—for example, that certain aspects of syntactic maturity may be part of language processes in the brain that may have a predetermined neurological basis: Snowdon and colleagues found that syntactic features in the writing of 678 nuns entering a convent in their 20s predicted with 90% accuracy whether they would develop Alzheimer’s or dementia many decades later (Snowdon et al., 1996; see also Iacono, 2009).

We can also hope that over the next fifty years, boundary crossing between teachers and researchers will have a stronger reciprocal effect on the teaching and learning of writing, fulfilling one of the most important goals that attracted a

group of remarkable writing and literacy scholars to meet at Dartmouth in the late summer of 1966.

## Notes

- 1 Trimbur (2008) supplemented this “conventional” history with an in-depth analysis of how at least some differences were resolved through the establishment of “a conceptual framework, premised on linguistic and cultural homogeneity, that enabled at least a temporary resolution of growth and subject matter, the central tension between the British and the Americans” (p. 144). Still, whatever consensus emerged, many unanswered questions set the stage for the research trajectory that was to follow. For a detailed historical account, see Harris (1996).
- 2 This is not to suggest that directors of writing programs who had not been trained in rhetoric and composition made for uninformed administrators, as demonstrated in McLeod et al.’s (2017) collection of essays about two early WPA pioneers, Ednah Shepherd and Joyce Steward.

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While Chris Anson’s fast-paced opening chapter set the stage for the collection by exploring the rapid development and branching of Writing Studies since the 1966 Dartmouth Seminar, Dylan Dryer’s “Tabling the Issues: Visualizing Methods and Methodologies in Contemporary Writing Studies” presents a range of pressing research questions and methods for answering them. Originally crowd-sourced at the 2016 Dartmouth conference, the Table went through many iterations before arriving in the form presented here. Dryer led these discussions and refined the presentation of the Table.

In this chapter, he discusses the Table as an overarching, visual framework for understanding this collection, as well as the field of writing studies in all its complexity and connection to other disciplines. Dryer presents the methodology behind the Table and explains how it organizes and presents concepts, as well as clarifying its limitations and uses.

You’ll note that each introductory interchapter makes explicit some of the potential connections between the research questions and methods of the author(s) and the Table offered here. Certainly no one table can present all methods and approaches in this interdisciplinary field, yet an attempt to gather the varying methods into one table aims to avoid the “intellectual dissociation and fragmentation” Anson warns against in Chapter One. Our hope is that the Table will generate much conversation.



# Tabling the Issues: Visualizing Methods and Methodologies in Contemporary Writing Studies

DYLAN B. DRYER

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## The Genesis of the Project

As “College Writing”: From the 1966 Dartmouth Seminar to Tomorrow 2016 Institute and associated conference (Dartmouth ‘16 Conference) took shape, its steering committee was challenged to organize a widely inclusive yet internally coherent conference for our “parliament of disciplines” (Prior & Lunsford, 2008, p. 91). How to craft the call? Who to invite? How to organize the sessions? How to empanel papers? What were we missing (and how would we even know)? Put another way, these were logistical versions of the questions about the contemporary state of the art in writing research engaged by the Dartmouth ‘16 Conference and by this collection: “What are the driving research questions? From which disciplinary frames? Using which diverse methods? Informing local practice in what ways? Engaged via which 21<sup>st</sup> century digital tools, global contexts, and language realities?” (Blewett, Donahue, and Monroe, “Introduction,” this volume).

As the conference theme began to cohere around the need to get different parts of the field to engage in productive cross-talk, Christiane Donahue, the principal architect of the Institute and Conference, gave the steering committee electronic access to a draft of a table with which she had, as she explained, been “trying to classify a lot of the terms thrown around [in] intros and TOCs of the field’s few books about method or methodology” (personal communication, February 8,

2016). The committee put this table (for an illustrative mockup, see Table 2.1) to the immediate purpose of helping identify over- and under-represented areas in the draft CFP and invite-list.

Table 2.1. Mockup of Working Table Used by Steering Committee as Conference Program Heuristic

	Method	Object	Purpose/ Focus	Premises
collection method				
analytic method				
both				

Like the other committee members, I found this exercise of “tabling” the field interesting both for its heuristic and epistemic benefits, particularly the interesting disagreements and productive compromises over wording and category that arose while trying to arrive at plausible ways of sorting out which methods were being applied to which kinds of problems. So instructive were these discussions that I proposed keeping this table (henceforth “the Table”) alive during the Institute so as to incorporate a much larger pool of insights and frames of reference (as well as to provide a kind of material locus to both inspire and to capture conversations and insights about method).<sup>1</sup> This chapter contextualizes the version of the Table published here, a contextualization that tries to document some of what is necessarily excluded from the Table itself: certain significant field-decisions about categories, some useful ideas that had to be set aside for want of time, the persistent influence of the “source code” of the original table (see Table 2.1), as well as certain ongoing tensions in the field this collaboration highlighted.

## What’s in a Table?

Jack Goody reminds us that tables are simplifications, ones that produce an “order that reflects the structure of a matrix more obviously than the structure of the (or a) human mind”; more insidious, he implies, is the epistemic trap of the “empty box” that must be filled once rows and columns have been plotted: “the matrix,” as he says, “abhors a vacuum” (1977, p. 68, 153). As a critique of anthropology’s tools-in-trade, Goody’s reservations are sensible (especially given the example he holds up for critique, a ludicrous early eighteenth-century table of the personal characteristics of citizens of ten European nations, pp. 154–5). Lurking in Goody’s critique is a premise that Writing Studies rejects: true knowledge somehow precedes

writing; insights *caused* by writing remain suspect. Writing Studies can and should acknowledge Goody's still-important reservations about epistemological strait-jackets (see, most obviously, chapters in this volume by Cushman and Makoni); even so, we are better equipped than most to see the "empty box" as an opportunity space for previously unthought thoughts.

Warren (2014) finds that "research on tables is neither plentiful nor well-known" (p. 203). Certainly there is ample *advice* on table-design (some of which the Table has obviously ignored in its pursuit of comprehensiveness); the best of this advice is coupled with usability imperatives for information processing and ethical imperatives for information representation, following Tufte (1990; 2001). Campbell-Kelly et al. (2003) historicize the emergence and development of mathematical tables; closer to home, Gross (1983; 1990) and Manning (1989) debate the feasibility of applying semantic theory to graphical figures (including tables). For some time now, information-organization schemas have been securely within the purview of technical writing instruction, yet beyond a general acceptance that tables usefully mobilize principles of proximity and repetition for cognitive efficiency, they remain undertheorized. More to the point, this small body of work is focused on tables of descriptive or inferential statistics; nothing that I can find addresses the widespread use of informational, discursive, or language-based tables in Writing Studies research, where cells are populated not by numbers but by words.

Not confined to results sections, language-based tables are nomadic: summarizing a theoretical framework (Horner et al., 2011, p. 272) or anticipating one (Ivanič, 2004, p. 225); detailing the parameters of study design (Lillis, 2008, p. 357), the demographic characteristics of study participants (Barnes & Smagorinsky, 2016, p. 4), or the scope of available knowledge (Klobucar et al., 2012, p. 114); providing representative samples of coding nodes (Skaar, 2012, p. 248–9); mapping sequences of instruction (Angulo & Parejo, 2010, p. 185), and many other uses. Language-based tables share with their statistical counterparts a "deceptively simple" engine of discovery: rows and columns (Campbell-Kelly et al., 2003, p. 14). In numerical tables, the workings of the engine of comparison is comparatively straightforward: the cell intersections are interval variables that enable the eye to move among the rows and columns and to generate things to think about (for an excellently provocative example, see Anderson et al., 2015, p. 221). The important difference in language-based tables is that the cell-contents in ask more from us; words require translation, less can be assumed and will always remain to some extent indeterminate. Just as it's important when considering a statistical table to keep in mind the workings of the calculations that produced the

number in any particular cell, the necessary brevity of the language in a cell hides the compromises and negotiations that produced it.

At their heart, language-based tables, like their statistical cousins, are still trying to facilitate comparison by arranging felicitous conditions for discovery: coincidence in the literal sense of co-inciding, for seeing the familiar in complex and perhaps novel contexts. A language-based table, then, affords questions like: “What is this category of things when it’s in this column as opposed to that one? What is that concept when it’s cross-indexed with that row instead of this one?” In either case, as Edward Tufte (1990) insists (and this point will bear touching on again shortly), a table’s purpose is to equip us properly *for* a conversation, not to obviate one.

## The Revising Process

As Anson notes in the opening chapter of this volume, a theme sounded consistently during the 10-day Institute that led up to the Conference was that the methodological orientations of Writing Studies are complex because its object of inquiry is complex: writing is cultural, cognitive, linguistic, material, historical, intersubjective, intrasubjective, and so on, and the making of new knowledge will require both boundary crossing and diversification of method. This complexity played out in plain view during the Institute, during which the Table underwent four substantial revisions. (A large poster of each version was attached to the wall of the commons room of the dormitory where most Institute attendees were living, along with a supply of markers. Every two to three days it was replaced with a new version that incorporated participants’ annotations and verbal and email feedback on the previous version.)

The first major revision of the Table offered two major additions, both of which survived to the version published with this chapter: first, a new conceptual category of “validation measure” and second, Donahue’s initial working distinction between methods that were primarily about collection of data and methods that were primarily analytic were moved from rows to columns (see Table 2.2). That had the effect of transforming an initially useful distinction into an intriguing realization: any research method is both a way of accumulating evidence and a way of analyzing it.

Less successful, as explained below, was this new scheme to organize rows, which attempted to sort methods by which element (text, context, or writer) was most foregrounded for the researcher.

Table 2.2. Mockup of the Table, Version 2

Object	Premise(s)	Method of collection	Method of analysis	Validation measure	Purpose/Focus/Deliverable
<b>text</b>					
writer					
context					
text					
<b>writer</b>					
context					
text					
writer					
<b>context</b>					

As the Table moved toward a second major revision, Institute participants added new methods and new objects of inquiry not envisioned by the original (human-computer interaction, for instance) and recommended splitting some existing rows (intertextual research, for instance, can be archival as well as bibliometric; autoethnography can be evocative or analytical) and consolidating others (“naturalistic observation” of cultural behaviors and of distributed cognition were subsumed under “CHAT”). Other developments were less predictable. Once attendees began trying to populate the original “object” column in earnest, it quickly developed incoherencies: sometimes the cells in that column named a researcher’s focus (learner development over time, for instance) but sometimes a method that researchers might employ in response *to* that focus (e.g., longitudinal analysis) (see Table 2.3).

Meanwhile, annotations on entries in the “purpose/focus/deliverable” column revealed another incoherency: the insight a researcher “delivers” is not the same thing as their purpose doing that research. For example, the entry in the row “genre analysis” under the Purpose/Focus/Deliverable column was originally “enhanced understanding of institutional/cultural recurrence,” which someone amended to “How might we/in what ways can we understand institutional/cultural recurrence?” Observing this pattern, Institute-attendee June Griffin objected that researchers start with questions, not objects of inquiry. Accordingly, she suggested, the nascent interrogatives that were developing under final “deliverables” column should be moved to the *first* column. This suggestion was to prove an exceptionally important revision.

By the final revision, the text-writer-context organizational scheme for rows collapsed. As Prior and Thorne would have predicted, “the text-process-social



context way of framing different research agendas”—which that scheme roughly reduplicated—“struggles with studies that do not fit neatly ... while also leaving many categorizations of writing research ... homeless” (2014, p. 33). For example, corpus linguistics might seem like an obvious choice for a method with “text” firmly in the foreground. But the purpose of building a corpus is ultimately to be able to say something valid about a context of use (for questions arising from a perspective on genre) or even about a writer’s style or revising practices (for questions arising from a literary tradition). Among the experiences of this revising process was learning some old lessons anew.

As the Institute drew to a close, Deborah Brandt observed that while articulating research questions in the first column was a positive development, questions like “how do writers change over time?” or “How are writers’ cognition and physiology affected by digital and web-based tools?” are motivated by deeper and broader questions that guide an entire career. Brandt’s observation inspired a short impromptu session in which Institute participants were asked to dig into the “substrate” of their research question(s)—what is the question our current research projects assume? This exercise offered more than 40 such questions. Clay Spinuzzi then proposed that a working group<sup>2</sup> use affinity mapping to cluster the questions into categories and collaboratively draft 4 questions that could plausibly underlie those groups. Revised versions of these four “substrate” questions now appear in the far left margin of the Table; each is plugged into the rows beginning with the research questions they inspire (see “Contemporary Writing Studies: A Table of Research Methods,” following this chapter).<sup>3</sup>

## Limitations and Uses

Warren (2014) explains that tables offer a “global meaning” as well answers to local search strategies. He is thinking of the full context provided by the table for any particular cell, but I think we can adapt this phrase for a language-based table by thinking of the overall impression it makes. The Table in its final-for-now form offers a glance at the scope and complexity of our field at this moment in time: a bustling, sprawling field of inquiry with unexpected convergences, familiar questions being asked in unexpected ways and unexpected questions answered with familiar means, an extraordinary diversity of approaches united in a shared fascination with this most complex and ubiquitous of human innovations.

To be sure, the Table is *partial*, both in the sense of being incomplete and in the sense of being “invested” in a particular vision of the field. For example, conversations around earlier versions of the table often returned to the question of where “critical-scholarly inquiry” might go. Is hermeneutics a method of its own? Or can

it be assumed to be operating already in each of these methods? Or perhaps bibliographic critical-appraisal/review scholarship has methodological implications, but is not *itself* a research method? This question was one of many that the Table had to table, as it were. The record must also acknowledge several important ideas for new categories of content that appeared by version three (above) but had to be abandoned as the Institute drew to a close. On the chance that those columns *could* have been productively populated had we had more time and that this is work that others might wish to continue, I'll describe their short lives here:

1. *Essential references.* This column quickly collapsed under the weight of different understandings of “essential.” In other words, a reference could be essential because it was an articulation of theoretical principles, because it made essential cross-connections or syntheses of existing work, or was even just a good example of a method executed very well. Such references would be “essential” at different times in one’s career or even at different times in the day.
2. *Essential tools.* There was interest in trying to document the most relevant tools for each method (software, audio-visual equipment, algorithms, etc.), but others worried that entries might confuse tools used most frequently with disciplinary recommendations for particular tools (and on what grounds?). An interesting side-debate over this column, especially since the sequencing of columns was starting to take on a temporal trajectory by version 3, was where such a column might best be placed. As Charles Bazerman pointed out, a tool can be something a researcher routinely uses, but can also be where a researcher *begins*: just as several generations of amateur naturalists set out with their microscopes, new kinds and uses of data can suddenly seem possible once a researcher learns that MS Excel can perform a regression analysis.
3. *Accountability and stakeholders.* An annotation on version 2 called for a column that would document “other stakeholders we might be accountable to and *their* standards (e.g. other disciplines, institutions, accrediting bodies, etc.)” This column briefly appeared in version 3, but the range of potential stakeholders—depending on the nature of the project—was so wide that identifying them became impracticable and often duplicative. The spirit of this suggestion lives on, however, in the current header of the last column, which suggests that researchers should consider accountability alongside the presentation of their findings and conclusions.
4. Other columns proposed in annotations but lost in the shuffle included:

- a. “a column about what methods don’t see or common criticisms to anticipate/work through”;
- b. “a column with information about how to plug into a community of researchers after similar questions or using similar methods”; and
- c. “a column indicating which journals publish these kinds of research or value certain perspectives over others.”

These last three suggestions indicate that, while the Table globally suggests a bustling and sprawling field of inquiry, this field is also a place where it is easy to get lost. The need for clearinghouses, scholar-networking, ways to facilitate interdisciplinary collaboration, and multiple opportunities to return to the study of methods remains acute.

As uses of a map become more important, ultimately, than its designers’ intentions, I’ll suggest three: two for teaching and one for research.

1. A seminar or even a single class session might locate itself on single cell (at the intersection of “validation measure” and “rhetorical analysis,” for example). The Table might offer context for that cell: what does “persuadability” look like in proximate and distant lines of inquiry? Rows, in this sense, map the conventional traffic flows from the various landing points of each substrate question – in other words, that’s where people have tended to turn as they sought answers for questions like this one, and their way of attempting to answer those questions in that way has tended to lead them to make these kinds of contributions.
2. Alternatively, each row could serve as a heuristic, an opportunity to think together about the wording of particular cells as a place to begin a conversation, particular turns of phrase as points of departure and negotiation – in this spirit, the arrows ramifying from the substrate questions may also identify unusual allies and resources and colleagues with which we can make common cause. (For instance, it would never have occurred to me before now to see rhetorical historians and institutional ethnographers as engaging in a similar kind of work, an insight that offers a way of rereading their work and a place to begin a collaboration.)
3. Finally, we might imagine the Table as a recombinational tool, a kind of conceptual, paper-based difference engine. If rows map conventional trajectories beginning with a particular question through a usual set of methods and landing usually in a particular place, then we might imagine the table three-dimensionally, something like an engraved cylinder of wheels. Columns could be “twisted” a step or two in either direction, asking – what if I get at my question this way, with this collection-method? Or as a

pedagogical tool – the work of a seminar might be to bend the conceptual arc of a particular arrow so that it lands somewhere else. Many of those recombinations will probably generate the methodological equivalent of static, but a few might click into an unexpected angle or a generative place to launch a new kind of project.

A map, as has often been noted, conceals much in order to highlight a little. Despite the visual certitude the Table’s gridlines might imply, two lessons from Bowker and Star’s classic study (2000) of the tenth revision of the *International Classification of Diseases* are also relevant here. First, genres of representation (Yates and Orlikowski, 1992) are moments in a state of “permanent tension” between attempts to capture a dynamic situation and the “local circumstances” of those using the representations; second, “ad hoc responses” to these representations “can *themselves be mined* for their rich information about local circumstances” (Bowker & Star, 2000, p. 139, emphasis added). The Table is intended to be used (and used hard, I hope). Accordingly, let’s try to think of the Table as another kind of familiar table; that is, think of it as a *seminar* table—the place we gather around for work.

## Notes

- 1 Between late February 2016 and the start of the Institute, I also consulted students and colleagues about potential additions and revisions to the Table. I’d like to take this opportunity to thank participants in my Spring 2016 ENG 579 seminar (Charlotte Asmuth, Katelyn Connolly, Kelly Hartwell, Mitchell Herring, Diana Meakem, Tyler Nute, Samantha O’Shea, and Bryan Picciotto); Kevin Roozen and Nathan Stormer were also particularly helpful during this stage.
- 2 Ryan Dippre, Aimee Lanoue, Ann Shivers-McNair, Clay Spinuzzi, and me.
- 3 Thanks especially to Ellen Cushman for her help forging the initial set of draft connections among the substrate questions and individual rows.

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Contemporary Writing Studies: A Table of Research Methods

Motivating question/ construct of interest	2	3	4	5	6
	Premise(s)	Method of Collection	Analytic method/approach	Validation Measure	Likely Contribution/ Accountability
<p>What can be deduced from densities of thematic or substantive content?</p> <p>What if we could see patterns in discourse at scales unavailable to unaided human perception?</p>	<p>Textual patterns produce and reflect cultural formations</p>	<p>Principled document-collection w/ parameters of thematic interest</p> <p>Collation / markup of a body of textual discourse (categorical principle; genre, register, occasion, author, etc.)</p>	<p>Content analysis; attention to text-structure and function; content densities and distributions</p> <p>Corpus analysis – machine-counting, re-categorizing, -sorting</p>	<p>Intra-analyst agreement on classifications of units of analysis; comprehensiveness of explanation of categories</p>	<p>Explanation of cultural / interactional phenomena influenced by thematic or rhetorical patterns in content</p>
<p>What are the purposes and effects of forms of writing on writers and cultures?</p> <p>How is subjectivity discursively constituted?</p> <p>How are identity, power, culture, etc. intersubjectively produced?</p>	<p>Power is discursively enacted; culture is semiotic and semiosis constitutes our experience of reality. Participation is discursive and produces effects of power, culture, and semiosis are susceptible to exposure by critique.</p>	<p>Assembling interrelated instances of forms that have institutional/cultural significance</p> <p>Reflects parameters of political / social inquiry</p>	<p>Rhetorical genre analysis; usually case-study or observational, with attention to location and subjectivity of readers/writers</p> <p>Critical discourse analysis</p> <p>Systemic functional linguistics</p>	<p>Salience; statistical significance</p> <p>Construct-representation (i.e. genre as 'social action'; 'standing transformations')</p> <p>Enhanced understanding of how identities and interpersonal relations become constituted through readings/and writing.</p>	<p>Regularities in the categories of interest inductively derived from patterns in the discourse produces in those categories</p>
<p>How do cultures make meaning with different tools (aural, gestural, inscription systems)</p> <p>How are texts composed in the web or distant presence of other texts?</p>	<p>Tools are never merely instrumental, but are imbued with history and value for the people who use them</p> <p>Knowledge is communally constructed and is constituted and distributed in texts; texts rely on other texts and anticipate future texts</p>	<p>Guided by researcher's school of thought (e.g., ambient, aesthetic, feminist, queer)</p> <p>Observation and documentation of 'off-visibility' / 'typical' instances of tool-use</p>	<p>Rhetorical analysis / critique: adaptation of rhetorical principles; depends on outcome intended</p> <p>Ethnohistorical / hermeneutic</p>	<p>Ontological validation and / or problematization of rhetorical tropes/canons, capacities</p> <p>Enhanced understanding of rhetorical tropes/canons, capacities</p>	<p>Enables tool-users to better understand the meaning-making affordances of the artifacts they employ</p>
<p>What was? How did it come to be? Could the present have been otherwise?</p>	<p>We live within history and must understand its unfolding effects</p>	<p>Often involves library, database-aggregators (e.g., Web of Science)</p> <p>Reflects parameters of relationship of interest (e.g., a particular correspondence, a historical trajectory)</p>	<p>Intertextual: large-scale bibliometric analysis of citation</p> <p>Intertextual: close-reading smaller collections for allusion and frame of reference</p> <p>Archival investigation: close-reading; historical contextualizing</p>	<p>Statistical measure of significance and / or effect size</p> <p>Nonrandom, nontrivial associations of wordings and artificial features</p> <p>Concurrent validation with existing histories; consultation with special-collections; reflective practitioner</p>	<p>Understanding how writers have understood each other (e.g., insight into discursive practices, production practices, spread (or not) of ideas; lifespan of and shifts in constructs of interest; genealogies of theories, research methods, etc.)</p>
<p>How are writers' cognitions and physiology affected by digital and web-based tools that can work across platforms / devices?</p>	<p>Human-computer interaction enacts a qualitatively different technology of writing and reading; interfaces are designs with uses and limitations that affect user decisions and performances</p>	<p>Prototyping (rapid-turner design), time-stamped and/or geotagged; text-based (e.g., analysis of paratextual collaboration and task-distribution), co-design through rapid iteration</p>	<p>Human-computer interaction: data analytics, 'UX' (user-experience), machine learning, 'scriptum' style software development (i.e., adaptive, team-based, in-situ learning during design-problems)</p>	<p>Pragmatic validation of co-designed systems by functional or democratic user-participants (e.g., 'Does it work?')</p>	<p>Creation capacities for present and future users; making consequences of interface-design visible (especially in the case of machine-learning; responsible development of unobtrusive co-actants)</p>
<p>What's happening as writers produce texts?</p>	<p>During reading and text-production activities, movements and fixations of gaze and / or pauses and bursts of keystrokes / pen activity are robust proxy measures for otherwise inaccessible cognitive activity</p>	<p>Use of clinical / lab setting to administer controlled eye-tracking, keystroke-logging, or digital-pen exercises</p>	<p>Text production (physical dimensions): Data compression; measurable effects on independent variables of interest</p> <p>Text production (mental function / development): Transcript coding and researcher field-notes (or data compression from scans)</p>	<p>Significant observed difference on a construct of interest (e.g., working-memory capacity) identified by externally validated instrument</p>	<p>Insight into brain structure / functioning through proxy measures; better understanding of automaticity and relationships among thinking processes and language use</p>
<p>What is the current direction of the research agenda of the field? What do our questions allow us to observe, analyze, or learn?</p>	<p>Writing is a complex, cognitive task requiring task-definition and skilled management of multiple schemas; the brain is an organ with broadly generalizable structures</p> <p>Approaches to defining problems or identifying research questions are about what counts as a 'problem' or 'data'.</p>	<p>Theoretical (or <i>mis</i>theory) at different junctures</p>	<p>Methodological inquiry</p>	<p>More accurate, representative results; method triangulation</p>	<p>Redirection/redevelopment of the field; identification of 'invisible' and/or 'invisible' questions, etc.</p>

How its writing defined, performed, and disrupted within and across material systems, power and privilege? How do writing conditions and composing decisions affect each other? How do writing conditions and composing decisions affect each other?

How do people use writing to create understandings and/or transform lives?	How can the instruction, learning, and assessment of writing be understood & developed?	1	2	3	4	5	6
Motivating question/construct of interest	Premise(s)	Method of Collection	Analytic method/approach	Validation Measure	Likely Contribution/Accountability		
<p><b>I</b> How do historical agents (including institutions, organs, movements, etc.) influence other agents, differently?</p> <p><b>J</b> How do writers change over time?</p> <p><b>K</b> What are writers doing in a particular space-time? What do they think they're doing?</p> <p><b>L</b> Do the researchers' experiences with reading and writing square with mainstream accounts?</p> <p><b>M</b> How do participants manage context, tasks, processes, relations among them?</p> <p><b>N</b> What can be learned by investigating networks and distributed nature of agency in schooling and workplace?</p> <p><b>O</b> How might relational structures of society reflect linguistic realities rather than linguistic ideologies?</p> <p><b>P</b> What counts as writing "quality" (writing, what, to whom, where, and when)? How to measure "quality" or change in relation to a defined construct?</p> <p><b>Q</b> What is effect Y of cause X?</p> <p><b>R</b> How do local conditions/practices affect practices/contexts of working/teaching/learning?</p>	<p>The oscillation of human activity is best understood by engaging and mapping the actualities of everyday life from a participatory standpoint</p> <p>Influences can be documented through techniques for investigating archives/ exploring memory</p> <p>Only by studying writers over time can we see development as multilayered and extended</p> <p>Ways of knowing, doing, and being in the world are culturally inherited but locally instantiated</p> <p>Researchers can <i>proactively</i> excavate their own literacy narrative</p> <p>Researchers can <i>analyze</i> their own literacy practices to develop theoretical understandings of social phenomena of which they are a part</p> <p>Cultural/institutional/language context matters for what counts as "quality" or "effectiveness" of a text</p> <p>Writers' "decisions" are mediated by tasks, other writers, routines, larger institutional priorities and tensions among them</p> <p>Human activity is mediated through physical ephemeral texts for coordination and cooperation); texts, tools, systems, practices, routines and actors are interdependent</p> <p>Mondlingual ideologies constrain and exclude useful ways of knowing and relating and devalue essential intercultural competencies</p> <p>In assessment, any demographic variable of interest is affected by design, collection and analysis of data, assessment; also role of race in writing development</p> <p>Teaching conditions, pedagogies, and curricula can and should be examined at all geographic scales and for institutional accountability, and/or reproducibility</p> <p>Institutional formations can be changed for the better by site-specific studies.</p>	<p>Interviews and/or focus groups + content analysis; often participant-observation</p> <p>Physical/virtual site visits; observations, surveys, etc. in schooling or workplace contexts</p> <p>Multiple texts, interviews, observations, surveys, etc. in schooling or workplace contexts</p> <p>Interviews and observations; participant-observation</p> <p>Reflection on experience/personal archive</p> <p>Site visit: often includes interviews and artifact-analysis and /or access to local knowledge (usually in context of schooling)</p> <p>Site visit: often includes interviews and discourse-based interviews to access local knowledge (usually in context of workplace)</p> <p>Case bounded by activity system, so: site observations, artifact analysis, interviews, interventionist methods (DWR)</p> <p>Applied work is predominantly corporeal, though with some corpus applications</p> <p>Disaggregated demographic data derived from portfolio or direct writing scores; captures of scoring practices</p> <p>Intervention; (teacher-research</p> <p>Multiple: demographics, GPAs, persistence attribution, transfer</p>	<p><b>Institutional ethnography:</b> feminist sociological inquiry</p> <p><b>Rhetorical biography / history:</b> content analysis/historical contextualizing</p> <p><b>Longitudinal:</b> Case-study (Looks at multiple parts of the relevant trajectory in context)</p> <p><b>Ethnography:</b> thick description; case-based scenarios of cultures/ objects/practices</p> <p><b>Autoethnography:</b> critical-reflective narrative</p> <p><b>Naturalistic observations:</b> Thick description + articulated coding scheme (emphasis on <i>behavioral/ cultural phenomena</i>); discourse-based interviews to get at tacit, know-how</p> <p><b>Naturalistic observations:</b> Thick description + articulated coding scheme (emphasis on <i>distributed cognition</i>)</p> <p><b>Cultural-Historical Activity Theory (CHAT):</b> Vygotskian framework for ethnographic methods, co-design and co-analysis with participants</p> <p><b>Translation / translingual:</b> researcher's narratives/work of translation/site observations</p> <p><b>Writing assessment:</b> validation, reliability, fairness studies (incl. studies of scoring, generalization, extrapolation and consequence, construct modeling structures)</p> <p><b>Experimental, quasi-experimental, pre-experimental, or ex post facto studies:</b> random assignment, control group, with or without randomization</p> <p><b>Institutional research:</b> usually responding to local exigency (e.g., attrition)</p>	<p>Explanatory power for actions/experiences unaccounted for by macro-theories</p> <p>Exhaustiveness – no new categories or conceptual insights appear with additional data</p> <p>Member-checking, concurrent validity with other studies</p> <p>Member-checking, alignment/accretion with other studies</p> <p>Translation with artifacts or results of separate methods (e.g., survey)</p> <p>Triangulation, member-checking, concurrent validity</p> <p>Reflective observer/ (sometimes) member-check + concurrent validation of CHAT framework; triangulation with data-streams, data types</p> <p>Explanatory power, triangulation, member checks; returning analysis to stakeholders</p> <p>Construct re-validation</p> <p>Statistical significance; satisfaction of stakeholders; remedy of inequalities and creation of opportunity structures</p> <p>Effect size: relative to control or comparison group; predictive/ explanatory power</p> <p>Success of institutional intervention against predicted effect-size</p>	<p>Deconstruction of discursive mechanisms, affirmation of lay expertise (factors), critical reappraisals of sociological master narratives (e.g., school of teacher</p> <p>Understanding of the "place" or "impact" of this rhetorical/ agent/ institution in the writing process (chronic effects, processes)</p> <p>Chronemic insights: Development of construct of interest (e.g., competence, attitude, belief, metacognition, ability to adapt) over time (single or multiple subjects)</p> <p>(See next line.)</p> <p>Insights into how a culture operates, how it is learned, how it is shared, how it connects socially, can also carry over-generalizations and de/familiarize dominant cultural practices</p> <p>Enhanced understanding of how cognitive problem-solving/decision-making is distributed across contexts, tasks, etc.</p> <p>Better understanding of networks of human activity, specifically how tools, contexts, and subjects work in relation to each other in systems situated in the world (and are dynamic) through contradictions</p> <p>More accurate and inclusive model of linguistic practices; greater openness to epistemic potential of devaluative resources beyond metropolitan English</p> <p>Compliance with federal protections (for certain populations); better construct validity generally; what counts as "writing" and as "writing quality"</p> <p>Empirically verified assumptions, practices, and innovations that inform students, teachers, school-ups in other institutions and/or cautionary tales</p>	<p>6</p>	<p>L</p> <p>M</p> <p>N</p> <p>N'</p> <p>P</p> <p>Q</p> <p>R</p>

A collaborative effort originating from the Dartmouth 2016 Institute & Conference, 8/1 through 8/12; Hanover, NH, USA

This table can also be viewed here: [https://www.peterlang.com/fileasset/Donahue/Contemporary\\_Writing\\_Studies.jpg](https://www.peterlang.com/fileasset/Donahue/Contemporary_Writing_Studies.jpg)





Our opening methodology chapter takes on a mode of investigation that can be a leap for writing researchers more familiar with qualitative analysis: corpus linguistic analysis. Susan Conrad makes a case for the role of quantitative linguistic analysis in advancing the study of writing. She investigates the use of passive voice and other impersonal features of engineering writing, combining quantitative analysis of multiple genres with interpretive interviews of practicing engineers and students. Overall she finds that students and practitioners alike use passive voice with intended rhetorical effects, however the intended effects are dissimilar. For example, in contrast to student writers, practitioners rarely reported using passive voice to be purposefully vague. Covering design, methodology, results and analysis, and practical implications, Conrad builds a solid foundation for her contention that the integration of corpus analysis and interviews can provide new, useful perspectives on writing and on instructional needs. Her approach anticipates contributions by Laura Aull (Chapter Four), Shawanda Stewart (Chapter Twelve), and Joanna Wolfe (Chapter Eighteen), all of whom explore the relationship between research and teaching.

The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows A and L. Readers are encouraged to seek other connections.



# Integrating Corpus Linguistics into Writing Studies: An Example from Engineering

SUSAN CONRAD

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This chapter discusses the role that quantitative linguistic analysis can play in advancing the study of writing. More specifically, I argue that research that combines corpus linguistics techniques with interviews of writers can provide a valuable basis for understanding writing in its context of use and for developing materials to help students improve their writing. I demonstrate the potential for such research by investigating the use of passive voice and other impersonal style features in engineering writing. By making comparisons between grammatical features in several genres and using interviews of practicing engineers and students to help interpret the findings, the research provides more systematic evidence and a more contextualized understanding of impersonal style features than research with other methods.

Several scholars have lamented the decline of language-focused research in writing studies from the 1970s onward (Connors, 2000; McDonald, 2007; Myers, 2003). A view from the 1980s has continued to thrive: that linguistics has little to offer writing research because it has “an extremely narrow, decontextualized notion of what it means to be a user of language” (Crowley, 1989, p. 499). As I show in this chapter, however, corpus linguistics techniques combined with interviews are an effective way to integrate language and context; together, the linguistic analysis and interview data reveal how contextualized rhetorical concerns manifest in language.

The example study described here is part of a larger project that investigates the writing of civil engineering practitioners and undergraduate students, and then develops teaching materials to improve students' preparation for writing in the workplace (see further Conrad, 2017; Conrad et al., 2015; Conrad et al., 2016). For decades, graduates of engineering programs and their employers have emphasized the need for engineering students to develop stronger writing skills for industry workplaces (see review in Donnell et al., 2011). In the project, we argue that pedagogical interventions are likely to be most effective if based on empirical evidence about differences in practitioner and student writing. As the next section shows, such evidence is not available from previous research about passive voice.

## Background: Why Do We Need More Research on Impersonal Style Features in Technical Writing?

The use of passive voice and lack of human agency has been a topic of interest within technical writing for decades, but it continues to be described in conflicting ways. On the one hand, passive structures are depicted as unnatural and sneaky because they hide the agent of actions (see review in Connaster, 2004; Wilkinson, 1992). A fourth edition handbook warns students against passives: "Sentences become more vigorous, direct, and efficient in the active form. By showing that a *person* is involved in the work, you are doing no more than admitting reality" (Beer & McMurrey, 2014, p. 57). In describing engineering students' papers, Gwiasda (1984) described passives as "the perfect vehicle for documents that record material of no intended consequence to anyone at all" (p. 150).

Other literature, however, describes passives as serving important functions. They allow objects and processes to be the focus of discourse, which is particularly useful for fields such as engineering (Ding, 2002; Wolfe, 2009). They are consistent with the goals of cooperation and falsifiability in science, where results should not depend on who conducted the procedures (Ding, 2002). Passives may allow writers to avoid sounding "obnoxiously egocentric" (Spector, 1994, p. 47). Linguistic analyses have described passives as useful for making sentences conform to typical information flow (placing already-mentioned information before new information) and end weight (placing long, more complicated structures at the ends of sentences), both of which make writing easier for readers to process (Biber et al., 1999; Kies, 1985; Seoane, 2009).

The conflicting claims about passive voice are often stated as global generalizations, but their accuracy could well depend on specific context. Unfortunately, there is little empirical evidence from any engineering context, and especially not

from industry workplaces. Studies of engineering texts have had small data sets. For example, Ding's (2001) and McKenna's (1997) studies found many objects and non-human entities used as subjects of sentences, often with passive voice, but Ding analyzed only four engineering documents and McKenna three engineering reports. A larger-scale survey in workplaces (Couture, 1992) and a survey supplemented by interviews (Sales, 2006) concluded that engineers prefer passive over active voice, but neither study included systematic analysis of texts. The few previous corpus-based studies that have included engineering texts (e.g., Biber, 1988) have tended to use academic writing and should not be generalized to industry.

Passive voice has been analyzed in texts from some other scientific fields, but even then a lack of consistent methodology makes it impossible to compare across studies. Passives are identified in a variety of ways—only finite verbs or all verbs, only declaratives or all sentence types, omitting or including subordinate clauses, allowing intervening adverbs or not (see discussions and comparisons in Riggle, 1998; Ding, 2001; McKenna, 1997; Miller et al., 2013; Alvin, 2014). Almost no study of technical writing includes passive post-nominal modifiers (e.g., “profiles *provided by the county*”), but these have been found to be common in other studies of informational writing (Biber et al., 1999).

Clearly, to understand passive voice use in civil engineering texts and student writing needs, new research was required. I therefore designed a study to investigate the following questions:

To what extent do journal articles, practitioner documents, and student papers in civil engineering differ in their use of features of impersonal style, including the passive voice? How do the engineering genres compare to each other and to genres from a wide range of English discourse? In what ways are students' uses of impersonal style features likely to be problematic if transferred to workplace practice?

The data comprised two student genres, two industry genres, and academic journal articles. I used analytical techniques shared by previous studies of non-engineering genres so engineering could be compared to other fields. I used interviews to investigate the reasons behind differences in the groups' language choices and likely effects for workplace practice.

## The Study

### The Context

The students in the study were in a department of civil and environmental engineering at a public university in the United States. Almost all the department majors have a goal of a job in industry, not an academic career. The students had all taken foundational writing courses meant to address basic rhetorical concerns related to audience and purpose.

Ten engineering firms and three public agencies contributed to the study. They include the range of organizations that hire graduates of the department, from small consulting firms in the local area to branches of large international organizations. As a quality control measure, all firms had been in business for at least 15 years and employed multiple engineers, who reviewed each other's work.

The study was approved by the Institutional Review Board at the university and followed protocols for participants' informed consent.

### The Text Corpus

I asked practitioners to contribute documents that were typical of their successful work so that the corpus represented writing that met workplace needs but also captured variation within it. I asked students for all final papers for course assignments in order to see the range of needs in student writing. The journal articles were published in well-known civil engineering journals from a variety of publishers (see appendix).

The corpus for this study is relatively small for corpus research (Table 3.1). I selected texts from the larger project corpus so that the rhetorical parameters of the student assignments matched the practitioner genres as closely as possible, given that student genres always still fulfill the need to demonstrate knowledge to instructors. For both groups, I chose reports written for specific clients, addressing specific problems. The topics cover four areas of civil engineering — structural, geotechnical, transportation, water resources. I included practitioner site visit observations to investigate whether the focus on an engineer's observations of a site corresponded to different frequencies of verb voice. The only observation assignment for students was a bridge observation assignment in one course. The observation texts are thus a small collection, from few sources, and the analysis is preliminary. All student papers were written before the project's new teaching materials were used.

Table 3.1. Texts Used in the Analysis

Category	Type of Text	Texts	Words	Sources
Practitioner	reports	60	201,700	10 firms
Practitioner	site visit observations	25	20,300	5 firms
Student	reports	60	207,700	9 courses
Student	bridge observations	25	14,900	1 course
Journal	research articles	50	270,900	10 journals

### The Linguistic Analysis

I chose a system of analysis that allows comparisons with a range of English discourse—a specific technique within corpus linguistics called multi-dimensional analysis. Multi-dimensional analysis uses factor analysis to identify groups of language features that co-occur in texts with statistically significant frequency. Because language features tend to co-occur as they work together to achieve communicative functions (see Biber, 1988, pp. 13–14), the groups of co-occurring features are interpreted as dimensions of variation—i.e., continua along which texts in a language vary. In a study of 67 linguistic features in 23 spoken and written genres of English, Biber (1988) found that one dimension was dominated by passive structures of various types. The dimension was characterized as “Impersonal Style” (see Conrad & Biber, 2001, pp. 37–39). Texts with a high score on the dimension (i.e., frequent use of the features) typically covered technical information, and if agents were mentioned, they were often inanimate and incidental to the main purpose of the text. The dimension has been used in studies of student writing in biology (Conrad, 1996) and British university student writing (Nesi & Gardner, 2012), but not in civil engineering.

The grammar features on this dimension are described in Table 3.2. There are four kinds of passive structures: agentless passives, passives with *by* prepositional phrases, past participial adverbial clauses, and past participial noun postmodifiers. In addition, the dimension includes linking adverbials and some subordinators—two types of connectors that often mark the relationships between ideas in complicated, technical or academic texts. As noted above, this group of features results purely from statistical analysis of co-occurring features in texts; they are not based on a priori assumptions. An excerpt from an engineering journal article exemplifies frequent use of the features:

## Text Sample 1: Journal Article (impersonal style features in italics)

*While* strain gauges measure strains at the ‘point’ of bonding, Berkheimer’s calibration of the strain gauges for IRIB *was developed* so as to yield the average strain between two adjacent ribs (Berkheimer 2007). For the approach that *was used*, the strain gauges *were glued* near the rib where the strands are less stiff, *thus* rendering more strain for a given load; *however*, its output *was correlated* with the deformation of the entire strand between ribs. *Hence*, the strain gauge data are directly comparable with the translated total strains.

To conduct the multi-dimensional analysis, I used standard procedures as outlined in Conrad and Biber (2001): grammatically “tagging” the texts with a program developed by Biber; using another computer program to count all occurrences of the features on the impersonal style dimension; norming the counts to 1,000 words so that length of text did not confound the analysis; standardizing the counts to the findings of Biber’s (1988) analysis so that comparisons could be made with a range of English discourse; and calculating the mean score for each category of text. The mean scores of the genres were analyzed for statistically significant differences with analysis of variance and a post-hoc Scheffe test.

As in all corpus studies, the quantitative analysis was integrated with analysis of the features in context. To interpret the functions of the features, I considered aspects of the context, such as the differing audiences and purposes of the text categories; linguistic principles, such as information structure and end weight; and explanations from the interviews.

Table 3.2. Features in the Impersonal Style Dimension and Factor Loadings. Based on Biber, 1988

Language Feature	Example	Factor Loading
linking adverbials	<i>therefore, however, in conclusion</i>	.48
passive verbs, agentless	The bridge <i>was built</i> in 1923.	.43
past participial adverbial clauses	<i>Based on the results</i> , this area poses a medium risk of ...	.42
passive verbs with <i>by</i> phrases	The bridge <i>was designed by</i> a local engineer.	.41
past participial noun postmodifiers	The recommendations <i>included in this report cover</i> ...	.40
adverbial subordinators with multiple functions	<i>since, while, whereas, such that</i>	.39

## Interviews

I conducted interviews with 16 practitioners and 37 students. (Interviews with 14 faculty are omitted here to reduce the scope of the analysis.) Most interviews were audiorecorded and transcribed, but some were documented with notes (e.g., if participants chose not to be recorded or noise made recording impractical).

As part of the larger study, the 30–90 minute interviews covered a variety of general questions about writing. For the analysis of impersonal style, most useful was a discourse-based component in which participants were asked to look at examples of writing, comment on them, and discuss the impact of alternative wordings. The text samples illustrated typical writing based on the findings. The engineering practitioners and students often had little conscious knowledge of language forms and functions—or the metalanguage to talk about them—but specific examples elicited clear contextual concerns and beliefs. Because I had the results of the corpus analysis, I could make sure the examples illustrated patterns in the writing of the two groups.

## Results

Especially for a project whose findings will be applied in teaching materials, the usefulness of the results is a crucial part of assessing the methodology. This section provides a brief review of the findings, highlighting a few examples of the ways in which the methodological features worked together to reveal new insights into the use of impersonal style features.

Figure 3.1 displays the engineering genres plotted along the impersonal style dimension. The figure uses standardized mean scores, with 0 representing the mean score of 23 different genres (Biber, 1988) and each unit above or below designating a standard deviation. The positive and negative signs are a feature of the factor analysis, not evaluations. From this perspective, the engineering genres are similar in that they have a high frequency of impersonal style features, far more than non-specialist genres such as fiction or popular nonfiction.

At the same time, the statistical results show that there are significant differences among the engineering genres (Tables 3.3 and 3.4). Many of the differences deserve investigation, but most notable for this chapter are (1) student reports are significantly different from practitioner reports, (2) student bridge observations are statistically significant from practitioner site visit observations, and (3) journal articles are statistically significant from both genres of practitioner writing. In other words, with respect to impersonal style features, students write very differently from practitioners even when rhetorical concerns are similar, and journal articles do not provide a good model of disciplinary writing for students who are preparing for positions in industry.

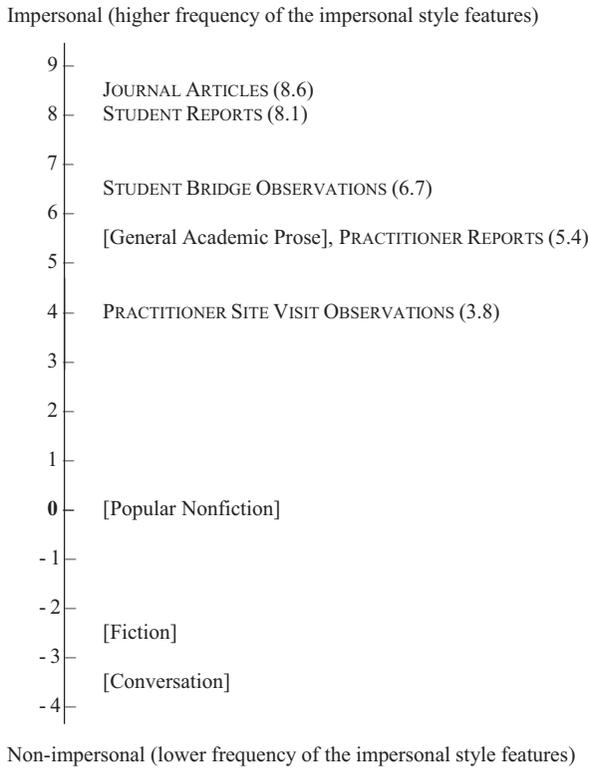


Figure 3.1. Mean Scores for Civil Engineering Genres on the Impersonal Style Dimension *Note:* General academic prose, popular nonfiction, fiction, and conversation are from Biber (1988) for comparison.

Table 3.3. ANOVA Results for the Civil Engineering Genres on the Impersonal Style Dimension

Source	<i>df</i>	Sums of Squares	Mean Square	<i>F</i> Value	<i>p</i>	$\eta^2$
Model	4	709.0	177.3	20.19	<.0001	.26
Error	228	2001.2	8.8			
Corrected Total	232	2710.2				

Table 3.4. Pairwise Comparisons of Engineering Genres for Impersonal Style Features (✓Designates Significant Difference)

	practitioner reports	practitioner site visit observations	student reports	student bridge observations	journal articles
practitioner reports			✓		✓
practitioner site visit obs.			✓	✓	✓
student reports	✓	✓			
student bridge observations		✓			
journal articles	✓	✓			

Examining the impersonal style features in their discourse contexts further clarified their use and the differences between the writer groups. The frequent use of impersonal style features in the journal articles was illustrated in text sample 1: passive voice for almost all actions, and relationships between ideas marked with linking adverbials and subordinators, which often created complex sentences. In contrast, text sample 2 illustrates typical features in practitioner texts. Passive voice is still common when objects and processes are used as given-information subjects and are the focus of discourse. However, there is a slightly higher use of active voice and human agents, especially when responsibility for an action is first established (*we drilled, we developed*). Use of active voice is not just about human agent subjects, however; the subjects include inanimate objects (*drilling encountered fill, table 1 summarizes the depths and elevations*). The sentences, whether active or passive, typically conform to principles of information structure and end weight (known information in shorter constituents in the subject, and longer, new information in the predicate). There is also a relatively infrequent use of connecting words. Sentences tend to have one main idea. Explicit connectors like *therefore* are sometimes used, but subordinators are not common.

#### Text Sample 2: Practitioner Report

We drilled six exploratory borings on the dam between October 31 and November 4, 2016. The borings were designed BH-1A through BH-6A to distinguish them from the bridge borings. [...]

We developed cross-sections perpendicular to the dam at each location. [...] The cross-section locations are shown on Figure 2A. Cross-sections are shown on Figures 3A through 8A (Appendix A). [...]

Drilling on the dam encountered between 3 to 40 feet of fill. Table 1 summarizes the estimated fill depths and elevations in each boring.

The practitioners' site visit observations have even fewer passives and more first person, active voice sentences describing activities (*visit, meet, arrive, observe, discuss, note, propose*).

In interviews, practitioners made repeated references to two major factors that corresponded to their less frequent use of the impersonal style features. The first was managing liability by being as unambiguous as possible. This concern included being explicit about who was responsible for what. The engineers discussed their profession as one in which they were hired to make subjective judgments based on observations—thus, what they observed or what they decided versus what they were told was important to make clear. They discussed liability as part of the profession, but were concerned about unintentionally sounding responsible for decisions or conditions outside their work; as one engineer put it, “Ambiguity leads to unintentional liability.” Interestingly, academic articles do not have these same considerations about liability, and—as noted in previous research—actors are devalued in an academic scientific process because the study should be replicable.

The practitioners' second major concern had to do with readers' ability to find and understand information quickly. The lack of subordination and use of inanimate subjects with active voice were often connected to this concern. One main idea per sentence without subordination was identified as faster to read and less likely to be ambiguous. Some inanimate subjects with active voice were identified as concise choices and formulas familiar to readers (e.g. *this report documents ...*).

For each student genre, the use of impersonal style features was more similar to journal articles than to the practitioner genre whose rhetorical context it mimicked. As text samples 3 and 4 illustrate, student papers tended to consistently use passives and to explicitly mark connected ideas, especially using subordinators to create complex sentences. The combination of passives and subordinators often made ideas confusingly complicated, as in sample 4.

#### Text Samples 3 and 4: Student Reports (impersonal style features in italics)

- 3) Data collection *was performed* for five police stations in the [CityName] Metro Area. Each location *was observed* in the PM peak hours between 4pm and 6pm. Actual trip generation *was recorded* for incoming and outgoing police vehicles and private vehicles.

- 4) One LED light *installed* is about \$18.50 per bulb, *whereas* a typical 100 watt incandescent bulb that *was used* for many years is only a couple of dollars. Over time *though*, the LED lights *are designed* to last longer, between 15 and 20 years, *whereas* the incandescent bulbs last less than 5.

Student bridge observation papers had less frequent use of the impersonal style features than the student reports, suggesting some adjustment in language for the personal observations required by the assignment. However, many students still avoided any mention of themselves as agents (e.g. *the depth to span ratio is estimated to be 20 if the depth of the girder was assumed to be ...*). The student interviews provided revealing insights into students' intentions with their language choices—some confirming my expectations and some very surprising. One predictable comment by many students, given the patterns in the texts, was that they had learned an absolute rule for technical writing of “don't use *I* or *we* or *us*.” More surprising was an associated misconception about a need to “use objective language,” which they thought necessarily excluded first person pronouns. Thus, even a statement like “we drilled four bore holes” could be considered too subjective. Even more important were comments by a few students who connected the choice of active versus passive voice to liability management, but their beliefs were in direct opposition to practitioners' concern to make responsibility as unambiguous as possible. The students thought liability management required the use of passives and other “weasel words,” as one student put it. These comments thus not only explained reasons behind students' language choices, but also revealed a profound misconception about language use in professional practice.

Another illustrative, surprising finding concerned students' use of subordinators. I had originally suspected that students' overly complex, confusing sentences were due to a lack of revising. I expected to hear about late nights and lack of time. Instead, more students said they intentionally used complicated sentences. Even when asked to comment on sentences whose subordination made them inaccurate or incomprehensible, the majority of students discussed a desire to “make it sound fancy,” as one student summed it up. They tended to equate this kind of complexity with sounding professional—when, in fact, it is the opposite of the practitioners' desire for simple, unambiguous sentences. Again, the comments revealed student beliefs that were in direct opposition to practitioners' goal in writing. For these findings, the usefulness of discourse examples in interviews was again clear. When asked in general what they had learned about writing, no student said a goal was to write complicated sentences. But shown examples that illustrated the findings, students repeatedly made comments such as, “[A sentence] looks better if it's longer. I think it's as simple as that” and “You want to sound really knowledgeable about things, and it seems like the easiest way to do that is to be wordy.”

## Conclusion

The brief summary of findings illustrates how the integration of corpus analysis and interviews can provide new, useful perspectives on writing and on instructional needs. The methods provide multiple perspectives on the engineering genres, showing their similarities compared to non-specialist genres and their important differences when compared to each other. The practitioner interviews allowed the practitioners to explain the impact of the features as they experience them in their profession. The student interviews showed that many students do not understand the link between these language choices and aspects of professional practice, and—perhaps even more importantly—also showed that many students hold erroneous beliefs that are diametrically opposed to the practitioners’ values. Applying these findings, the new teaching materials connect language choices to values in engineering practice and directly counter widespread, erroneous beliefs with “myth buster” boxes. Compared to previous work about passive voice, we emphasize both the context of the situation and the discourse context.

Of course, no single method can supply all perspectives on writing. Most notably, the method described here needs complementary research about the process of writing. But the method described here can make important new contributions. The combination of linguistic analysis with input from writers who know the context allows us to see systematic patterns, understand their importance for the context, and make better informed decisions for writing instruction.

## Acknowledgments

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## Appendix 3.A. Sources of Academic Articles Analyzed in the Study

Publishers are in parentheses. ASCE = American Society of Civil Engineers  
*Geotechnical and Geological Engineering* (Springer)  
*Journal of Advanced Transportation* (John Wiley & Sons)  
*Journal of Bridge Engineering* (ASCE)  
*Journal of Earthquake Engineering* (Taylor & Francis)  
*Journal of Geotechnical and Geoenvironmental Engineering* (ASCE)

- Journal of Hydraulic Engineering* (ASCE)  
*Journal of Intelligent Transportation Systems* (Taylor & Francis)  
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Like Susan Conrad, Laura Aull takes up the methodology of linguistic corpus analysis as it relates to writing studies. While Conrad focuses on comparing the linguistic data of several contrasting corpora to uncover patterns of passive voice in engineering writing (texts of students versus texts of practitioners versus journal articles), Aull explores, in a more general way, the value of corpus methodology for those who want to study student writing within the context of composition courses at the post-secondary level. She notes that although recent linguistic corpus studies have identified statistically significant discourse patterns in student writing, there are few discourse-focused, corpus-based studies in composition today. One result is that most composition students receive macro-level rhetorical instruction but little systemic language-level instruction.

In this chapter, Aull discusses the value of discourse-focused, corpus-based analysis for composition studies, proposing corpus research into connections between writing assignment *text* and *context* as a productive direction for investigating the interconnections of theory and practice. She examines key questions for such research, closing the chapter with examples and guiding principles. Her focus on using corpus linguistics to further conversations in writing studies is maintained in the subsequent chapter by Mya Poe.

The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows A’ and B. Readers are encouraged to seek other connections.



# Corpus Analysis and Its Opportunities and Limitations in Composition Studies

LAURA AULL

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## Introduction: Composition and Context-Focused Insights

We learn a lot about student writers by reading their individual papers, and most of us who teach writing do just that. We read one student text at a time, considering each one vis-à-vis the context of the assignment, student, and course. Across texts, the most systematic work we do, if we do it, probably focuses on macro-level writing constructs like genre, audience, purpose, or evidence. We teach students to attend to these constructs, and we pay attention to whether a given class of papers does so—if, for example, students have accounted for the evidence expectations of a given genre, or the interests of a particular stakeholder audience. In the process, our teaching and grading tend to focus on individual students and aspects of the rhetorical context, whether or not we know how our students tend to achieve or miss particular expectations at the level of their words and sentences.

Composition research today also tends to approach texts this way, with a primary emphasis on context-focused analysis of writing constructs and individual texts, without a systematic focus on discourse across texts. Qualitative and ethnographic approaches in composition, for example, focus on assignment descriptions and writing habits of small groups of first-year students (e.g., Downs & Wardle,

2007; Sullivan, 2015), the genre knowledge of students in first-year courses (Rounsaville, Goldberg, & Bawarshi, 2008), or the transfer experiences of a single student or a handful of students throughout undergraduate coursework (Beaufort, 2007; Driscoll & Powell, 2016). Composition theory reflects this orientation; for instance, genre theorist Carolyn Miller specified that a “definition of genre must be centered not on the substance or the form of discourse but on the action it is used to accomplish” (1984, p. 151), and most rhetorical genre studies privilege substance and context and tend to ignore discourse (Devitt, 2009, p. 27). This orientation has been labeled the “contextualist” focus of composition teaching and research, in contrast to the “linguistic” focus of studies that examine texts according to discourse-level patterns (Crusius, 1999; Flowerdew, 2002).

More extreme is the conclusion that studying discourse is equal to ignoring context and is unproductive or problematic. This sense in composition studies was historicized by Connors (2000) and MacDonald (2007) in order to show that while language-oriented approaches were common in composition in its early years (a trend reflected in Kitzhaber’s 1963 Report of the Dartmouth Study) the 1960s and 1970s marked a clear shift away from them. This can be seen, at least in part, as an understandable response to reductive formalism at that time. For many compositionists, decontextualized textual analysis and grammar instruction in the latter twentieth century—in a larger disciplinary tradition of English studies that already “separate[d] literature from writing and both from language” (Bleich, 2001, p. 119)—fueled clear resistance to the study of form and discourse.

Contextualist approaches in recent decades are furthermore the norm but not the rule. Discourse studies in composition, for example, have identified word- and phrase-level patterns of cohesion and argumentation (e.g., see Barton & Stygall, 2002; Vande Kopple, 1985), distinctions in student versus professional essays (Barton, 1993, p. 763), and instability in disciplinary styles (Olinger, 2014). Corpus linguistic studies in composition have identified statistically significant discourse patterns, across large corpora of student writing (Aull, 2015; Crossley, Roscoe, & McNamara, 2014; Hardy & Römer, 2013; Jarvis, Grant, Bikowski, & Ferris, 2003; McNamara, Crossley, & McCarthy, 2010), in first-year composition rubrics across institutions (Dryer, 2013), and in textbook templates (Lancaster, 2016).

Even so, there are still few discourse-focused, corpus-based studies in composition today. A result, both epistemological and methodological, is that even as we have important insights about student writing within texts and contexts, patterned discourse across texts is rarely a part of our understanding of how our students write and the assignment tasks to which they respond. A pedagogical result is that most composition students learn macro-level rhetorical concepts, but they have little systematic language-level instruction; students may even “learn to

distrust their repertoires of discursive knowledge and expectations” because they have not been “encouraged to reflect upon them and to deploy them” (Bialostosky, 2006, p. 113).

This chapter discusses the value of discourse-focused and corpus-based analysis for composition studies. It further proposes corpus research that investigates connections between writing assignment text and context as a productive direction for studying the nexus of composition theory and practice. To this end, the chapter briefly addresses several questions: What is corpus linguistic analysis? What are its opportunities and its limitations? What are specific opportunities and limitations of corpus analysis in composition? Finally, the chapter closes with guiding examples and principles for corpus analysis of constructed response tasks.

## Corpus Analysis and Discourse-Focused Insights and Limitations

### What Is Corpus Linguistic Analysis?

A basic definition of corpus linguistic analysis is the examination of textual patterns in a selected body of naturally produced texts. The term *textual patterns* refers to lexical or grammatical patterns that persist or do not persist across texts in a corpus, in contrast to more varied choices or to patterns in other corpora. This means that corpus analysis can be used to identify word- and phrase-level as well as functional choices, and it can begin with what emerges in the texts or with a pre-determined target for analysis. The term *naturally produced texts* means that a given corpus consists only of language produced for authentic, real-world purposes (Bowker & Pearson, 2002). Corpus analysis rests on the premises that texts make meaning in patterned ways across texts, and that attention to recurring discourse and its exceptions enhances what we know about texts and contexts.

While it predates computers, contemporary corpus analysis includes computer-aided tools that facilitate searching, sorting, and calculating large-scale textual patterns (Bowker & Pearson, 2002, p. 9; Hunston & Francis, 2000, p. 15; McEnergy & Wilson, 1996). Corpus analysis of student writing is especially common in applied linguistic fields like English for academic purposes (EAP), which, like composition, prioritizes making writing more transparent and accessible for students. Composition and EAP tend to approach writing differently—vis-à-vis sociorhetorical context and action in composition, and vis-à-vis language use in EAP. Historically, EAP has also focused on English language learners, while composition studies, largely situated in North American institutions with general

writing requirements, focuses on first-year (FY) writers and has not taken up corpus-based methods common in EAP (Aull, 2015). Given the fields' respective priorities and target learners, it follows that there are few corpus-based analyses of FY writing in composition, and few corpus-based EAP studies which examine FY writing (Aull & Lancaster, 2014; Coffin & Hewings, 2004; Dudley-Evans, 2002; Gere, Aull, Lancaster, Perales Escudero, & Vander Lei, 2013).

### What Are Some Opportunities Enabled by Corpus Analysis?

Corpus linguistic analysis has been called “text transformation” because it reveals patterns across texts difficult or impossible to detect via traditional reading alone (Barlow, 2004, p. 205; Römer & Wulff, 2010). Moretti (2005) and Jockers (2013) call this transformative view distant reading or macroanalysis—a view that zooms out and throws into relief otherwise undetectable trends. Such patterns can be difficult to discern by “close reading” for several reasons, principally because they can be part of our tacit but unconscious understanding of language. Even persistent discourse that influences student grades can remain beneath the awareness of instructors (Lancaster, 2016; Odell, Goswami, & Herrington, 1983). Put another way, instructors may “know good writing when they see it” but not consciously recognize recurring discourse that constructs it. Two reasons for this include: one, effective writing for particular genres is propagated partly through distributions of words and phrases readers do not consciously consider (Brown & Aull, 2017). And two, our conscious perceptions can be misleading, because features can be perceptually salient but not actually account for much of the total discourse across text examples. For example, while some instructors perceive that textbooks contain accessible, narrative discourse compared to academic articles, corpus analysis shows that textbook discourse is actually among the most densely impersonal and informational writing that students confront in college (Biber, Conrad, Reppen, Byrd, & Helt, 2002).

Identifying recurring discourse therefore helps expose the unreliability of intuitions about language based on individual texts (Biber & Conrad, 2001, p. 332), though it need not suggest that individual iterations are all the same. Highlighting discourse patterns can instead illuminate the “set of conventional, available utterances” in a given genre or context, within which writers locate their own utterances (Bartholomae, 1983, p. 306). In these ways, corpus analysis can help uncover the utterances that are prototypically available or rewarded (Swales, 1990). As an aggregate, systematic way to explore patterns and implications for alternatives, corpus analysis is particularly valuable for identifying student-specific discourse (Römer & Wulff, 2010, p. 101).

## What Are Some Limitations of Corpus Analysis?

Compositionists have expressed important concerns about linguistic analysis, specifically that it can problematically decontextualize language uses and users (e.g., see Crowley, 1989; Swales, 2004; Widdowson, 1998). Crowley, for instance, suggested, “Linguistics favors an extremely narrow, noncontextual notion of what it means to be a user of language. Thus compositionists must recognize that linguistically based pedagogies necessarily operate as though texts are constructed in a cultural vacuum” (Crowley, 1989, p. 499). Before addressing this concern, two caveats bear mention. One is that these critiques are not representative of diverse views held in composition today. Even Crowley’s contemporaries suggested her view was not the full story of twentieth-century linguistics and composition (Parker & Campbell, 1993). Additionally, such concerns may have subsided to some degree, as more recent discourse-level, corpus-based studies by Matsuda and Jefferey (2012), Dryer (2013), and Soliday (2011), among others, have attended to context, rhetoric, and language.

The other caveat is that even more strictly “linguistic” corpus research in EAP does attend to contexts and social values, such as those of disciplinary discourse communities, though its primary object of study is language (Flowerdew, 2005). In just one example from EAP, Hyland uses corpus analysis to examine lexical patterns that reinforce epistemological differences across disciplines. He argues that rare use of first person pronouns in academic writing in the natural sciences foregrounds evidence or phenomena, while significantly more first person pronouns in social scientific and humanistic writing foreground writers’ interpretive reasoning (Hyland, 2005, p. 181). This example—of the first person facilitating particular dimensions of meaning across texts—strives to connect purpose and discourse, rather than treating them as separate. Some past critiques of discourse-focused analysis instead imply a separation, such as in Moffett’s argument that “precisely what are missing” from sentence- and word-level exercises are “broad things like meaning and motivation, purpose and point” (1968, p. 205).

Still, corpus analysis does focus on language and identifying patterns across texts. A concern, then, is that corpus-based patterns risk simplifying context-contingent processes related to those patterns. One response to this is that there will always be questions that are better suited to other approaches. Corpus analysis should be an approach that complements context-focused and individual-text analyses, rather than one that could or should supplant them. Just as ethnographic approaches give us context-focused insights but not every insight, so too can corpus linguistics give us discourse-focused insights but not all the information we need to be thoughtful analysts and teachers of written language. But an additional answer that I want to propose, one particularly well-suited to composition, is to

not only consider both context-focused and discourse-focused research, but to pursue corpus-based analysis that illuminates both context and text. This direction strives to neither reduce, nor choose only, micro-level discourse or macro-level context and meaning, but to help pointedly illuminate both.

### What Are Some Opportunities and Limitations of Corpus Analysis in Composition?

Through corpus-based analysis of how context and discourse interact in writing assignment tasks, composition studies is uniquely poised to explore the nexus of writing theory and practice. Contemporary treatment of writing assignments as constructed response tasks (Bennett, 1991) underscores that writing assignments, which construct students' very responses to them, are unique (or missed) opportunities for connecting constructs theoretically espoused by instructors and administrators, and constructs practiced by students in their assignment responses. A vision of writing assignment design at the interconnection of theory and practice is not new, though composition studies stands to benefit from more avenues for supporting it.<sup>1</sup>

Corpus analysis can help facilitate examination of how the expectations of particular assignment parameters (based on contextual details) are manifest in particular discursive practices (based on textual details), and vice versa. Such investigation can include close attention to assignment genre and task specifications, and systematic analysis of discourse patterns, rather than focusing on one or the other. Consider two example studies. The first study, from applied linguistics, focuses on discourse; the second study, from composition studies, focuses on social context and action. After briefly describing each one, I note how an extension of each might support a new direction, corpus-based examination of assignment context and text.

The first study identifies discipline-specific discourse in advanced student writing vis-à-vis five dimensions of language use. The dimensions were first identified by Biber (1988) according to language use across 23 registers, for instance, interpersonal language more common in conversations, and informational and impersonal prose common in academic writing.<sup>2</sup> Using these language dimensions, Hardy and Romer (2013) show that in the Michigan Corpus of Upper-level Student Papers (MICUSP), upper-level student writing in philosophy includes the most interpersonal and narrative discourse, while writing in physics includes the most informational discourse.<sup>3</sup> In future studies of language dimensions in students' discipline-specific writing, we might additionally investigate the extent to which they are influenced by individual instructor assignment specifications

(which were not compiled as part of MICUSP). What difference does it make, for example, when students write for a general or discipline-specific genre or audience? More information and analysis along these lines could illuminate how task parameters also influence interpersonal or informational discourse, for example, whether a more familiar audience leads to less formality (Puma, 1986).

In a contrasting example, Wardle's (2009) well-known study of first-year composition genres analyzes instructors' and students' assignment descriptions to determine the extent to which composition genres parallel those students will confront later. Based on the descriptions, Wardle argues that composition genres reflect discursive norms unique to first-year writing—aimed at practicing discrete skills (or “getting a good grade”) without a larger rationale—that do not connect to genres and expectations outside of it. In future studies of student and professional genres, we might additionally examine how written patterns compare across them. In other words, on a level of meaning smaller than the whole assignment genre, which (if any) student discursive practices overlap with professional discourse? Is an “observation paper” any more or less likely to prime discursive transfer than a “position paper”? More information of this sort would extend what we know about potential mis/connections between discourse practices within composition courses, and discourse practices in more professional and discipline-specific genres.

Both studies imply that written patterns and institutional, disciplinary values are intimately tied, and of course, neither study intended to blend attention to discourse and context in the ways I am discussing here. The first study considers discourse patterns in disciplines and genres across a university but not how particular assignment details might influence those discourse patterns; the second focuses on particular assignment details but not on how they are realized in discourse. Together, though, they show what we customarily learn in applied linguistic and composition research studies, and what we know less about—the interaction between assignment context and discourse.

What if, using corpus linguistic analysis, instructors examined the common discourse patterns in one assignment versus another, or successful versus unsuccessful assignment responses—and accordingly strengthened connections between assignment parameters and student discourse choices? What if, in their own courses or programs, instructors and administrators could begin systematically to answer the question *What is constructed through constructed response tasks?* Such research would tell us more about the semiotic circumstances and systems that interact and shape students' evaluated writing—in other words, more about how writing theory and practice dis/connect. In support of these possibilities, I close with related principles and example study guidelines.

## Corpus Analysis of Composition Assignment Tasks

Keyword analysis, a common corpus analysis approach, is used to identify discourse patterns that are unique (or key) in one corpus relative to another. It is used to “highlight the existence of types of (embedded) discourse or ideology” by directing researchers to important concepts in selected texts in relation to others (Baker, 2004, p. 3). It is an example corpus-based approach that, guided by assignment context, can help direct attention to discourses and values embedded in assignment responses. In that it enables comparative observations, keyword analysis furthermore does not necessarily require compiling large, representative corpora. For instance, by comparing responses to two assignments in which students have had similar time and resources for writing, instructors can make useful, exploratory observations about each assignment without extrapolating about their students’ writing generally.<sup>4</sup>

There are many descriptions of how to compile usable corpora and conduct keyword analysis. Romer & Wulff (2010) provide an article-length introduction of how to use AntConc, a free toolkit available online, to conduct keyword analysis of student writing. More lengthy introductions provide more detail about corpus building, annotation, and analysis (Anderson & Corbett, 2017; Cheng, 2011; Kübler & Zinsmeister, 2015). Here, I focus on example keyword studies that could shed light on intersections between assignment text and context; the list below highlights possible choices for selecting corpus texts, and example questions that keyword analysis could answer.

- (1) Comparing patterns in high-graded versus low-graded responses to the same assignment. What are key patterns in high-graded writing, and what do they suggest is successful? What are key patterns in low-graded writing, and what do they suggest is not rewarded in a given assignment? Are there a range of key features (suggesting multiple ways to write un/successfully for the assignment), or few key features (suggesting some uniformity in un/successful responses)? Some research shows that multiple features combine to create coherent styles, such as more a persuasive or more formal style, that are equally successful even for the same task (Crossley et al., 2014). Other research suggests that there are specific patterns favored over others in successful advanced student writing, including nouns that are metadiscoursal and methodology-related (Hardy & Römer, 2013), rather than the more generic nouns, such as *people* or *society*, that are key in first-year writing (Aull, Bandarage, & Miller, 2017).

- (2) Comparing patterns in different assignment genres in the same course. What are key differences between different genres in the same course? Do they align with instructor goals for a course and task, or do certain genres align better than others? Research on advanced student writing suggests that some academic genres tend to include more features characteristic of informational writing (e.g., nouns and prepositions), while others include features more characteristic of interpersonal writing (e.g., adverbs and pronouns) (Hardy & Römer, 2013; Nesi & Gardner, 2012). Related research on first-year writing suggests that explanatory writing includes more detailed, elaborated description, while argumentative essay keywords facilitate more generalized claims (Aull, 2017).
- (3) Comparing patterns in similar tasks over time. What are key differences between the same students' responses to similar tasks over a semester or year? What do such keywords suggest about what develops over time and what might be useful to emphasize in writing instruction? Some research suggests that as undergraduate students develop, they hedge more and boost less, and they begin to use certain cohesive strategies more (Lancaster & Aull, 2015). Students may also develop vis-à-vis how they cite, engage with, and project others' views (Ädel & Garretson, 2006; Coffin, 2002; Coffin & Hewings, 2004).

In these examples, the selection and keyword analysis of student texts are by necessity informed by both assignment text and context. Based on resulting inferences, instructors can consider whether the differences in student responses align with instructional goals and whether they reflect student understanding of intended distinctions between genres and tasks. These considerations can inform choices about assignment design, order, and description, as well as how to use instruction to help illustrate valued discourse and rhetorical effects for students. Explicit attention to discourse in this way can help elucidate students' understanding of genre and task expectations and specific, valued possibilities for how to fulfill them. These possibilities may be subtle or tacit for students, even as they help characterize genres and un/successful texts in patterned ways.

Further research using principled corpus analysis of constructed response tasks will likewise support these efforts. Combined with important cautions and questions for data analytics,<sup>5</sup> such principled analysis can strive to:

- (1) Attend to patterned discourse across texts in a systematic way, with attention to how it is influenced by, and as it illuminates, contextual assignment details;

- (2) Identify distinctions sufficiently significant to trust they are not due to chance, by endeavoring to build representative student corpora, to recognize the limitations of any given student corpus, and when appropriate, to use reliable statistical metrics;<sup>6</sup>
- (3) Connect discourse patterns to implications for student learning, not to implicitly privilege one type of language use but to shed light on conventionally-used discursive choices and the implications for embracing or diverging from them; and,
- (4) Neither imply that context nor discourse—nor any single study—can tell the full story of writers and the semiotic circumstances in which they write.

Corpus analysis reminds us that patterned discourse operates in naturalized and tacit ways in existing systems. Context-focused insights help illuminate how sociocultural circumstances and norms encourage and preclude particular genres and ways of thinking. Blending both in corpus analysis of constructed response tasks can provide an additional heuristic for understanding student writing and informing writing task design. There is good reason to pursue it: data analytics is increasingly visible in writing research whether compositionists are involved or not, but composition is specifically well-poised to draw on such approaches to simultaneously investigate assignment text and context.

## Notes

- 1 For instance, Brian Huot (1996, p. 552) underscores site-based writing constructs that are evaluated through locally-controlled assessments, in order that theory and practice unite in writing courses.
- 2 Contrasting more densely informational language production such as academic written discourse, involved features include frequent first-person pronouns, present tense verbs, and amplifiers (e.g., *very, really*). The second pattern, narrative discourse, characterizes written language like fiction and includes past tense verbs and third person pronouns. The third pattern is “overt expression of persuasion,” e.g., in written editorials and including infinitives and prediction, necessity, and possibility modals (*would, must be, and could*, respectively). Involved and narrative discourse especially contrast academic prose, which is characterized impersonal presentation of information such as in complex nominalized constructions (Biber et al., 2002, p. 16).
- 3 MICUSP is a free corpus of A-graded papers across 16 disciplines available here: <http://micusp.elicorpora.info/>. In a British context, Nesi and Gardner (2012) utilize the same dimensions of language use in their analysis of the British Academic Written English corpus. They show that as students move from undergraduate level 1 to level 4, their writing becomes more informational and less interpersonal.

- 4 Keywords can be found in corpora of plain text files using tools such as AntConc (Anthony, 2011) or WordSmith Tools (Scott, 2014). One common way these tools calculate what is “key” in one corpus versus another is by using log-likelihood (LL), which compares observed versus expected frequencies and is useful because it does not assume normal distribution of words across a corpus (Baker, 2004; Oakes, 1998). In addition to using WordSmith or AntConc, researchers can use LL calculators designed to be used with Excel (Rayson & Garside, 2000).
- 5 For the Writing Program Administrator’s Guide to Data Analytics (Adler-Kassner, Estrem, Miller-Cochran, Shepherd, & Wardle, 2017), see [https://docs.google.com/document/d/1hsftuJ1\\_R3vi-NUvadtibyZQg\\_mslAmu-cUW9pfX5pM/edit#heading=h.gri41m55v69x](https://docs.google.com/document/d/1hsftuJ1_R3vi-NUvadtibyZQg_mslAmu-cUW9pfX5pM/edit#heading=h.gri41m55v69x).
- 6 For a guide to common statistic measures in corpus analysis, see Oakes (1998).

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While Laura Aull focuses on what corpus-based studies can offer teachers of writing in the postsecondary classroom, Mya Poe uses corpus analysis to uncover how the field of writing assessment has developed over time. Part historical overview, part theoretical exploration, this chapter traces the development of writing assessment research through the parallel fields of U.S. Composition and Education Measurement. Curious about discourses within and among different fields that “claim” writing assessment, Poe employs word frequency corpus-analysis to trace the discourse in writing assessment research published in leading journals between 2014 and 2017, positing that overlapping terminology reveals ideological and methodological commonalities. Recall that Conrad pairs corpus-analysis with interviews; similarly, Poe pairs corpus-analysis with additional research on the geography of writing assessment research. She finds a demonstrably more international field submitting and downloading assessment research in the Education Measurement journals than previous reviews of writing assessment literature have acknowledged. Coupling her overview of the geographic footprint of the Education Measurement journals with her corpus-analysis of key terms, Poe concludes that the field of writing assessment is international in scope and united by a shared set of concerns. The topic of assessment is also addressed in the subsequent chapter by Ellen Barton, Jeff Pruchnic, et al.

The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows A’, Q and F. Readers are encouraged to seek other connections.



# Is There a Shared Conversation in Writing Assessment? Analyzing Frequently-Used Terms in an Interdisciplinary Field

MYA POE

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The field of writing assessment has a complicated history, as composition studies, educational measurement, and applied linguistics have all claimed ownership over the assessment of writing (Dorans, 2011; Elliot, 2005; Weir, Vidakovic, & Galaczi 2013; White, 2001). For example, Ed White (2001) locates the beginning of the modern era of writing assessment in 1971, “when the English departments of the California State University (CSU) system ... were able to defeat an administrative move to institute an external multiple-choice test for first-year English equivalency for the entire system” (p. 308). In connecting the modern era of writing assessment firmly with teachers of writing rather than test designers, White points to disciplinary tensions that have often informed scholarship in the field. While this contested history remains a well-known narrative in U.S. composition studies, today there is a recognition among writing assessment scholars that writing assessment research is an interdisciplinary field that draws on multiple disciplines. Writing assessment scholars within composition studies, for example, have produced an enormous body of scholarship drawing on educational measurement theories of validity and reliability, including validation studies of responding to student writing (Anson, 1989; Sommers, 2006; Straub, 1997), connecting assessment to the curriculum (Adams, 1993 Adams et al., 2003; Gallagher, 2011; Gere et al. 2013; Haswell, 2001; Smith, 1992), as well as reliability studies of scoring and rating (Dryer & Peckham, 2014; White 2005). That scholarly conversation has

yielded important insights about the relationship between writing development and writing assessment (Behizadeh, 2014; Camp, 2012; Slomp, 2012); and how technology changes writing assessment (Neal, 2010; Whithaus, 2005). Moreover, newer research looks to linguistics research in designing assessments to account for diverse student populations (Crusan, 2002; Das Bender, 2011; Poe, Inoue, & Elliot, 2018).

Despite the shared territory, reviews of the field often ignore this interdisciplinarity. For instance, Condon's 2011 review of the field in the WPA journal, "Reinventing Writing Assessment: How the Conversation is Shifting" reviewed 13 books on writing assessment to demonstrate how the disciplinary conversation is evolving. Of those 13 books, 12 were written or edited by composition scholars with the thirteenth book written by a U.S. education scholar. Such reviews suggest a distinctly U.S. composition studies orientation, even though during that same 10-year period between 2000 and 2010, there were also books published on writing assessment outside of U.S. composition studies, such as *Diagnostic Writing Assessment: The Development and Validation of a Rating Scale* (2009) by Australian language testing researcher Uta Knoch, *Assessing Writing* (2002) by U.S. applied linguistics scholar Sara Cushing Weigle, and *Automated Essay Scoring: A Cross-Disciplinary Perspective* (2003), edited by ETS researchers Mark Shermis and Jill Burstein.

By ignoring the interdisciplinarity of writing assessment scholarship, such reviews maintain the long-standing narrative within composition studies that assessment research has progressed in waves (Yancey, 1999), with newer disciplinary paradigms replacing older ones. In contested disciplinary landscapes, however, one paradigm is rarely completely displaced in favor of a new one. Instead, contested disciplinary landscapes are often layered with multiple value systems. Such layered disciplinary knowledge-making has been suggested by studies from Behizadeh & Engelhard (2011) as well as Morris et al. (2015). In Morris et al.'s (2015) review of 34 books published on writing assessment from 1974 to 2012, researchers concluded, "our limited study of these texts seems to paint a picture of writing assessment as a stable area of study with increased scholarly activity by new scholars, primarily composition authors writing for WPAs and writing teachers" (p. 132). The question, then, is not what paradigm is dominant in writing assessment, but how are different paradigms at work and is there any consensus across those paradigms?

In this modest study, my goal was to use word frequency to trace the discourse community conversation in writing assessment research published in leading journals. My research question was simply, "If writing assessment is an interdisciplinary field, is there a shared conversation in the field?" By invoking the term "sahred

conversation,” I meant to suggest potential shared methods, objects, and values. The frequency with which words appear in journals can suggest a common interest in topics as well as ideological or methodological commonalities. Likewise, if the writing assessment journals that have arisen out of U.S. composition studies use a different lexicon than the educational measurement or linguistics journals, it may suggest that the field of writing assessment remains split in different disciplinary camps.

## Methods

To trace the interdisciplinary conversation in writing assessment research, I conducted a corpus-based study. Because the frequency of specific words suggest terms that circulate in a disciplinary field (Dryer, 2016), I drew on corpora from five journals of the more than 20 journals dedicated to assessment: I selected the two journals specifically dedicated to writing assessment (*Assessing Writing* and *Journal of Writing Assessment*) and two journals in educational assessment that publish articles relevant to research on writing (*Educational Measurement* and *Assessment in Education*). For the comparative case, I selected the journal *Language Testing*, which publishes articles of interest to researchers working in multilingual writing (Table 5.1). I excluded several other assessment journals, such as the *Journal of Educational Measurement*, because their content was less relevant to writing assessment researchers.

Articles from the years 2014–2017 were selected for analysis. Over this time period, 354 articles were published. From those articles, I selected the title and abstract of each article, yielding a corpora of 66,679 words. Because all five journals follow genre conventions for social science journal titles, article titles typically include words related to content. For example, an article title like “Contract Grading in a Technical Writing Classroom: A Case Study” indicates both the key content of the article and the methodology used. Abstracts provide summaries of articles, thus suggesting theoretical and methodological terminology. Table 5.2 shows the number of articles analyzed from this three-year period as well as any special issues that the journal published.

Using Voyant—a web-based reading and analysis environment for digital texts from Emory University—I conducted an analysis of article titles and abstracts to determine frequency of specific words. Using this “bag of words” approach, I delimited stop words as well as the words “assessment,” “evaluation,” and “measurement.” From the Voyant results of frequently-used words, I grouped together forms of the same lexeme such as “raters” and “rating” or “teachers” and “teaching.” For

Table 5.1. Journals Analyzed

Journal	Aim	Impact Factor (2016)
<i>Assessing Writing (AW)</i>	<i>Assessing Writing</i> is a refereed international journal providing a forum for ideas, research and practice on the assessment of written language.	1.462
<i>Journal of Writing Assessment (JoWA)</i>	The <i>Journal of Writing Assessment</i> provides a peer-reviewed forum for the publication of manuscripts from a variety of disciplines and perspectives that address topics in writing assessment.	n/a
<i>Assessment in Education: Principles, Policy &amp; Practice (AiE)</i>	<i>Assessment in Education</i> provides a focus for scholarly output in the field of assessment. The journal is explicitly international in focus and encourages contributions from a wide range of assessment systems and cultures.	n/a
<i>Educational Measurement: Issues and Practice (EM)</i>	The primary purpose of <i>Educational Measurement: Issues and Practice (EM:IP)</i> is to promote a better understanding of and reasoned debate on assessment, evaluation, testing, and related issues of practical importance to educators and the public.	1.145
<i>Language Testing (LT)</i>	<i>Language Testing</i> is a fully peer-reviewed, international, quarterly journal that publishes original research and review articles on language testing and assessment. It provides a forum for the exchange of ideas and information between people working in the fields of first and second language testing and assessment.	.713

example, the *Educational Measurement* included the following forms of the word “develop”: five instances of “develop,” four instances of “developed,” one instance of “developers,” one instance of “developing,” eight instances of “development,” and two instance of “developments.” These instances were summed to yield the total of 21 instances. In future research, it would be fruitful to look at the specific shifts in such terminology across assessment journals. Terms such as “teachers” might point to different actions—e.g., teachers as assessors versus teachers as research subjects.

Using the condensed list of words, I selected the 10 most frequently-used words from each journal dataset. Because of commonality of terminology across journals, this process yielded 24 frequently-used terms. Because journal corpora

Table 5.2. Journal Data Analyzed 2014–2017

Journal	Issues	Articles published (n=354)	Number of words in corpus (n=66,679)	Special issues
<i>AW</i>	4	81	16,182	“The Use of Rubrics to Assess Writing: Issues and Challenges” “Feedback in Writing: Issues and Challenges”
<i>JoWA</i>	1	26	4,981	“A Theory of Ethics for Writing Assessment”
<i>AiE</i>	4	88	14,345	“The Great Validity Debate” “Educational Assessment in Latin America” “English Language Testing in China”
<i>EM</i>	4	63	10,212	“The AERA/APA/NCME Standards for Educational and Psychological Testing”
<i>LT</i>	4	96	20,959	“Authenticity in LSP Testing Future of Diagnostic Language Testing” “Assessing Oral and Written L2 Performance: Raters’ Decisions, Rating Procedures and Rating Scales”

had different word counts, I then averaged the 24 most frequently-used words per 1,000 words. For example, if the word “writing” was found in the *Journal of Writing Assessment* 370 times, I divided 370 by the total number of words for that corpora (4,981). That number was then multiplied by 1,000. In this example, that yielded 22.865. By averaging the frequently used words per 1,000, I could determine if certain words were more likely to be used in certain journals.

## Tracing an Interdisciplinary Conversation through Frequently-Used Terms

Across the five journals that publish writing assessment articles, there was a common set of 25 frequently-used terms used (Table 5.3). Across the journals, the top five frequently-used words in article titles and abstracts were “student,” “writing,” “test,” “language,” and “score.”

Table 5.3. The 25 Most Frequently-Used Words in Assessment Article Titles and Abstracts

	<i>AW</i> 16,182 words	<i>JoAW</i> 4,981 words	<i>AiE</i> 14,345 words	<i>EM</i> 10,212 words	<i>LT*</i> 20,959 words	Total Instances
1. Student	219	40	177	98	67	601
2. Writing	370	79	6	4	68	527
3. Test	73	24	83	68	224	472
4. Language	68	12	26	18	269	393
5. Score	116	18	59	107	89	389
6. Teacher	51	13	207	41	33	345
7. English	38	12	32	8	126	216
8. Develop	69	18	37	21	70	215
9. Performance	53	2	19	32	97	203
10. Rater	74	3	27	22	67	193
11. Valid	45	14	49	31	53	192
12. Education	14	26	90	33	27	190
13. Standard	15	35	21	49	67	187
14. Learning	29	5	120	4	26	184
15. Item(s)	16	0	9	80	77	182
16. Use	45	15	50	28	39	177
17. School	17	6	102	28	17	170
18. Feedback	90	3	25	5	20	143
19. Practice	40	15	49	14	24	142
20. Proficiency	19	3	9	14	92	137
21. Scale	44	8	19	25	38	134
22. Read	8	3	11	14	73	109
23. Reliability	23	5	5	31	33	97
24. Rubric	55	9	12	5	7	88
25. Formative	5	1	64	8	2	80

\*Other common terms included “L2” and “ESL”

Because raw frequencies are not easily comparable, I averaged the word counts per 1,000 words to see the relative distribution of words across the journals (Table 5.4).

When the counts were averaged per 1,000 words across the four journals, the results showed that the most frequently-used words were “student,” “writing,” “score,” “teacher,” and “test.” With a few exceptions, there is also a striking similarity between the raw averages shown in Table 5.2 and the averages per 1,000 words shown in Table 5.3. In other words, with the exception of words like “language,”

Table 5.4. The Most Frequently-Used Words in Article Titles and Abstracts, Averaged by Number of Words in the Corpora

	<i>AW</i>	<i>JoAW</i>	<i>AiE</i>	<i>EM</i>	<i>LT</i>	
	Avg. per 1,000	Avg. Total x 1,000				
1. Student	13.53	8.03	12.339	9.597	3.197	46.693
2. Writing	22.865	15.86	0.418	0.392	0.191	39.726
3. Score	7.168	3.613	4.113	10.478	4.246	29.618
4. Teacher	3.152	2.61	14.43	4.015	1.574	25.781
5. Test	4.511	4.818	5.786	6.659	1.574	23.348
6. Language	4.202	2.409	1.812	1.762	12.834	23.019
7. Standard	0.927	7.027	1.464	4.798	3.200	17.416
8. Education	0.865	5.219	6.274	3.231	1.290	16.879
9. Develop	4.264	3.614	2.579	2.056	3.400	15.913
10. Valid	2.789	2.811	3.416	3.036	2.529	14.581
11. Use	2.789	3.011	3.486	2.742	1.860	13.888
12. English	2.348	2.409	2.230	0.783	6.011	13.781
13. Item(s)	0.989	0	0.627	7.833	3.674	13.123
14. School	1.051	1.205	7.110	2.742	0.811	12.919
15. Learning	1.792	1.004	8.365	0.392	1.240	12.793
16. Performance	3.275	0.402	1.324	3.133	4.628	12.762
17. Rater	4.573	0.602	1.882	2.154	3.200	12.411
18. Practice	2.472	3.011	3.416	1.371	1.145	11.415
19. Scale	2.719	1.606	1.325	2.448	1.813	9.911
20. Feedback	5.561	0.602	1.743	0.489	0.954	9.349
21. Proficiency	1.174	0.602	0.627	1.371	4.390	8.164
22. Reliability	1.421	1.004	0.349	3.036	1.574	7.384
23. Rubric	3.399	1.807	0.837	0.489	0.334	6.866
24. Read	0.494	0.602	0.767	1.371	3.482	6.716
25. Formative	0.309	0.201	4.462	0.783	0.954	6.709

which is over-represented in the journal *Language Testing* and words like “performance” and “rater” which are over-represented in *Assessing Writing*, there seems to be a common lexicon found across these journals. If the frequency of terminology can be used as a proxy for scholarly discourse, then the results suggest that there is a shared scholarly conversation in assessment journals.

Moreover, while technical terms like “scoring” or “test” are common across journals so are terms like “student” and “teacher,” suggesting the subjects or the practitioners of assessment are the focus of current assessment research. While it

may not be surprising to find “student” as a common term in assessment journals, it was surprising to see the term “teacher” found so frequently. Often, outsiders assume that assessment discourse is focuses solely on the technologies and tools of assessment. This dataset shows that the field is very much interested in the people involved in writing assessment.

Looking more critically at the *Avg. per 1,000* columns in Table 5.4 another finding emerges; the terms “valid,” “develop,” “use,” “practice,” and “scale” were *consistently* frequently-used across the journals. Thus, it is not merely that the data show a shared lexicon across the journal but that data show some consistent values across the journals. For example, the term “valid” potentially evidences the shift in the assessment community’s conversation from questions of reliability to validity (Kane, 2015). Notably, the term “reliable” was used infrequently across all four journals.

Of course, the results do show differences across journals. Terms like “item,” “score,” and “test” were found most frequently in *Educational Measurement*, a journal that defines the scope of its purpose within the language of classical test theory: “The term ‘educational measurement’ is used herein in a very broad sense, and can refer to both inferences made and actions taken on the basis of test scores or other modes of assessment.” In *Assessment in Education*, an international journal that often profiles elementary and secondary national assessment practices, it is not surprising to see the terms “education,” “school,” and “learning” appearing frequently. Not surprisingly, the term “writing” was found often in *Journal of Writing Assessment* and *Assessing Writing* but not as frequently in the two journals, *Educational Measurement* and *Assessment in Education*, that include discussions of assessment beyond writing while also publishing writing assessment research. Finally, where differences in terminology between writing assessment and language testing may be most apparent is in the naming conventions of English language learners. Given frequency counting, the terms “L2” (82 times) and “ESL” (17 times) are obviously part of the disciplinary discourse of *Language Testing* researchers. In sum, this shift in terminology across assessment journals suggests that journals have their own niches within the larger scholarly discourse community of assessment.

Finally, while presence and consistency of terms is useful to see a common vocabulary in a disciplinary subfield, it is also useful to note the presence of novel or missing terms. In the case of the journals in this study, the terms “ethics” and “fair” are not frequently-used terms. “Ethics” appears 13 times in the *Journal of Writing Assessment*, one time in *Assessment in Education*. No instances were found in *Assessing Writing* or *Educational Measurement*. “Fair,” an important theoretical concept in assessment research today, appears 20 times in the corpus, 0 times in

*Assessing Writing*, 11 times in *Journal of Writing Assessment*, four times in *Assessment in Education*, and 3 times in *Educational Measurement*. Terms like “ethics” are particularly important from a research perspective because it suggests a disciplinary conversation about research integrity (Elliot, 2016). Likewise, the word “researcher” is lacking from the list of frequently-used words, possibly suggesting that reflexivity is not part of the dominant discourse paradigm of the field. Surprisingly, the term “multilingual” did not appear in *Language Testing*’s most frequently-used words.

## Conclusion

The field of writing assessment today is an interdisciplinary, international field. This modest study of frequently-used terms in five journals that publish writing assessment research suggests that there is a shared vocabulary in the field across journals that publish writing assessment scholarship. Frequently-used words focus on methodological and theoretical concerns as well as the people who are assessed—i.e., students and teachers. While certain words do appear frequently across the five journals in this study, the findings also show that the five journals also have their own foci relevant to assessment research. A useful question for future research would be to determine if novel terms that enter the field through journals like the *Journal of Writing Assessment* end up circulating to the more well-known journals in the field like *Assessing Writing* and the *Journal of Educational Measurement*.

In the end, the modern era of writing assessment looks quite different than the one portrayed by White when he challenged the California State University administration in 1971. While battles with institutional administrators over assessment seem to remain unchangeable, writing assessment scholarship today reflects evolving shared conversations in the field.

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Like Mya Poe, Ellen Barton, Jeff Pruchnic, et al. are interested in assessment, yet these scholars pursue the topic from the perspective of writing program administration. Writing program administrators are often required to balance the need for accountability and quantifying curricular outcomes with the reality of limited resources. In this chapter, the authors present a study of successful uses of what they call *thin-slice methods* in large-scale direct assessment of student reflective writing. As opposed to using longer selections of text as the unit of analysis, thin-slice methods select short, predetermined “slices” of text as the objects for study. Following a description of a study of thin-slice methods in the first-year writing context to assess reflective essays, the authors conduct a second study to develop best practices in norming for thin-slice methods and test these practices empirically. Both studies, the authors posit, support the reliability of thin-slice methods, which offer administrators a more time-efficient method for completing outcomes-based assessment. They call for a reconsideration of norming using empirical methods within Writing Studies. The subsequent chapter by Daniel Perrin takes a different linguistic approach to study workplace writing.

Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows A, A’, and Q.



# Thin-Slice Methods and Contextualized Norming: Innovative Assessment Methodologies for Austere Times

ELLEN BARTON, JEFF PRUCHNIC, RUTH BOEDER, JARED GROGAN, SARAH PRIMEAU, JOSEPH TOROK, THOMAS TRIMBLE, AND TANINA FOSTER

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The examination here has come to be dominated by what is termed psychometric elegance. [...] But the form of scrutiny is pre-empted in most cases by the demand for a “reliable” mark on a scale [...] Alternatively, the examiner may be asked to reach a complex series of judgments, in which case most of this information is discarded when his judgements are reduced to a single mark.

--(Dixon [1967], *Growth in English: A Report Based on the Dartmouth Seminar 1966*, pp. 92–93)

Writing program administrators have long found themselves trapped between countervailing mandates of assessment and austerity. On the one hand, we are more and more finding ourselves living in what White, Elliot and Peckham (2015) have called “The Age of Accountability”: A moment in which educational institutions are increasingly called upon to quantify the impact of their curricular approaches on student learning through direct assessment of student writing. At the same time, however, as Welch and Scott (2016) argue, we currently live in the age of austerity, where funding for assessment programs has not kept pace with the resource demands of large-scale assessments.

In response to this dilemma, our first assessment study, which we will call Study #1 in this chapter, tested the use of thin-slice methods by comparing two

teams using the same outcome-based rubric in assessing our FYC reflection outcome “Use written reflection to evaluate one’s own learning and writing.”

Our two-trait rubric (see Table 6.1), which was based upon our shared assignment for the FYC reflective essay, was developed in a “Storming and Norming” style (Colombini & McBride, 2012).

The final rubric focused on Argument (thesis, claim, relation to course outcomes) and Evidence (examples, analysis, experiences, discussion). Following our existing Phase 2-style assessment process, two-person pairs on one 10-member assessment team assessed full reflective essays using consensus scoring for the final score for the essays (White, 2005; Haefner, 2011). A second 10-member assessment team assessed the same reflective essays in a thin-sliced format: Each thin-sliced essay included three slices—the first paragraph/introduction, a middle paragraph/body, and the final paragraph/conclusion. The thin-slice team scored their essays individually without consultation. The mean of the five scores became the final score for the same reflective essays.

In Study #1, which was based upon a representative randomized sample of our FYC reflective essays (n = 291), the thin-slice team was much more efficient than the full essay team, as would be expected: The full essay team needed 11 hours, 45

Table 6.1. FYC Reflective Essay Rubric. Reproduced with Permission from the Composition Program, Department of English, Wayne State University

	6	5	4	3	2	1
Learning Outcome	Sufficient 6,5,4			Insufficient 3,2,1		
Use written reflection to evaluate one’s own learning and writing.	Excellent argument (thesis, claim, relation to course outcomes). Excellent evidence (examples, analysis, experience, discussion).	Good argument Good evidence	Adequate argument Adequate evidence	Limited argument Limited evidence	Poor argument Poor evidence	No argument No evidence

*Note.*

FYC = First Year Composition

The language explicating argument and evidence is the same for all six categories.

minutes for scoring, while the thin-slice team needed approximately half that time in 5 hours, 23 minutes. We also found that the thin-sliced essay scores of the thin-slice team were well-correlated with the scores of the full essay team (Pearson's  $r = 0.462$ ), indicating that the two teams were scoring similarly. We found, however, that the thin-slice team was significantly more reliable in scoring: Using the Intra-Class Correlation Coefficient (ICC) to measure inter-rater reliability (IRR) (Hallgren, 2012), the thin-slice team's ICC was 0.761, excellent reliability, while the full essay team's ICC was 0.603, good reliability (Cicchetti, 1994). (For the details of Study #1 see Pruchnic et al., 2018.)

Based on these findings, we argued that the most important affordance of thin-slice methods was that it allowed large-scale direct assessment of FYC reflective writing to be based upon a fully representative randomized sample of our FYC student body, which provides essential evidence for the validity of thin-slice methods as part of the development of curricular reforms in our composition program. We consider this a crucially important point: Because our previous full-essay methods took so long, an assessment would often read only 6-12% of our full set of FYC reflective essays, with the dubious consequence that we were making curricular decisions without a solid understanding of the FYC student body as a whole.

The comparative design of Study #1 depended on keeping all conditions of assessment the same for both teams: We varied the format of the essays only (full essays, thin-sliced essays). Out of necessity, we followed our existing assessment process to norm both teams on the reflection outcome and the rubric. In Study #1, our assessment coordinator conducted a one-hour norming on the first day, asking raters to read two full essays using the rubric. For each essay, raters' scores were listed on a whiteboard, and the coordinator then led an unstructured discussion of the scores. On the next day, this norming was repeated using one full essay.

This full essay norming in Study #1, however, meant that we were not using norming procedures optimized for thin-sliced methods. We thus wanted to investigate whether revising our norming procedures to better match our thin-slice methods would lead to even greater reductions in scoring time and/or increased reliability, which would provide further evidence for the reliability, validity and efficiency of using thin-slice methods in the direct assessment of FYC students' reflective writing.

The purpose of the study reported here, which we will call Study #2, was to determine whether a thin-slice norming improves reliability and efficiency. We compared two datasets: The thin-slice data from the assessment reading of Study #1 with its mismatched norming, and thin-slice data from an additional assessment

reading with a matched norming. Our specific research questions (RQs) for Study #2 were the following:

- RQ #1 What was the overall inter-rater reliability (IRR) of Study #2 compared to Study #1?
- RQ #2 What were the overall scoring times of Study #2 compared to Study #1?

Addressing these questions allows us to argue for the importance of adapting norming processes to specific text selection and scoring practices to provide further evidence of the reliability and validity of thin-slice methods in the direct assessment of reflective writing in FYC courses.

## Literature Review—Best Practices of Norming for Reliability

In the writing studies literature, White et al. (2015) defined reliability as an “estimate of the way scores resulting from measurement procedures would be expected to vary across time and circumstance” (p. 22). In writing assessment contexts, measures of reliability describe the degree of agreement among multiple raters’ scores of the same essay; in other words, reliability measures the consistency of raters. White et al. (2015), among others, have argued that reliability, together with the concepts of validity and validation, is an essential goal of assessment due to its role in establishing the credibility of assessment data for students, instructors, writing program administrators, and external stakeholders such as accreditors.

Achieving high levels of reliability, however, is complicated by factors including raters’ value systems, reading practices, and personality traits as well as the design and use of rubrics, the design and implementation of norming, and the material context or social ecology of assessment. For instance, Wolfe (2006) studied raters’ cognitive processing in think-aloud protocols to distinguish how raters processed information while reading, how they scored procedurally, and how they understood the components of writing. The study revealed how different cognitive processes map onto different levels of rater competency and how reliably the raters scored. Wolfe’s recent work with Song and Jiao (2016) identified ten features of essays that make scoring difficult and found two features that stand out: essay length and lexical diversity. To gloss, longer essays with less diverse language (generic or clichéd) were the most difficult to score and led to the most variance in scores. Wolfe et al. (2016) thus recommended that raters be trained in how to handle difficult-to-score features through the use of representative texts that exemplify these difficult features for rater training. Recently, researchers have examined the

impact of rater training and norming and argued for specific practices designed to increase reliability of scoring. Suggested practices include designing rubrics in the context of assessment development, testing rubrics for reliability, and organizing norming sessions with clearly identified phases.

In the thin-slice literature, Ambady et al. (2000) have suggested best practices for training raters in thin-slice contexts, arguing that immediate performance feedback, in which raters are told how their score on an individual artifact compares with an artifact's normed score, has the biggest impact on increasing reliability.

## **Development of a Thin-Slice Norming for FYC Reflective Writing**

Our Study #2 norming procedure included these best-practice strategies aimed at increased reliability according to writing and education researchers. Most obviously, we used thin-sliced sample essays (not full essays) for reading and scoring. We also followed Wolfe et al. (2016) in including difficult-to-score essays as part of our training. Our study's norming included both easy-to-score essays that had received a consistent range of scores in Study #1 assessment as well as essays that had received an inconsistent range of scores in Study #2 assessment and were thus considered difficult-to-score essays. We also followed Ambady et al.'s (2000) recommendation to let raters know immediately how their scores compared with each other and with the normed scores from Study #1. The structure of our three-part contextualized norming is described below.

### Didactic Frame

We developed a didactic infrastructure to frame our thin-slice norming. On day one of the Study #2 norming session, the assessment coordinator introduced our goal of reliable scoring based upon a representative randomized sample of student reflective essays, and also emphasized our use of materials designed and selected specifically for thin-slice assessment norming. The coordinator then carefully reviewed the reflective essay assignment and the assessment rubric, pointing to key terms in the prompt (e.g., “argument,” “claims,” “evidence,” and “examples”), language that was carried through to the rubric (see Figure 1). The coordinator also directed raters' attention to assessing achievement of the reflection course outcome and not writing skills in general or the other FYC course outcomes in particular (reading, researching, writing). He also assured raters that writing which argued

for a lack of achievement in the FYC course could still successfully make an effective reflective argument in this assignment.

## Anchor Essays

The didactic component of the norming continued with six anchor essays identified as easy-to-score based on the consistent distribution of scores for that essay in our previous study. For example, one anchor essay demonstrating rubric category 6/Excellent had been scored a 6 by four raters and a 5 by one rater in Study #1. In the presentation of this essay, the coordinator identified specific features of the essay that linked to the rubric categories—argument and evidence—and their definitions (e.g., thesis and claims for argument; examples and analysis for evidence). This process was repeated with anchor essays for the other five rubric categories, from 5/Good to 1/No.

The coordinator paid special attention to the anchor essays for rubric categories 4/Adequate and 3/Limited. For example, from an essay that had been scored a 3/Limited, the Coordinator described the following topic sentence as too reliant on personal experience (e.g., emotional responses): “Besides the site driving me crazy, the infographic played a small role in the research argument.” The coordinator also noted that remainder of the paragraph also did not go on to follow an evidence-based structure in support of the claim regarding the role of the infographic.

## Scoring Sample Essays

The coordinator then moved to the next phase in the norming—the scoring of sample thin-sliced essays—with visual presentations of the previous scores for the essay and the scores of the group, followed by a semi-structured discussion of the raters’ scores with respect to the rubric. After raters read each essay, the assessment coordinator wrote the Study #1 scores of the sample essay on a whiteboard and raters then called out their scores for the coordinator to post as well. This allowed readers to quickly see how their score compared to the Study #1 score and to see which scores were the most common across the group in Study #2. In the guided group discussion, the assessment coordinator took pains to keep the focus of the discussion on scoring with the rubric, even identifying the improper use of individual heuristics that went outside the rubric, such as scores based upon voice, narrative, or quality of writing.

While the six anchor essays had been selected because previous raters scored them reliably, the sample essays for the Study #2 norming on day one included four difficult-to-score essays. Thus, one innovation in our norming was the use of

reliably and unreliably scored essays from previous research. Another innovation in our norming procedures was to pay special attention to sample essays that had previously been scored either 3/Adequate or 4/Limited on the rubric. This distinction was the most challenging one for raters in our previous study. After scoring and discussing the sample essays in terms of the rubric, the day one norming ended after 90 minutes and regular scoring began.

On day two, the coordinator conducted a booster norming of 50 minutes, briefly reviewing the rubric language before the group individually read, scored, and discussed three sample essays, again in terms of the rubric.

In comparison to Study #1, our contextualized thin-slice norming in Study #2 was lengthy, structured, and outcome-based, using a rubric that was deliberately grounded in the assignment that FYC students were asked to write to demonstrate their achievement of the reflection outcome.

## Method

To determine whether a contextualized thin-slice norming improves reliability and efficiency in the direct assessment of FYC reflective writing, we addressed the following research questions:

RQ#1 What was the overall IRR of Study #2 compared to Study #1?

RQ#2 What were the overall scoring times of Study #2 compared to Study #1?

### Site

Our Study #2 assessment took place at Wayne State University (WSU), an urban public research university. Our FYC course utilizes a common syllabus and assignment sequence strongly influenced by the Council of Writing Program Administrators Outcomes Statement (2014). The WSU Institutional Review Board approved the study.

### Teams

In Study #1, we formed a team of 10 experienced FYC instructors: Four full-time faculty members, three graduate teaching assistants, and three part-time faculty members. For Study #2, we also formed a similar 10-member team of experienced FYC instructors: Five full-time faculty members, three graduate teaching assistants, and two part-time faculty members.

## Sample

For Study #2, we assessed the same representative randomized sample of thin-sliced FYC reflective essays as Study #1 (n=291).

## Norming

We used the contextualized thin-slice norming described above.

## Procedures

As in Study #1, we divided the thin-slice team into two groups of 5, each of which scored half of the essays (n=147, n=144). The Study #2 teams then read the thin-sliced reflective essays and scored them individually, using the rubric without consultation or discussion with other raters. The final score for each reflective essay was the mean of the five raters' scores.

## Data Analysis

We used the same statistical methods used in Study #1. Our hypothesis for RQ #1 was that overall inter-rater reliability would increase for the Study #2 team compared to the Study #1 team. To test this hypothesis, we measured the IRR of the Study #2 team using Hallgren's Intra-Class Correlation Coefficient (ICC) (2012). The ICC measures the degree of agreement among raters' scores (the covariance of scores), and the ICC is the inferential measure used for interval numeric data scored by multiple raters.

We used the ICC results to compare the reliability of the Study #1 team and the Study #2 team. To determine whether inter-rater reliability increased significantly, we followed Cichetti's (1994) classifications in order to interpret the ICC results: Excellent ( $\geq 0.75$ ), good (0.60 to 0.74), fair (0.40 to 0.59), and poor ( $< 0.40$ ) reliability. To determine whether IRR increased incrementally in Study #2, we followed Landis and Koch's (1977) more differentiated set of classifications: Near perfect agreement ( $\geq 0.80$ ), substantial agreement (0.60 to 0.79), moderate agreement (0.40 to 0.59), fair agreement (0.20 to 0.39), and slight agreement ( $< 0.20$ ).

Our hypothesis for RQ #2 was that the overall scoring time would decrease significantly or incrementally for the Study #2 team compared to the Study #1 team. We calculated the mean scoring time in minutes for both teams and then

used an independent samples *t*-test to compare the means of the Study #2 team to means of the Study #1 team ( $p = .05$ ) (Standards, 2014).

## Results

To answer RQ #1, we compared the reliability of our thin-slice assessment scoring in Study #1 and Study #2 (see Table 6.2).

Our working hypothesis for RQ #1 was that overall inter-rater reliability would increase for the Study #2 team compared to the Study #1 team, either significantly or incrementally. The ICC results for Study #2 found that inter-rater reliability increased from 0.761 to 0.809. In Cichetti's (1994) classifications, both results remained within the category of excellent reliability. Using Landis and Koch's (1977) classifications, however, we found an incremental difference between the two ICC results: The 0.761 ICC from Study #1 would be considered substantial reliability, while the 0.809 ICC from Study #2 would be considered near perfect reliability.

To answer RQ #2, we compared the efficiency of our thin-slice assessment scoring in Study #1 and Study #2.

Our working hypothesis for RQ #2 was that the overall scoring time in minutes would decrease for the Study #2 team as compared to the Study #1 team (see Table 6.3). The Study #2 team spent 2469 minutes reading and scoring (4 hours, 9 minutes), while the Study #1 team spent 3203 minutes reading and scoring (5 hours, 23 minutes). An independent samples *t*-test found that significantly less time was needed to score essays in Study #2 ( $M = 246.90$ ,  $SD = 88.336$ ), compared to the Study #1 team ( $M = 320.30$ ,  $SD = 65.318$ ),  $t(2.113)$ ,  $p = 0.49$ .

To summarize, we found that the reliability of the Study #2 team increased incrementally over the Study #1 team (RQ #1). In efficiency, we found that the Study #2 team was significantly more efficient than the Study #1 team (RQ #2).

Table 6.2. ICC Team Results for Study #1 and Study #2

Variable	ICC <sup>(a)</sup>	95% CI <sup>(b)</sup>
Study #1 Team	0.761	[0.714, 0.802]
Study #2 Team	0.809	[0.773, 0.842]

Note. Hallgren, 2012.

(a) ICC = Intra-Class Correlation Coefficient

(b) CI = Confidence Interval

Table 6.3. Time Comparison of Study #1 and Study #2 Using an Independent Samples t-Test

<i>t</i> <sup>(a)</sup>	Study	#1	Study	#2	Sig <sup>(d)</sup>
	Mean <sup>(b)</sup>	Standard Deviation <sup>(c)</sup>	Mean <sup>(b)</sup>	Standard Deviation <sup>(c)</sup>	
2.113	320.30	65.318	246.90	88.336	0.49*

*Note.* Standards, 2014

(a) *t* = *t*-statistic

(b) M = mean

(c) SD = standard deviation

(d) Sig = significance,  $p < .05$ .\*

## Discussion and Conclusion

Functioning in part as a replication study, the study presented here strengthens our conclusion from Study #1 that thin-slice methods can effectively be used as a quantitative method in the large-scale direct assessment of FYC reflective essays. The results of Study #2 found that adapting best practices of norming specifically for thin-slice methods improved the reliability and efficiency of our assessment. Together, these results provide high-quality evidence of the quantitative validity of thin-slice methods for FYC reflective writing.

The major contribution of this chapter lies at the overlap of two related areas of assessment scholarship: (1) thin-slice methods applied to the direct assessment of student writing and (2) best practices for norming in writing assessment scholarship. Our results regarding reliability as well as the significant time efficiency of the method help confirm and extend our earlier study that also demonstrated notable affordances in these areas (Pruchnic et al., 2018). However, the improvements in reliability and, more strikingly, in decreasing the necessary time needed for scoring essays in Study #2, are the result of adapting extant best practices in assessment norming to the methodological conventions of thin-slice methods for scoring texts.

It is worth noting two other affordances in the comparison of norming in Study #2 compared to Study #1. First, in Study #2, our norming covered a total of 13 thin-sliced essays over two days. In Study #1, the full essay norming covered only three essays, and the timing of a norming based upon 13 or even fewer essays would be prohibitive. While this is largely a function of the shorter thin-sliced texts, the depth of the norming is an affordance of thin-slice methods because it allows space for a detailed norming.

A second affordance of the use of thin-slice methods is that it offers a rigorous norming that could contribute to a field-wide conversation about high-stakes assessments. Our research uncovered one distinction our raters perceived as high-stakes judgment—identifying a student writer’s essay as achieving or, especially, not achieving the reflection outcome. The infrastructure of a contextualized norming, however, may give raters more confidence to make these difficult judgments. It is worth discovering and exploring such issues empirically in future research, using thin-slice methods and other methodologies.

Our conclusions suggest not only that thin-slice methods are viable for certain assessment scenarios common to writing programs but also, more generally, speak to the need to contextualize norming methods to the specific design of the text preparation, rubric development, and scoring methods being used in a particular assessment process. As austerity conditions increase the pressure on writing programs to be innovative in changing elements of their assessment in order to maintain accountability to relevant stakeholders, it is important to remember that all aspects of assessment design may need to be recalibrated around these innovations in order to maintain the integrity of the assessment process in the field of Writing Studies.

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Shifting the research site from the writing program to the multilingual and multicultural workplace, Daniel Perrin details Transdisciplinary Action Research (TDA), an emerging theoretical framework in applied linguistics that offers much to writing studies. Researchers and practitioners can collaboratively address real-world problems of language use and writing through TDA's method of *progression analysis*, a mixed-method approach involving observations, computer-recorded screencasts, and interviews. Progression analysis, Perrin writes, "enables researchers to consider the multi-layered context of a production process; to trace the development of an emerging text; and finally to reconstruct the writers' considerations from different perspectives." This method has been used to investigate text production practices in a range of workplaces. Perrin offers brief examples from four domains (education, finance, translation, and journalism). In closing, he suggests empirically-based measures for research that contributes to the development of both theory and practice—with the goal that research *on* practitioners can become research *with* and *for* practitioners. Perrin's examination of naturalistic composing practices is continued in the following chapter by Neal Lerner.

The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows G, G', I and B". Readers are encouraged to seek other connections.



# On, for, and with Practitioners: A Transdisciplinary Approach to Writing Research

DANIEL PERRIN

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## Applied Linguistics and Transdisciplinarity

In an increasingly globalized and interconnected world, communication entails the transgression of boundaries between “discourse systems” (Scollon, Scollon & Jones, 2012). These systems include linguistic varieties, natural languages, and entire semiotic systems used by discursive cultures rooted in regions, professions, and societal groups. Applied linguists thus find themselves in the comfortable position of being in growing demand both inside and outside the classroom. Society at large expects applied linguistics to identify and analyze socially relevant “practical problems of language and communication” (Association Internationale de Linguistique Appliquée mission statement, [www.aila.info](http://www.aila.info)) and to contribute to sustainable solutions which add long-term value from the perspectives of researchers, practitioners, and society at large.

In developing sustainable solutions, applied linguistics can draw on knowledge developed in transdisciplinary research in general (Apostel, Berger, Briggs & Michaud, 1972) and in the research framework of transdisciplinary action research (TDA) in particular (e.g., Stokols, 2006). TDA aims at facilitating theoretically grounded and systematic collaboration between researchers and practitioners, such as writing researchers, on the one hand, and teacher educators, financial analysts, translators, journalists, and policy makers, on the other. Not surprisingly,

the methodological principles and practices of TDA have included, from the very beginning of TDA, language awareness as the key success factor of a systematic collaboration between practitioners and researchers (e.g., Klein, 2008, p. 407).

If this collaboration succeeds, the TDA research framework enables researchers and practitioners to jointly develop sustainable solutions to complex practical problems of – in our case – language use in general (Perrin, 2018) and writing in particular (e.g., Perrin, 2013). In the next section, I describe the methods used within the TDA framework to identify, analyze, and solve problems of written communication in increasingly multilingual and globally connected settings. Next, four examples, from the domains of education, finance, translation, and journalism, illustrate what it means to identify and sustainably solve practical problems. I then offer an in-depth analyses from an exemplary project to explain the trajectory from the problem to the solution step-by-step. Finally, I describe the value that such research can add to the development of both theory and practice.

## The Multimethod Approach of Progression Analysis

In all research projects described below, we apply progression analysis, which is a multimethod approach that combines (a) ethnographic observation and interviews, (b) computer recording, and (c) cue-based retrospective verbal protocols (for more details, see Perrin, 2003). Progression analysis has proven valuable in understanding the writing processes of practitioners such as journalists, communication professionals, financial analysts, and translators. It allows data to be obtained on three levels, so researchers can investigate collaborative writing as a situated activity in organizational and societal frameworks (Perrin, 2019).

### Ethnographic Observation and Interviews

The first level of progression analysis investigates the writers and the writing situation. Considerations include the writers' professional socialization and economic, institutional, and technological aspects of the work situation as well as the specific writing task that the writers aim to accomplish. Data on the writers' self-perceptions are obtained in semi-standardized interviews that focus on writers' activity, professional experience, and workplaces. Researchers collect ethnographic data through unstructured participatory observations of organizational practices as well as interviews about them. Findings on this level include, for example, writers' general language awareness in the area of coherence problems.

## Computer Recording

The second level of progression analysis records every keystroke and writing movement in the emerging text with programs that run in the background (behind the text editors that the writers usually use, for instance, behind the user interfaces of their company's editing systems). The recording can follow the writing process over several workstations and does not influence the performance of the editing system or the writer. The computer recordings provide information about what writers do during the text production process, with every movement and revision step representing intermediate text versions in the writing process. Findings on this level can reveal, for example, the writing activities that result in a specific text coherence problem.

## Cue-Based Retrospective Verbal Protocol

The third level of progression analysis, the sociocognitive conceptualization or reconstruction, draws on verbal data to infer the mental structures that might have guided the writing activities observed on the second level. After finishing a text production process, writers view a playback of their process and watch as their text emerges. While doing so, they are prompted to comment continuously on what they did while writing. An audio recording is made of this verbalization, and the recording is transcribed in a cue-based retrospective verbal protocol (RVP). The RVP is then encoded with respect to aspects of language awareness, writing strategies, and conscious practices. Findings on this level can provide insights into, for example, writers' decisions that resulted in a coherence problem in their texts.

In sum, progression analysis enables researchers to consider the multilayered context of a production process; to trace the development of the emerging text; and, finally, to reconstruct the writers' considerations from different perspectives. The three levels of progression analysis allow the strategies and practices that writers articulate in their cue-based retrospective verbalizations to be placed in relation to the situational analysis and the data from the computer recordings. Characteristics such as coherence problems in final texts become understandable as resulting from complex situated activity in dynamic contexts of layered durability (Perrin, 2013, pp. 215–223; drawing on Carter & Sealey [2004] and Layder [1998]).

## Examples from Four Domains of Writing

In this section, I outline how transdisciplinary research teams have used progression analysis to understand and improve text production in various domains

and workplaces. To provide comparable examples across research projects and domains, I focus on one narrow subtopic of analysis: the coherence problems in evolving texts. By *coherence*, I understand the syntactic and semantic, as well as the explicit and implicit pragmatic connectivity, within and across text elements of all sizes, ranging from single words to entire paragraphs, texts, and intertextual chains in discourse (e.g., Campbell, 1995; Kehler, 2003; Rickheit, Günther, & Sichelschmidt, 1992).

Aspects of this phenomenon are illustrated in the next four subsections with data from four projects: the MYMOMENT project, which tracked children's essay writing to improve teacher education; the NATIONALBANK project, where the production of financial analysts' recommendations for investors was analyzed to improve stakeholder communication; the CAPTURING TRANSLATION PROCESSES project which focused on the use of information sources and decision-making; and the IDÉE SUISSE project, in which journalists' collaborative news production was investigated to foster the Swiss public service broadcaster's contribution to public discourse and understanding.

#### MYMOMENT: Tracking Writing Behavior to Improve Teacher Education

Children perform a variety of writing tasks using digital devices, and word processing programs are quickly becoming their natural writing environment. The development of computer logging programs has enabled researchers to track the process of writing without changing the writing environment for the writers concerned. In a research project called MYMOMENT and its follow-up projects (e.g., Gnach, Wiesner, Bertschi-Kaufmann, & Perrin, 2007), hundreds of children in primary school grades one to five were provided with a web-based interactive writing environment for reading and writing stories and for making comments in class and at home. Writing processes were recorded automatically with progression analysis. Teachers and researchers collaborated in transdisciplinary setting to jointly create knowledge about children's writing practices.

In the following example, the fourth-grader Doris (pseudonym) writes a German text entitled "Der Regenbogen" [The Rainbow] as a piece of free composition; she was able to determine both the form and the content herself. Figures 7.1, 7.2, and 7.3 show the production of the first five (of 30) sentences of Doris' text. The notation system used in the figure is called S-notation (Severinson-Eklundh & Kollberg, 1996), which marks insertions and deletions and shows their sequence in the writing process. Wherever the writing is interrupted to delete or add something, S-notation inserts the break-character  $|_n$  in the text. Deleted passages are

Als es an einem Sonntag <sup>1</sup>[ndie|<sub>1</sub>]<sup>1</sup> die ganze Zeit regnete und dann wieder die Sonne schien beschloss ich in den Wald zu gehen. <sup>2</sup>[Ich|<sub>2</sub>]<sup>2</sup> Die frische Luft tat mir sehr g<sup>4</sup>[uet|<sub>4</sub>]<sup>4</sup>ut.

*As it rained <sup>1</sup>[nthe|<sub>1</sub>]<sup>1</sup> the whole time one Sunday and then the sun shone again I decided to go for a walk in the woods. <sup>2</sup>[I|<sub>2</sub>]<sup>2</sup> The fresh air did me a lot of g<sup>4</sup>[oed|<sub>4</sub>]<sup>4</sup>ood.*

Figure 7.1. First two sentences of a fourth-grader's composition (translation by the author).

Ich sah <sup>5</sup>[viele Tie|<sub>5</sub>]<sup>5</sup> nicht so viele Tiere wie let<sup>6</sup>[s]<sup>2</sup>|<sup>6</sup>z]<sup>7</sup>te Woche

*I <sup>5</sup>[saw many ani|<sub>5</sub>]<sup>5</sup> didn't see as many animals as la<sup>6</sup>[z]<sup>6</sup>|<sup>6</sup>s]<sup>7</sup>t week*

Figure 7.2. Third sentence of the fourth-grader's composition (translation by the author).

in <sup>n</sup>[square brackets]<sup>n</sup> and insertions in <sup>n</sup>{curly braces}<sup>n</sup>, with the subscript and superscript numbers *n* indicating the order of these steps.

Doris writes the first two sentences fluently, immediately correcting typos (deletions 1 and 4) and making a conceptual change (deletion 2).

She begins the third sentence by saying that she saw a lot of animals. Then she deletes the beginning of the sentence and writes the converse (i.e., she did not see as many animals as last week; deletions 5 and 6, insertion 7 in Figure 7.2).

Once she writes the third sentence, Doris moves back through the text, correcting the spelling of a word (i.e., *letste* to *letzte*). She continues to write about her experience in the woods (Figure 7.3). Doris then immediately deletes the last part of the previous sentence and makes what will become a significant turning point in her story (deletion 8).

The rest of the story is written in the same linear way. The reader learns that the narrator wanted to take the hedgehog home but then decides to leave it because she is afraid of her mother's reaction. While walking home, observing a rainbow in the sky, she feels sad and guilty. But when she comes back the next day, she sees the hedgehog alive, fully recovered – which, in her understanding, is what the rainbow had promised.

Aber plötzlich stand ich wie angewurzelt stehen. Ich sah einen <sup>8</sup>[toten Igel vor m|<sub>8</sub>]<sup>8</sup> halb toten Igel vor mir

*But suddenly I stood rooted. I saw a <sup>8</sup>[dead hedgehog in front of m|<sub>8</sub>]<sup>8</sup> half-dead hedgehog in front of me*

Figure 7.3. Fourth and fifth sentence of the fourth-grader's composition (translation by the author).

This story only works because Doris changed the description of the hedgehog from *dead* to *half dead*. This local change ensures the dramaturgical coherence of the narration. The girl's decisive conceptual change in revision 8 (see Figure 7.3) illustrates epistemic writing: typing is used as a means to understand what she wants (and does not want) to say in her text to make it a coherent story. But in contrast to many adult experienced writers' behavior, global coherence seems to be established on the fly, while typing, not by planning key elements in advance. The fourth-grader Doris tells her story linearly, correcting typos and altering far-reaching dramaturgical decisions by deleting all the characters on her way back to the stretch she wants to change.

The MYMOMENT project suggests that analyses of text production processes can provide teacher-education insight. Detailed empirical information shows teachers how children at specific stages of development—thinking, writing, and, in this case, ensuring narrative coherence – and how they are, by doing so, influenced by their writing environment, peers' feedback, and teachers' instructions. The transdisciplinary approach fosters both an age-specific understanding of essay writing and the design of writing education, addressing central questions such as how to establish narrative coherence in a text. By doing so, it facilitates communication among generations that have different discursive cultures (for example, linear text development versus top-down planning).

### NATIONALBANK: Analyzing Financial Analysts' Recommendations for Investors

Another strand of transdisciplinary projects investigates text production in the domain of finance, for example, financial analysts' writing (e.g., Whitehouse & Perrin, 2015; Whitehouse, 2018). Financial analysts continually write recommendations for investors. They can be considered professional writers without a professional writer's background – their professional education mostly focuses on technical knowledge about banking and finance but neglects language awareness and writing skills. In the NATIONALBANK project and its follow-up projects, analysts' text products, writing processes, and workflows in financial institutions such as banks were investigated to raise individual and organizational language awareness and to promote an orientation toward the addressee's communicative needs.

In this chapter, I briefly highlight one particular outcome of this transdisciplinary research: the insight that coherence breaks in text products tend to emerge between *phase shifts* in writing processes (e.g., Perrin & Wildi, 2012). Put simply, when writers switch from linear progression to jumping back-and-forth in the emerging text, they risk losing control over their text and its coherence. Phase

shifts have turned out to be strong predictors of coherence problems. In Figure 7.4 below, the two graphs illustrate writing processes with and without such phase shifts (and the resulting breaks of coherence).

In both graphs, the x-axis shows the order of deletions and insertions over time, from the beginning to the end of the writing process. The y-axis, by contrast, shows in which order these deletions and insertions appear in the final text, from the top to the bottom of the text product. The graph visualizes the progress of a writer working through an emerging text – how she or he moves back and forth in the text produced so far while writing. We have therefore termed this type of visualization a *progression graph* (Perrin, 2003). In Figure 7.4, a straight line from the upper left to the lower right on the left graph indicates a completely linear writing process. In the right graph, however, shifts between more linear and more fragmentary phases are visible. This is where text coherence problems tend to occur.

Such knowledge can help transdisciplinary research teams design measures for professional writing education in institutions such as banks. The goal of the measures in the NATIONALBANK project was to enhance the comprehensibility and comprehensiveness of analysts' recommendations, among other ways by improving text coherence, in order to provide investors with a better basis for their decisions. Measures can help members of an expert community overcome their discursive culture's boundaries and communicate with lay people. Given the low average financial literacy of investors (e.g., Guiso & Viviano, 2013) and the (polito-) economic importance of investment decisions, improving the communicative potential of analysts' recommendations is relevant not only in an economic but also in a societal context (see Whitehouse, 2017).

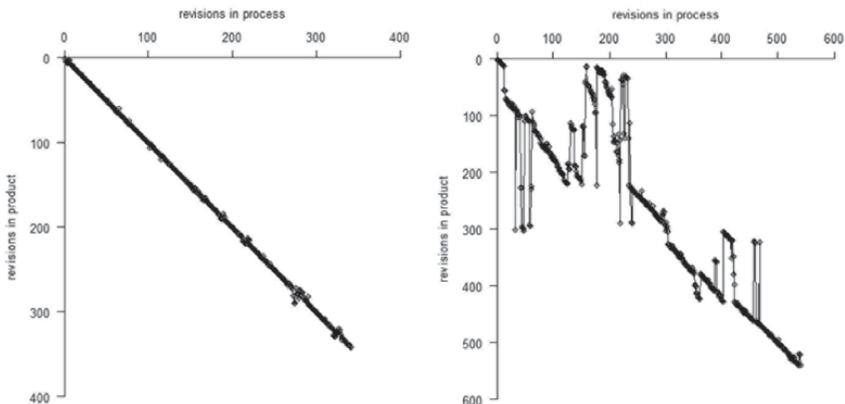


Figure 7.4. Linear progression (left) and multi-phase progression with phase shifts (right).

## CAPTURING TRANSLATION PROCESSES: Revealing Translators' Use of Resources

In an extension to progression analysis, eye-tracking has been used in the laboratory to investigate how writers confirm or supplement their domain knowledge when working on texts in an unfamiliar area. The focus of attention can be tracked as writers or translators access and read through digital sources and their emerging texts. This is what transdisciplinary projects such as CAPTURING TRANSLATION PROCESSES do (e.g., Ehrensberger-Dow & Perrin, 2009; 2013).

In Figure 7.5 (below), the set of connected spots shows the foci and intensity of attention while a professional translator searched with Google for an acronym that appeared in a text about a military sonar detection system recently banned in the U.S. (Massey & Ehrensberger-Dow, 2011). The translator was grappling with the task of adequately translating the acronym *MoD* for a German-language target readership that might be unaware of the differences between these two countries' military systems and what relevance a U.S. judge's decision might have for the U.K.. The eye-tracking visualization shows that the translator skimmed through the first three hits, barely fixating on the descriptions in the snippet texts. The whole process took only 7 seconds before the translator returned to work on the emerging target text.

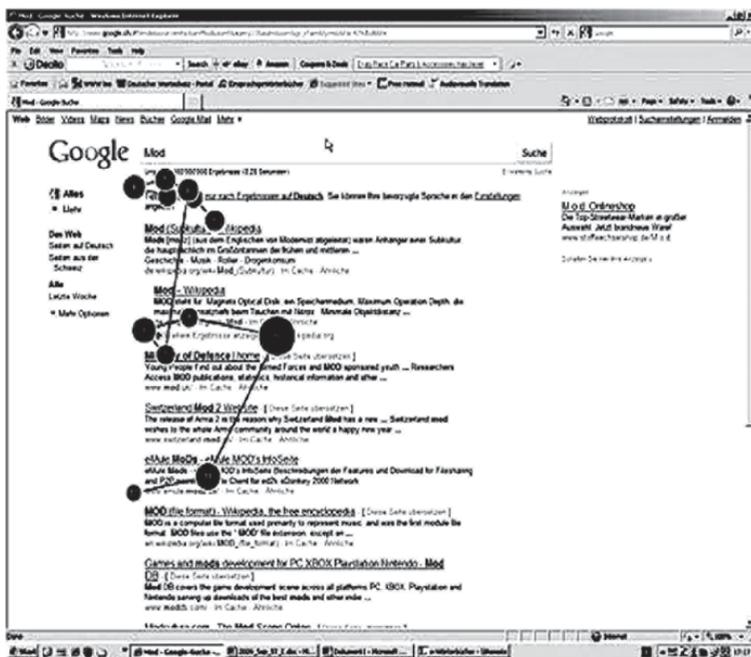


Figure 7.5. Eye-tracking visualization of a professional translator's use of digital resources.

In the subsequent RVP, as he viewed his translation process, the translator remarked that he actually knew that MoD must mean *Ministry of Defence* in that context but that he had just wanted to check. This purposeful confirmation by the professional establishes coherence between the emerging text and the ongoing discourse in the field. It is in stark contrast to the behavior of a student translator with much less domain knowledge and experience who seemed to have little idea of what to look for. Even though her gaze fell on the solution to this particular translation problem in the list of hits that she checked, she failed to recognize it as such (for more details, see Massey & Ehrensberger-Dow, 2011).

Progression analysis provides a framework that allows comparative investigations into the decision-making involved when translators shape their texts to meet the linguistic and cultural needs of their target audiences. Efficient exploitation of the appropriate digital resources is one of many indicators of translation expertise that have been identified in transdisciplinary research, which has fed into empirically based improvements in the education and professional development of translators (e.g., Massey & Ehrensberger-Dow, 2013).

#### IDÉE SUISSE: Investigating Collaborative and Multimodal Newswriting

The use of digital resources has also become an important aspect of the intercultural communication evinced by multimodal newswriting as journalists work as gatekeepers in increasingly digitized global newsflows. Transdisciplinary research into news production can help the media improve their contributions to public discourse (Perrin, 2013). The IDÉE SUISSE and its follow-up projects (e.g., Perrin & Zampa, 2018; Zampa & Perrin, 2016) have involved public and private broadcasting and publishing companies as well as media policy makers. Our interest in these projects is to examine stakeholders' practices to understand what precisely they do, how they do it, and why they do it this way.

One of our large projects focuses on the Swiss public broadcaster SRG (*Schweizer Radio- und Fernseh-Gesellschaft*) [*Swiss Radio and Television Company*]. The findings show that policy makers, management, and journalists interpret their public or private mandates in different and partially contradictory ways. Most media policymakers under investigation see the mandate of fostering societal integration by promoting public understanding as a commitment by media in general and SRG in particular. However, SRG managers' statements made in semi-standardized interviews tend toward the following propositional reconstruction: *Public media are not the right institutions to solve social and pedagogical problems.*

Basically, this proposition means that SRG fails to do what it says it will and what it is expected to do – essentially that SRG neglects its public mandate of

promoting public understanding. However, by looking more closely at the writing processes of the journalists under investigation, we were able to identify emerging practices – ways out of the conflicts and dilemmas, toward multilayered yet coherent texts that meet both expectations: on the one hand, the public demand for societal integration through fostered public discourse and shared public knowledge; on the other hand, the market expectations of reaching large audiences and generating income with attractive programs and stories.

In transdisciplinary collaboration, we identified these good practices and their most important counterparts, the critical situations. Whereas critical situations denote exemplary findings of which circumstances could lead to a failure to promote public understanding, good practices represent potential success in terms of the journalists', chief editors', managers' and politicians' criteria reconstructed in the project. One example of good practice is what we call the background-recency split which emerged in one experienced journalist's conflict of basic practices. This is explained in more detail in the next section.

## An Exemplary Trajectory from the Problem to the Solution

An in-depth analysis of an exemplary case from the corpus of the *IDÉE SUISSE* project explains a conflict and its emergent solution. In the *UN ELECTIONS* case, the journalist is a professional with over 20 years of experience as a foreign correspondent and news editor for Scandinavian and Swiss print media and television. He dares to challenge existing policies (“doing forbidden things”) if he thinks this will enhance the quality of the news. At the time of the study, he worked for the *TAGESSCHAU*, SRG's German-speaking flagship television newscast. In the following subsections, I demonstrate the trajectory from problem to solution through the journalist's collaborative text production practices, the strategies beyond the practices, and the solution that emerged from the situated activity.

### The Collaborative Text Production Practices

In the news production process analyzed in detail here, the journalist first viewed the video sources he had at his workplace – most of which were in English – and made notes by hand. He then chose pictures and took them to the cutter's workplace, where they compiled the video together. Before the journalist started writing, he had a clear idea of how to start – and he counted on getting other ideas for the rest of the text while writing it. His idea of how to start was that he would split the story in an unusual way. The idea and the corresponding practice

0076 *and what I'm trying to do here actually is (to give) the story*  
 0077 *which is simply just an election to the security council as it were*  
 0078 *to provide a context for it*  
 ... ..  
 0092 *there are two different stories*  
 0093 *to tell here*  
 0094 *and with the pictures*  
 0095 *I can't tell the second story very well of course*  
 0096 *these are the pictures we have*  
 0097 *which show the election procedure*  
 ... ..  
 0100 *that means that now in the anchor's introduction I have to try*  
 0101 *to sort of describe the context*  
 0102 *and because we really focus on current topics*  
 0103 *I have to somehow make sure*  
 0104 *that there is a connection to recent events*  
 ... ..  
 0113 *chavez this is quite difficult in two or three sentences*  
 0114 *for people who don't know*  
 0115 *what chavez's role is*

Figure 7.6. Translated excerpts of the German RVP from the UN ELECTIONS case.

emerged when the journalist tried to solve the problem of contextualizing recent events with the pictures he had available – as can be seen in the cue-based RVP (Figure 7.6).

## The Strategies beyond Situated Activity

The propositional analysis of the journalist's RVP led to the description of the repertoire of his conscious activities. In the UN ELECTIONS case, the key activities consist of practices (doing X) and strategies (doing X in order to achieve Y, or doing X because Y is true; e.g., Perrin, 2013, p. 258) that help the journalist deal with background and recent information in a dramaturgically new way that we called the *background-recency split*:

- Distinguish between two stories: the recent story and the background story (see Figure 7.6, e.g., line 92).
- Tell the recent story in the news text because it matches the recent pictures available (e.g., lines 94–99).
- Tell the background story because not all of the audience is up-to-date on this item (e.g., lines 113–115).
- Tell the background story in the anchor's text because there are no pictures (e.g., lines 94–95).

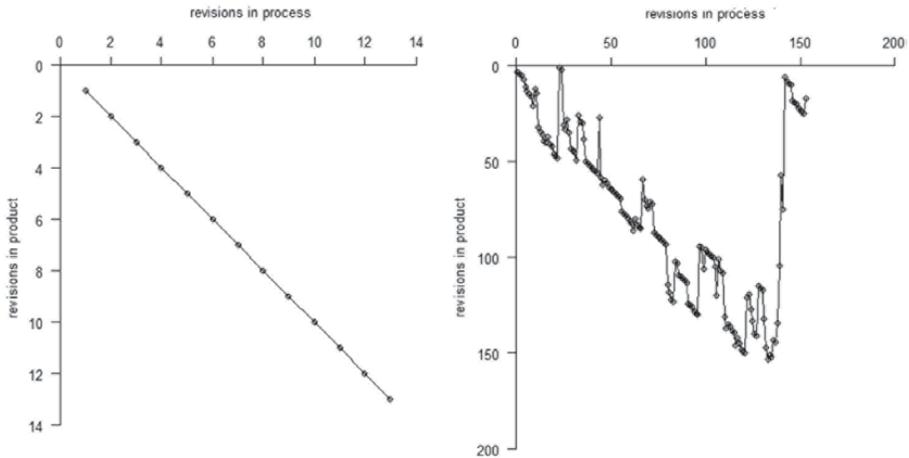


Figure 7.7. Progression graphs of the background story (left) and the recent story (right).

Having researched the core sources and decided to split the story, the journalist sees one clear thematic focus for each of the two short stories he will write. This writing can be evaluated visually in the progression graphs of the two writing processes. The split becomes visible as he produces the introduction for the news anchor first and the news text next. The progression graphs in Figure 7.7 show that the journalist writes his ideas fluently in the order they will be read or heard. The background story for the anchor is generated in a single linear sweep. The recent story is written in a linear composing sequence followed by a second, revising sequence.

### The Emerging Solution

The *background-recency split* practice emerged when the journalist attempted to overcome the conflict between basic expectations: He had to meet market demands and policy requirements at the same time. On the one hand, the pictures available only covered recent events; on the other hand, he needed to provide background information to establish discursive coherence for the audience. However, he decided not to compromise – neither to overburden the pictures with inappropriate text nor to sacrifice background information due to the lack of appropriate pictures.

Instead, the journalist opted for an emergent third way: reaching both goals properly by writing two different texts, each of them internally coherent and contributing to a dramaturgically coherent ensemble. For the text of the news item, he took into account recent events, the market for short and well-illustrated news,

and the pictures available. For the anchor's introduction, he supplied the background information he expected to be useful for the less-informed of the audience. This is how he practiced *promoting public understanding*.

The *background-recency split* is part of this journalist's tacit knowledge (Polanyi, 1966) that includes collaboration modes, text-picture ratios, storytelling, and combining public and market needs. By enabling the journalist to do what the media policy expects him to do, it belongs to a set of good practices of experienced yet isolated professionals, as identified in the IDÉE SUISSE and similar projects. From an organizational perspective, it deserves to be detected and transferred to the knowledge of the whole media company, as a situational alternative to the widespread practice of always leaving the production of the introduction to an anchor who might have less thematic competence—and as an encouraging answer to management's resignation regarding combining policy and market demands.

## Conclusion: Organizational Learning from Tacit Knowledge

In projects such as the four examples briefly discussed above, we have analyzed “local” practices (Pennycook, 2010) of text production at workplaces—for example, practices of establishing discursive coherence—in various domains. Cases such as UN ELECTIONS in the IDÉE SUISSE project demonstrate how experienced practitioners in the role of “positive deviants” (Spreitzer & Sonenshein, 2004; Pascale, Sternin & Sternin, 2010) manage to find emergent solutions that overcome the conflict between seemingly contradictory expectations from their environments. TDA allows experienced writing practitioners’ “tacit” knowledge (Polanyi, 1966) to be made available to entire organizations, domains, and society at large.

In all of our research projects, the findings from case studies were generalized according to principles of grounded theory to develop a model of the dynamic system of situated text production. This model contributes to both theory and practice in the field of writing by foregrounding the dynamics and complexity of collaborative text production. Many of the earlier models of writing and text production, in contrast, neglected aspects of collaboration. This is because they had been developed in experimental settings where individual text producers were told to solve predefined problems in individual writing processes. That is quite the opposite of a text production task in natural professional settings (Perrin, 2013, pp. 150–152).

To cut a long story short, combining applied linguistics with principles and measures from TDA research in fields such as professional writing requires communication and collaboration across discursive cultures of stakeholders.

Transdisciplinarity, in contrast to interdisciplinarity, actually is about “mediating a relationship between two quite different planes of reality: that of the abstract discipline and that of the actual domains where the folk experience of language is to be found” (Widdowson, 2006, p.96). On the one hand, this raises project workloads and slows down research.

On the other hand, projects of writing research informed by applied linguistics and transdisciplinarity can result in a threefold benefit. Researchers (a) enact their key competence of mediating between languages of academic and professional disciplines and their discursive cultures; (b) provide evidence of their societal relevance by finding sustainable solutions to socially relevant problems in which language and writing play key roles; and (c) contribute to the development of empirically grounded theories on writing in an increasingly complex, dynamic and interconnected world.

Writing matters, now more than ever, and we are in an excellent position to approach writing with research that matters to all those involved—research on, for, and with practitioners.

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Neal Lerner, like Daniel Perrin, studies situated, naturalistic composing practices. Rather than workplace writing, Lerner turns his eye toward the writing center and examines the dialogic exchange between tutors and student writers who use the “chat” function in online tutoring sessions. Through examining these exchanges, Lerner suggests that researchers can discern what he calls the “curriculum” of the writing center. Of particular interest are embodied and hidden curricula, which illuminate how students express their learning and selfhood in particular environments, as well as the cultural or social values that underlie everyday practices in schooling. In developing an analytical schema that seeks to reveal the curriculum of the writing center, Lerner uses a grounded theory approach to identify codes for three kinds of knowledge that appear in the dialogue chats: role knowledge, writerly knowledge, and emotional knowledge. Ultimately, Lerner argues, pursuing content analysis of these themes as they appear in natural tutor/student dialogue at a broader scale, including both online and face-to-face interaction, could lead to new insights into how tutors and students perceive and inhabit their expected roles, which could in turn help researchers articulate the norms that shape behavior in these exchanges, including the conflicts that arise when tutor/student mismatched expectations collide. Lerner’s examination of the dialogue between tutors/students in the writing center is shifted in the subsequent chapter, in which

Sara Webb-Sunderhaus examines the dialogue that emerges between participants and researchers in an interview setting.

The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows B', G', I, and N. Readers are encouraged to seek other connections.

# Coding Writing Center Curriculum—Towards a Methodology

NEAL LERNER

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Writing center tutorials have long been recognized as productive sites for literacy research (Babcock & Thonus, 2012). In trying to make sense of the talk between tutors and student writers, researchers have brought multiple analytical lenses, including speech-act theory (Melnick, 1984), politeness theory (Murphy, 2006), or more general sociolinguistic approaches (Blau et al., 1998). In one of the more recent and rigorous studies, Mackiewicz & Thompson (2014) separate tutors' linguistic moves in the categories of "instruction," "cognitive scaffolding," and "motivational scaffolding" in an attempt to better understand the language features of conferences that tutors and student writers judge as effective.

In this chapter, I enter this conversation by offering an analytical lens to better understand tutorial discourse, one that might not immediately be apparent: curriculum and its distinction from pedagogy. While writing centers might primarily be seen as pedagogical—without specific learning outcomes, syllabi, assigned readings, and the like that we most often associate with curriculum—my contention is that in the language exchanged between tutors and students, one can find ample evidence of curriculum. This curriculum is often "hidden" or built into the sociolinguistic dynamic of the exchange; it is revealed in the language that tutors and students use to assert what they know, whether that knowledge is about writing, their specific expectations about how a conference is supposed to proceed, and the ways they position themselves and each other into specific roles. I explore this "hidden

curriculum” through analysis of online synchronous tutorials, specifically the “chat” feature in which tutors and students conduct in writing the work of the tutorial. While the findings I present in this chapter are intriguing and raise a host of follow-up questions, my focus here is on the development of the method of analysis itself, and the ways the lens of curriculum can be applied to the analysis of writing center sessions (see Lerner, 2019, Chapter 7 for a more robust version of this study).

## What Curriculum Is, and Is Not

Curriculum can be narrowly conceived as “subjects of study” or content in any course. That content—often expressed in a syllabus as specific reading and writing tasks or unit topics—is an important component of curriculum. However, in this chapter I draw on Schubert’s (2008) categorization of curriculum into several types. Most relevant to my analysis are the following:

- “Taught curriculum” (p. 408) or the actual content with which teachers engage their students in actual classrooms, often in contrast to the “intended curriculum.”
- “Experienced curriculum” (p. 408) or the “thoughts, meanings, and feelings of students as they encounter” (p. 409) the intended or taught curriculum.
- “Embodied curriculum” (p. 409) or the ways that students express their learning through imagination and expanded notions of “self.”
- “Hidden curriculum” (p. 409) or the cultural and social values that curricular choices and the practices of everyday schooling express, whether notions of social control, power hierarchies, or identities.

These curricula are expressed in student-tutor interaction and in many everyday practices. Most important, curriculum is an expression of values—what’s worth knowing, how is that knowledge produced, and how should it be expressed? My contention here is that these values are embodied via the language students and tutors use in a session, language that expresses claims to move the work of the session along and meet participants’ individual goals.

In what follows, I discuss the development of my analytical scheme, and then focus on those moments when tutor and student writer come together to articulate the curricular basis of writing center tutoring.

## Data Sources

The tutoring sessions I analyze in this chapter come from a medium-sized, private university in the northeast United States.<sup>1</sup> That university’s writing center employs a mix of undergraduates, master’s students, and Ph.D. students as writing consultants. It also contracts with WOnline (<https://mywconline.com>) to provide scheduling software and a platform for synchronous, online tutorials, and it is a selection of these online tutorials that constitute my data set. As shown in the screen shot in Appendix 8.A, the online tutorial task environment includes a space for students to upload their written work and their assignments and a chat box for real time conversation between consultant and student writer about the student’s project. I chose these data sources for several reasons:

1. I had access to them.
2. The archived chat eliminates the need for audio or video recording and transcribing.
3. A focus on tutorial chat transcripts eliminates to some degree the many variables that might constitute curriculum in face-to-face settings, particularly non-verbal communication such as gestures, body positioning, facial expressions, or other means of expression.

The chat transcripts that constitute the data for this chapter come from the first 10 online sessions in the first week of October in the fall 2016 semester. My choice of this time frame was mostly guided by the knowledge that the writing center would be fairly busy by that point (approximately week four of the semester); thus, I’d have an opportunity to capture data. The 10 online sessions were conducted by nine consultants and 10 different writers (i.e., one consultant conducted two sessions and the eight others held one each). A total of 20 online sessions were conducted that week (16 percent of all sessions held), and my choice to analyze the first 10 was mostly out of expediency and in accord with my primary purpose to develop and apply the coding scheme that I next describe.

Before coding, I removed names of both consultant and student in each session transcript, substituting instead “Tutor#” and “Student#” where # is in reference to each individual tutor and student, starting with the first session that week and ending with the 10<sup>th</sup>. To do the analysis, I saved the chat from each session as a.txt file and uploaded them to HyperResearch, v. 3.7.3, as “cases” (<http://researchware.com>).

## Development of Analytical Codes

My development of a coding scheme to understand the curricular basis of writing center tutoring has its roots in discourse analysis, particularly guided by the work of James P. Gee (2010) and Dell Hymes (1986), in theories of situated learning as applied to the writing center (Lerner, 2007), as well as in the inductive analytical practices of grounded theory (Glaser & Strauss, 1967). Through these frameworks, my naturalistic inquiries have been largely sociological—How do tutors and students use language to express their roles and relationships? How are those roles and relationships influenced by power, authority, agency, and identity?

In applying the lens of curriculum to these interactions, I was guided by the notions of “hidden” and “embodied” curriculum I described above, as well as my previous study of the ways tutors and students asserted roles and responsibilities through language (Lerner, 2002). Once I began to code for the language that I labeled expressions of “role knowledge,” it became clear the bulk of the remainder of the talk was either about the students’ texts themselves or about strategies for writing and revising (“writerly knowledge”) or some expressions of emotion, whether to create an atmosphere of trust and openness, to share frustration about an assignment or a class, or to determine the direction of the tutorial itself (“emotional knowledge”). I next expand on these three types of knowledge as assertions of curriculum.

### Role Knowledge

Articulated claims about the roles tutors or students might play or that they expect their interlocutor to play have a strong effect on the interaction itself, whether to propel the session along if those roles are accepted by each participant or to create tension and potential conflict if those roles are not accepted. By asserting particular roles, tutors and students are asserting particular norms for the session, and these sociolinguistic features carry from one session to the next. These expressions are curricular in nature in that they represent knowledge about how to interact in the “speech act” (Hymes, 1986) of the tutoring session in order to accomplish one’s goals. In classroom settings, the roles that students and teachers assert through their interaction are often referred to as the “hidden curriculum” (Giroux & Purpel, 1983; Gere, 1994). For example, each student sitting in rows, raising one’s hand before being acknowledged by the teacher to speak, not interrupting another classmate—all convey a strong social curriculum of order and authority. Another example of the hidden curriculum of teacher and student roles is the common IRE (initiation-response-evaluation) pattern of interaction (Cazden, 2001) where the

teacher initiates an interactional sequence with a question (“What’s the capital of Wyoming?”), a student responds (“Laramie?”), and the teacher evaluates (“No, that’s wrong, Franco. It’s Cheyenne.”). The knowledge of who talks when and what’s acceptable to say contribute to student learning not merely about the topic of the conversation but the social rules of interaction. Similarly, tutors and students bring to each session knowledge about the roles each should play and express that knowledge through language, whether spoken or, in this study, written. The language used to express those roles represents a curriculum (See Appendix 8.B.).

### “Writerly” Knowledge

What I label “writerly” knowledge are those instances in which tutor or student express a claim about how writing, writers, or the writing process should work, as in a student starting a session with “I was wondering if you could help me with the organization of thoughts in this essay, or let me know if my argument follows correctly,” or a tutor pointing out the need for clarity with “Oh, okay. I do think rewording it would help there—I think the idea is getting lost, and it’s a really interesting point.” One would expect these to be common utterances in writing center sessions, whether face-to-face or online, as tutor and student express an evaluation of the student’s writing (often in response to a question), the student describes her writing processes, or the tutor offers advice on revision strategies. (See Appendix 8.B.)

### Emotional Knowledge

Utterances that I coded “emotional knowledge” featured instances in which tutor or student offered empathy for their interlocutor, expressed support, commiserated, or in some way connected on an emotional level with one another, an outcome of writing center tutoring that has long been valued (e.g., Harris, 1995). For students, these utterances often opened sessions (“I’m not good at grammars. it has been a pain in the ass for my writing.”) and for tutors, expressions of emotional knowledge were often meant to offer assurance (“no need to worry! we can figure it out over this session.”). Mackiewicz & Thompson (2014) describe emotion as a component of “motivational scaffolding,” in which “tutors encourage writers by building and maintaining a sense of rapport and feelings of solidarity and thus can increase student writers’ motivation” (p. 37). While Mackiewicz & Thompson were only examining tutors’ verbal actions, I include both student and tutor utterances of emotional knowledge to capture the interactional nature of these responses (see Appendix 8.B.).

Before I offer the results of this research, I need to offer some cautions/limitations: Overall, coding the data for student and tutor knowledge claims was an instructive exercise to help refine coding categories and labels. This was a preliminary study, part of a larger work that explores the distinction between pedagogy and curriculum in writing studies (Lerner, 2019). As such, the development of the coding scheme was the primary goal. Thus, I did not seek inter-rater reliability and cannot make any claims that the data I have coded are representative of all online tutoring sessions in this particular center or even the online tutoring sessions over the course of that week, given that I have only coded half of them. Still, I believe that the results that follow and their demonstration of the curriculum of a writing center as expressed via tutorial discourse offer empirical evidence of several long-standing threads in writing center literature that focus on power and authority: directive vs. non-directive tutoring, student-controlled agenda vs. tutor-controlled agenda, higher-order concerns vs. later-order concerns, and a focus on the writer vs. a focus on the writing.

## Curricular Results: Tutor and Student Knowledge Claims

As shown in Table 8.1, both students and tutors made frequent claims that I coded as role knowledge, writerly knowledge, or emotional knowledge. The “shared role knowledge” refers exclusively to the ways sessions opened and closed, almost always with an exchange of pleasantries at the start and end, a kind of social glue that also marks face-to-face tutoring sessions as well as a variety of conversational exchanges with clear starting and ending points.

What is worth noting about the data presented in Table 8.1 is that tutors were much more likely to offer knowledge claims about their roles or students’ roles and were twice as likely to offer knowledge claims about writerly issues. In terms of emotional knowledge, across the 10 sessions tutors were more than twice as likely to offer claims that expressed sympathy or encouragement than were students. In other words, when it came to all knowledge claims, tutors certainly demonstrated that they were in charge—and students usually position them to take on that role.

Table 8.2 presents the most frequent tutor and student knowledge claims or assertions of curriculum. In terms of role knowledge, students were most likely to position the tutor as an evaluator of their text or their revision, taking up nearly a third of all student knowledge claims. The two other most frequent role assertions were that the tutor needed affirmation, often in response to tutor’s requesting evaluation (e.g., T: “Does that make sense?” S: “Yeah, sure it does.”) and that it is

Table 8.1. Frequency of Tutor and Student Knowledge Claims

Knowledge claim	Students	Percent of all claims	Tutors	Percent of all claims
Shared role knowledge	37	9 percent	37	9 percent
Role knowledge	83	21 percent	127	32 percent
Writerly knowledge	28	7 percent	54	14 percent
Emotional knowledge	9	2 percent	22	6 percent

the student's role to be thankful (e.g., "okay awesome totally never learned that haha. thank you so much!!"). For tutors, the most frequent roles were to offer an evaluation of students' texts (usually in response from students' requests to do so), to ask the student to initiate the agenda for the session (e.g., "How can I help you today?"), and to send the message to students that it is their role to revise (e.g., "Maybe you can rewrite some of your current sentence with some of your research interests described in sentence three.").

In terms of writerly knowledge, both student and tutor were most likely to offer knowledge claims about the genres they were working with having particular features (e.g., Student: "I'm writing a personal statement for a Ph.D."; Tutor in the same session: "Although it might feel odd to write, be as specific as you can be on how your experience will be an asset to those that you are working with and how their prior knowledge will help you reach your specific goals.") In terms of emotional knowledge, students were most likely to offer context for their error making (e.g., "I was really confused how to approach this assignment."), and tutors were most likely to express sympathy for student's error or effort, i.e., to commiserate, or to express interest and enthusiasm for students' efforts (e.g., "you've done a really great job.").

More evidence for tutor dominance in the sessions is shown in Table 8.3: Students' expression of role knowledge was more than twice as likely to be about tutors' roles than their own (57 occurrences compared to 23 occurrences). Similarly, tutors, when offering an assertion of role knowledge, were more than twice as likely to focus that assertion on their own roles, rather than students' roles (89 occurrences compared to 38 occurrences). One exception to this trend addresses the question of whose role it is to set the agenda for the session. As shown in Appendix 8.B, students did not often make an assertion about this role (five total occurrences), but when they did, they were more likely to position themselves as agenda setters. Similarly, tutors were far more likely to put students in the role of agenda setting (14 occurrences) than themselves (two occurrences).

Table 8.2. Most Frequent Tutor and Student Knowledge Claims

Students' most frequent knowledge claims	#	Percent of all students' knowledge claims
Role knowledge: Tutor's role is to evaluate the text and revision needed.	35	29%
Role knowledge: Tutor needs affirmation.	11	9%
Role knowledge: Student's role is to be thankful.	6	5%
Writerly knowledge: Genres have particular features.	6	5%
Emotional knowledge: Offer context for error making	5	4%
Tutors' most frequent knowledge claims	#	Percent of all tutor's knowledge claims
Role knowledge: Tutor's role is to offer evaluation of student's text.	36	18%
Role knowledge: Student's role is to set the agenda.	14	7%
Role knowledge: Student's role is to revise.	14	7%
Writerly knowledge: Genres have particular features.	17	8%
Emotional knowledge: Express empathy for student error or effort.	11	5%
Emotional knowledge: Express interest and enthusiasm.	11	5%

Table 8.3. Tutor and Student Role Knowledge Claims

Knowledge claim	Students	Tutors
Claims about students' roles	23	57
Claims about tutor's roles	38	89

Given the attention in a great deal of writing center literature on whether tutorials should focus on “higher-order concerns” (e.g., focus, organization, audience, revising) or “lower-order concerns” (i.e., language-level issues and editing), language-level knowledge claims—whether about roles or writerly issues—were not particularly frequent. As shown in Appendix 8.B, students’ expressions of writerly knowledge that might be considered lower-order concerns (“citations need to be formatted correctly” and “punctuation needs attention”) occurred only three total times. Similarly, tutors’ knowledge claims about lower-level issues (“need for language correction” and “need for punctuation”) occurred only five times. Much

more common for both tutors and students was to make knowledge claims about the particular features of the genres in which they were working.

Another manifestation of concern about the focus of sessions comes from Stephen North's (1984) maxim that has dominated a good deal of writing center theory and practice: "[I]n a writing center the object is to make sure that writers, and not necessarily their texts, are what get changed by instruction. In axiom form it goes like this: Our job is to produce better writers, not better writing" (p. 484). A cautionary view of online tutorials is that they would, indeed, focus on the "writing," given its prominence in a session. However, in this study, 95 total knowledge claims focused on the "writer," particularly tutor and student assertions of the writer's role, while 85 knowledge claims focused on the "writing," based on the counts in Appendix 8.B.

## Discussion—Toward an Understanding of Writing Center Curriculum

My intent in this chapter is to offer a methodology for understanding writing centers as curricular spaces, an accompaniment to their common portrayal as pedagogical spaces. What I found is that knowledge assertions or assertions of curriculum occupy a significant amount of time and space in my data set of online writing center tutorials. The results of this study also offer empirical evidence to support or challenge common beliefs in writing center practice, specifically that non-directive tutoring is preferred to directive tutoring, that students should control the agenda rather than tutors, and that the session should focus on higher-order concerns versus later-order concerns, each of which I take up in this discussion:

### Directive vs. Non-Directive Tutoring

The debate about how "hands-on" or directive tutors should be is long-standing, with Brooks' (1991) "minimalist tutoring" often the preferred approach. None of the tutors in this study seemed to take a minimalist position and usually positioned themselves and were positioned by students in directive roles. The curriculum here, particularly when it came to tutor and student assertions of role knowledge, meant that tutors would dominate the online conversation.

## Student-Controlled Agenda vs. Tutor-Controlled Agenda

While tutors were in control of the sessions overall, they still did consistently position students to set the agenda (often by starting the session with “How can I help you?”). While one might argue that the students’ writing itself and the assignments or exigencies that gave rise to that writing are what sets the agenda for a session, I saw very little tutor-directed priority setting in these online sessions. Students were not exactly authoritative when it came to agenda-setting, but tutors still did assert that it was students’ roles to set the focus for response to their writing.

## Higher-Order Concerns vs. Later-Order Concerns

The common “we don’t proofread” position of writing centers is meant to avoid the role of tutors as merely editors. Similarly, a common concern about online writing tutoring is that students’ writing will be the center of attention in ways that might not happen in face-to-face sessions (Kastman Breuch, 2005), and, as a result, language-level editing will dominate. However, the sessions in this study had very little focus on language-level or later-order concerns, despite the wide variety of student writing projects and the multiple number of tutors and students. The curriculum was decidedly focused on higher-order concerns.

While this pilot study offers a starting point for understanding the curriculum of writing centers, several questions are important to pursue:

- Does the context of online, synchronous determine curriculum? Would knowledge assertions be different in a face-to-face context? Similarly coding transcripts of a sample of face-to-face sessions for curricular assertions and comparing those results to online tutorials could highlight the importance of context.
- Do students’ agendas determine curriculum? Moving forward, I could group students’ agenda-setting statements, as well as the overall focus of the session, into various categories and compare knowledge claims across these different types of agendas.
- Do tutors have particular patterns of curricular claims? The one tutor in this study working with two different students did alter her curricular claims; I could investigate the possibility of patterns over a larger data set with more repetition of tutors.

Overall, I believe the methodology I have piloted in this study offers one way to make explicit the curriculum of a writing center. Certainly writing centers will continue to be known as pedagogical spaces, particularly if their “brand” of one-to-one instruction and student-centered learning is offered to the rest of the university as applicable to a wide variety of subjects and contexts. Nevertheless, their

identity as curricular spaces requires attention. By articulating their curriculum, not merely their pedagogy, writing centers have opportunity to name what they know and who and what they are, and to assert expertise in ways that might just lead to the kinds of leadership roles on their campuses that seem to have been elusive for the last 30 years. And beyond campus leadership, writing center studies as a disciplinary construct is impossible without a clear articulation of curriculum. Aspirations for writing center scholarship to be taken seriously will not come from mere application of research methods such as those that are RAD (replicable, aggregable, data supported; see Haswell, 2005) (Driscoll & Perdue, 2012), or of claiming ownership of one-to-one pedagogies (Lerner, 2014), but also from articulation of curricular identity. Elizabeth Boquet (1999) laments the identity of writing centers as “our little secret,” little known to the rest of the campus community and to the wider field of writing studies. Articulations of curriculum might just be one way to let others in on that secret.

## Appendix Chapter 8.A. WC Online Synchronous Tutoring Environment

**B I U**

WELCOME TO YOUR ONLINE CONSULTATION! Below is a brief overview of this module. For more information, click the question mark at the top right of the screen.

WHITEBOARD: This area of the screen is the document collaboration whiteboard. Here, you can import or paste a document, or type text. Changes made to text in this window are highlighted and seen immediately by both individuals participating in the online consultation.

TEXT CHAT: You can use the area to the right of the screen to have a text conversation in real time.

TOOLBAR: The icons on the left side of the toolbar allow you to work with a document's formatting. The icons on the right side (or at the bottom if using a phone) include options for your online session, such as importing or exporting a document. Hover over any

CHAT 0

1

Appendix 8.A Writing Center Online Synchronous Tutoring Environment

## Appendix 8.B. Frequency of Student and Tutor Knowledge Claims

Student Knowledge Claims	Number of occurrences
<i>Emotional knowledge</i>	
Offer context for error making.	5
Express interest or enthusiasm.	3
Express failure as a writer.	1
<i>Role knowledge</i>	
Tutor's role is to evaluate the text and revision needed.	35
Tutor needs affirmation.	11
Tutor's role is to help.	7
Student's role is to be thankful.	6
Student's role is to evaluate the text.	4
Student's role is to provide context for the writing.	4
Student's role is to revise.	4
Professor's concerns are a driving force for revision.	3
Student's role is to set the agenda.	3
Tutor can also set agenda.	2
Student's role is to interpret instructor's intent.	1
Student's role is to offer text for feedback.	1
Tutor's role is to act as handbook.	1
Tutor's role is to offer genre knowledge.	1
<i>Writerly knowledge</i>	
Genres have particular features.	6
Areas of writerly attention include organization and argument/prompt.	5
Conclusions should be conclusive.	3
Introductions might have problems.	3
Citations need to be formatted correctly.	2
Papers should be finished.	2
Essays should be coherent.	1
Essays should be focused.	1
Instructor's directions are a driving and complicating force.	1
Need for revision	1
Paragraphs need concluding sentences.	1
Paragraphs need topic sentences.	1
Punctuation needs attention.	1

Appendix 8.B. *Continued*

Tutor Knowledge Claims	Number of occurrences
<i>Emotional knowledge</i>	
Express empathy for student error or effort.	11
Express interest and enthusiasm.	11
<i>Role knowledge</i>	
Tutor's role is to offer evaluation of student's text.	36
Student's role is to set the agenda.	14
Student's role is to revise.	14
Tutor needs permission from student to review text.	8
Tutor's role is to focus revision priorities.	8
Tutor's role is to praise student.	7
Tutors should check students' understanding.	7
Tutor's role is to suggest changes.	6
Student's role is to evaluate revisions or edits.	6
Tutor's role is to read the text before commenting.	5
Tutor's role is to interpret instructor's intent.	3
Student's role is to provide context.	3
Tutor's role is to attend to student agenda.	2
Tutor's role is to query student to set agenda.	2
Tutors should defer to student's expertise about particular genres.	2
Tutor's role is not to correct for grammar.	1
Tutor's role is to manage session time.	1
Tutor's role is to seek student feedback on session's effectiveness.	1
Students role is to offer verbal clarity.	1
<i>Writerly knowledge</i>	
Genres have particularly requirements or features.	17
Need for clear flow of ideas.	8
Need for clarity.	6
Conclusions restate main ideas.	5
First paragraphs offer a focus/goal.	5
Each paragraph should have a clear focus.	3
Need for correct punctuation.	3
Thesis should be supported with evidence.	3
Assignment prompts should be addressed.	2
Need for language correction.	2
<i>Student and Tutor Shared Role Knowledge</i>	
Session will culminate in pleasantries.	20
Greetings/exchange of pleasantries is appropriate way to start.	17

## Note

1 Northeastern University IRB Project # 17-04-02.

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Shifting the focus from the writing center scholarship to literacy studies, Sara Webb-Sunderhaus examines issues of reciprocity, building collaborative relationships, and respectful representation in the field of Writing Studies, where interviews often form the basis for data collection. While these values are recognized by other researchers, they are most often addressed in terms of the theory behind the practices (methodology) rather than the practices themselves (methods). The author proposes interactive interviewing as a method of actively building the values into composition and literacy research, particularly when the interviewer/interviewee share the same marginalized identity or possess mutual expertise. In interactive interviewing, the interviewer's own identity is available for interrogation and co-inquiry, which diffuses the power dynamics and makes space for give and take within the interview. Drawing on her own research, conducted as an Appalachian cultural insider-outsider, she explores tellability (what narratives are worth telling, by whom, and in what contexts) and the role of interactive (reciprocal) interviewing, in which deeper layers of meaning and insight emerge thanks to the fluidity of roles. Webb-Sunderhaus's examination of research dynamics and context is carried forward in the subsequent chapter by Kelly Blewett, Darsie Bowden, and Djuddah Leijen.

The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows B', C, M', N, and B". Readers are encouraged to seek other connections.



# Becoming a Participant-Researcher: The Case for Interactive Interviewing

SARA WEBB-SUNDERHAUS

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The interview is a dominant method in qualitative composition research. Whether interviews are part of an ethnography, case study, oral history, or biographical sociology—to name a few of the methods discussed during the Dartmouth 2016 conference and the institute preceding it—interviewing participants is central to data collection, which is the foundation for much research in writing and literacy studies.

Yet strangely, the researcher-participant relationship undergirding every interview is underexplored in scholarship. Many have published on qualitative research ethics, particularly but not exclusively feminist rhetoric, composition, and literacy researchers. These scholars have wrestled with questions of establishing reciprocity (Powell & Takayoshi, 2003), building collaborative relationships (Cushman, 1998 and 1999), and representing our participants fairly and respectfully in our published work (Kirsch & Mortensen, 1996; Kirsch & Ritchie, 1995). But this work has mostly remained on the methodological level, stressing the ways in which we conceptualize our research and participants. We have not spent as much time discussing the methods by which we can realize our methodologies. What are the methods by which we establish reciprocity, build collaborative relationships, and fairly and respectfully represent our participants? What do these methods look like in practice, specifically in the context of an interview? In this chapter, I will offer

up one such method, interactive interviewing, and will discuss the possibilities this method offers to composition and literacy research.

Interactive interviewing is most associated with communication scholar Ellis, who along with her co-authors Kiesinger and Tillmann-Healy (1997) defines the term thusly: “An interpretive practice for getting an in-depth and intimate understanding of people’s experiences with emotionally charged and sensitive topics” (p. 121). Interactive interviewing has been written about and used as a research method by scholars of communication, sociology, and nursing, among others. Interactive interviewing can enable composition and literacy scholars to build reciprocal, collaborative relationships with participants and mitigate some of the power imbalances inherent in fieldwork by making the researcher’s own identity available for interrogation and co-inquiry.

Before I fully introduce the method of interactive interviewing, I’d like to return to my contention that the field has focused more on methodology than method and add that one notable and important exception to my claim is Selfe and Hawisher’s “Exceeding the Bounds of the Interview: Feminism, Mediation, Narrative, and Conversations About Digital Literacy” (2012). Selfe and Hawisher write that they moved from using structured to semistructured and unstructured interviews as they became more immersed in the work of feminist scholars in other disciplines. That work prompted them “to leave behind many of our more structured, interviewer-directed research goals and to commit—philosophically and pragmatically—to more-interactive exchanges, in which we encouraged participants not only to tell us stories but to help us make sense of them” (Selfe & Hawisher p. 41). They conclude that dialogic exchanges have resulted in multiple benefits for their own research and could be equally useful for other literacy researchers.

Unfortunately, I didn’t recall Selfe and Hawisher’s wise words when I began my current research project, which examines how highly educated Appalachians negotiate the literacy and identity decisions they face in their personal and professional lives. I was faced with complex methodological issues as I began interviewing my seventeen participants, the first of which being that I knew many of my participants before we embarked on this project.

I am an academic who identifies as Appalachian and whose research agenda primarily focuses on Appalachians’ literacy beliefs and practices. I am the co-founder and co-chair of the Appalachian Rhetorics and Literacies Standing Group of the CCCC. Because of my positioning in the culture and field, I know many highly educated Appalachians. Additionally, several of my participants sought me out and asked to participate when they learned of my study, because they strongly believed in its value and wanted to discuss issues surrounding literacy and Appalachian

identity. Other participants include former students; a former college classmate; a participant in my earlier research on Appalachian students in first-year writing courses; and some who were referred to me by other participants.

Another methodological question I found myself asking was what does it mean for an interview when both researcher and participant have skill in conducting research or when they share a scholarly area of expertise? Before I began this project, all of my fieldwork and interviews had been done with participants who were subordinate to me in some way; they were students, they did not have my level of education, they did not share my expertise in composition and literacy studies, and/or they knew very little, if anything, about qualitative research. This dynamic of a researcher who is more knowledgeable or educated than her participants is not unusual in composition and literacy studies, given the nature of our field's focus on academic writing, as well as demographic realities—according to the 2011 U.S. census, only two percent of Americans over the age of 25 have a Ph.D. But for this project, I would be working with some participants who knew as much as I did, if not more, about Appalachians and literacy. Many in this subgroup of participants had also conducted qualitative research, and we shared some professional networks as well.

The final methodological dilemma I had to consider was the fact that I was a cultural insider. I identify as an Urban Appalachian and thus am a member of the same cultural group as my participants. While only about half of my participants are currently in the academy, given the fact that they all have at least one graduate degree, they have spent a significant period of their lives immersed in academic culture. Thus, I shared both a regional and a professional culture with my participants. Yet I also found myself occupying an outsider role. Most of my participants grew up in the Appalachian region, not outside of it as I did, and today my participants are in a variety of professions outside of academia, including K–12 teaching, consulting, serving in the clergy, and working as a stay-at-home parent. While we are all Appalachian, we are not Appalachian in the same ways, and I could not presume that my experiences were the same as others.

This dilemma is known in ethnographic work as insider-outsider status. In “Ethnography and Composition: Studying Language at Home,” Moss (1992) describes the precarious position of the insider-outsider, noting, “As insiders, we too must deal with our own ethnocentrism and the mental baggage we carry, precisely because of our memberships in the communities we study. And we must also be prepared to deal with the mental baggage and expectations of other members of the community” (p. 168). Like many ethnographers, a significant question I have faced with this project is how to account for my insider/outsider status in the culture I'm studying.

Thus, I found myself in a position in which I hadn't been before: a cultural insider-outsider working with a group of participants who I already knew, for the most part, and whose education and knowledge equaled if not exceeded my own, in some cases. In previous projects, my interviewer ethos was one that was somewhat removed from my participants. I projected a stance that was friendly but a bit emotionally removed; I occasionally disclosed limited personal information, but nothing that would give my participants much insight into who I was as a person. I prepared an interview script and would check off questions as I followed the script, though I did allow for some digressing and would ask follow-up questions if I thought those digressions might lead to interesting places.

Due to the unusual circumstances of this project, upon beginning the interview process I intuited that my usual interviewing techniques would not work with most of my participants. I wanted to respect the knowledge my participants brought with them to our interviews and treat them as the colleagues they were in many cases. In *Case Study Research in Practice* Simons (2009) writes:

Case study has the potential to engage participants in the research process. This is both a political and epistemological point. It signals a potential shift in the power base of who controls knowledge and recognizes the importance of co-constructing perceived reality through the relationships and joint understandings we create in the field. (p. 23)

This collaboration is what I hoped would be the heart of my project—a co-construction of knowledge with my participants about the literacy and identity decisions we make and the ways in which we make them. Further, it felt forced and fake to assume a more removed interviewer stance, because I already knew many of my participants.

Finally, going into the field stirred up my longstanding feelings of ambivalence about literacy research. Interviewing can feel very intrusive to me at times; talking about reading and writing can bring up intense memories and emotions for participants, including feelings of shame and inferiority. Given that I would also be asking questions about Appalachian identity and the difficulties that go along with being a cultural minority, I knew these feelings could be intensified for my participants. And because I share this identity and have expertise in Appalachian Studies, I am well aware of the long history in the region of academics (among others) using Appalachians in the name of research. These experiences are not limited to Appalachians, of course, as many marginalized groups have had their physical and emotional pain exploited for academic gain while researchers remained safely ensconced in their figurative ivory tower.

I did not want to replicate that dynamic in my work, and I was deeply moved by Simons' (2009) provocative question: "What right do we have, in fact, to study others if we do not also study ourselves?" (p. 81). Simons gave me the language for articulating my long-standing discomfort with traditional understandings of researcher and participant roles in interviews; while I had always done my best to be kind and respectful to my participants, I had been swayed by what Simons calls "conventional forms of research interviewing" in which "the process is one-way" (p. 44). I now wanted interviews to be mutual exchanges in which the participants and I learned and grew together; by taking on the role of a participant as well as a researcher in these conversations, I could address some of my concerns about exploitation and inequities in power and emotional vulnerability between researchers and participants.

I turned to interactive interviewing as a way of mitigating my concerns and achieving my goals. Ellis, Kiesinger, and Tillmann-Healy (1997) write, "Interactive interviewing involves the sharing of personal and social experiences of both respondents and researchers, who tell (and sometimes write) their stories in the context of a developing relationship. In this process, the distinction between 'researcher' and 'subject' gets blurred" (p. 121). Interactive interviewing is not the appropriate method for every study; in the words of one reader of this chapter, "In the wrong hands, this method could be cruelly manipulative." I share the reader's concern and believe that this method is most appropriate when utilized by an experienced, sensitive researcher in an interview context in which power is diffuse, such as in my case, when I was interviewing people who were my academic peers (or exemplars) and with whom I shared a cultural background.

I do not think this method should be used by a researcher from a dominant culture with participants from cultural minorities; the risk of exploitation and manipulation, whether explicit or implicit, is too grave. However, there are particular research questions and cultural contexts—such as questions focusing on lived experiences of a shared, marginalized identity or cases in which the researcher and participants possess mutual expertise—where the interactive, co-constructing of knowledge that can happen in this type of interview is vital.

Interactive interviewing also allows a researcher to develop research and interview questions with her participants, questions that prioritize their needs and well-being. I began this project with a general sense that I wanted to talk to Appalachian academics about their literacy lives. As I began talking with participants, I began to discern some of the issues they most wanted to discuss: their conflicted feelings about academia and the places in Appalachia they called home, the frustration many of them feel towards their families of origin, and their awareness that their development of advanced academic literacies had resulted in irrevocable changes

in themselves and how they see the world—changes that often put them at odds with their families. What I have always been most drawn to about teaching and scholarship is the opportunity to help people through reading and writing and to learn from them, and in interactive interviewing, I found a method that prioritized those goals.

## Tellable Narratives in the Interactive Interview

The recognition of shared identity and cultural marginalization in interactive interviewing can bring about information and discoveries that would not occur in other contexts or with other people, exemplifying what Ferrell (2012) calls “tellable narratives”—public discourses which “reflec[t] common, but often unquestioned, ideas and assumptions” about the topic at hand (p. 128). Tellability is a lens for evaluating which narratives are worth telling and for further assessing who can tell which narratives in what context; it is similar in some ways to Burke’s (1969) understanding of motive: “What is involved when we say what people are doing and why they are doing it” (p. xv). Ferrell further argues that “the concept of tellability can also help us to understand the interaction between public discourses and individual narratives” of particular subjects (p. 132). Tellability is an important part of the methodological framework for this project, as interactive interviewing is highly reliant on the participants’ determination of which narratives are and are not tellable in the interview context.

The role of tellability became apparent as I interviewed my participants. During our time together, many of my participants made such comments as, “I know I can say this to you,” “You know how it is,” and “I wouldn’t say this to other people, but you’ll get it because you’re Appalachian.” With these words, my participants constructed an Appalachian identity not only for themselves, but also for me, as they reinforced our membership in the same cultural group. These remarks called attention to the ways in which my participants’ narratives may be tellable to some audiences, but not others; in other words, our shared Appalachian identity made certain narratives tellable—narratives that would be untellable to cultural outsiders. I have written elsewhere that “tellable narratives of identity matter because they shape our perceptions of, and our relationships with, our students” (30); these words apply to our research participants as well.

Thinking about tellability in the context of interviews can help us consider the benefits and the limitations interactive interviewing offers to researchers. While some narratives may have been tellable due to the identities my participants and I shared as Appalachians and academics, those shared identities could make certain stories more difficult to tell. They also did not automatically insure a good

working relationship between my participants and me. I still had to work hard to develop relationships with them—a process that was enhanced by the interactive interviewing methodology Ellis, Kiesinger, and Tillmann-Healy (1997) describe.

While I knew one or two of my participants well at other points in my life and had met several others at conferences and similar venues, I knew almost all of my participants in very limited ways when we began this research. The interactive approach I instinctively adopted allowed us to develop a relationship in the ways the authors describe, as seen in the following exchange between “Matt” (a pseudonym), an assistant professor of linguistics and writing, and me. Just before the excerpt you will read, Matt discussed feelings of insecurity he developed during grad school, and I wondered if those feelings persisted:

**Sara:** Do you still struggle with these feelings of your writing not being good enough?

**Matt:** Oh gosh yes. And, yeah. I don’t know how else to respond but yes. It’s strange, I’m completely fine with feedback and all those kinds of things. But if I send something off, it’s like I know there’s no way anyone’s gonna like it. You know what I mean?

**Sara:** Yeah. I don’t know if this will make you feel any better, but I was telling somebody I was talking to the other night that even now, and we’re talking I’ve had a Ph.D. for eight years, I’m tenured, I have plenty of publications under my belt. Even now, if I’m at a conference, or even just on Facebook and if somebody tells me “Oh, I just read your article” or “Oh, I’m teaching your essay to my students this semester,” my initial reaction still is, “Oh, shit.” It’s not like, “Oh yay, I’m being read.” It’s panic. It’s “Oh my god, they’re gonna read this and see that I suck!”

**Matt:** I totally feel that. I’m the same way at conferences or anything I do. It doesn’t matter with music, but writing is especially so.

In this exchange, Matt and I both became vulnerable by sharing our continuing insecurities and fears; to return to Ellis’s language, we were discussing a subject that is emotionally charged and sensitive. Writing is a subject both of us teach and have expertise in, yet we struggle with the impostor syndrome (an issue not unique to Appalachians) and fears that our writing is not “good enough.”

My insecurities were difficult to admit; if I had taken a conventional interviewing approach, I could have avoided this difficulty by simply answering “yes” to Matt’s question and moving on in my interview script. I did not, because I want to be a different type of researcher. I want to avoid the type of emotional exploitation Green (2003) references when she writes, “We often leave the lives and emotions of our research participants vulnerably exposed to public scrutiny while our own lives and emotions stay safely veiled” (p. 3). This exploitation is particularly problematic when studying Appalachians or other cultural minorities, “whose social

experiences are, of themselves, marginalizing,” as Green notes (p. 3). As someone who has lived through the experience of marginalization, I do not want my scholarship to perpetuate these inequalities.

Interactive interviews are not only appropriate for marginalized populations, however. This style of interview is beneficial when working with participants with whom the researcher shares a professional identity, as these interviews allow researchers and participants to move among roles at various times and conduct research together. A portion of my interview with “Andre,” an English professor who has also conducted qualitative research, illustrates how interaction can create new knowledge and theory.

Throughout all of our interviews, Andre easily moved between researcher and participant roles, and the quoted interview is no exception; sometimes Andre asked the questions, and sometimes I did. Prior to the following excerpt, we discussed Andre’s thoughts on agency in his personal life; I then asked what he thought about the role of agency in literacy studies. I will quote from the transcript at length here in order to illustrate the give and take in this interview:

**Sara:** I guess I’m just kind of curious to hear your viewpoint on, what do you think of this issue in literacy studies, this question of how much agency do we have as individuals? How much is socialization, or to use Brandt’s term, these sponsors of literacy that exert these huge cultural and social forces on us, that shape us in certain ways. What’s your stance on that? How do you feel that playing out?

**Andre:** I go back to Freire. Freire says we’re conditioned, but we’re not determined. Literacy, I’m definitely conditioned. People who grew up in Appalachia, when I say Appalachia often I mean rural Appalachia, that’s my vantage point. People are conditioned, regardless of how literate they are in regard to college literacy or textual literacy or whatever it may be. We’re not determined. I do think the more literate you become, and whatever the subject is or whatever part of your daily life, the most agency you have to fight that conditioning or question it, and perhaps change things. A lot of times, in that self-examining process, I look back and I’m glad I was taught some of the values I was taught. I was talking about the work ethic thing; I think my work ethic is very much a product of the town I grew up in. The way people view work and the way they view, take pride in their work, was a positive thing. I was conditioned to view work that way, and I’m glad I was. I think literacy helps you understand that you are conditioned that way, and there were reasons you were conditioned that way. But you’re not determined; it’s not like fate where you have no choice. It’s gonna happen regardless. I think that’s what literacy is, if I was to better examine how we function in the world.

**Sara:** Do you think because of your experiences growing up in rural Appalachia, do you think that certain types of academic work, more broadly or even more

specifically, certain schools of thought in composition and rhetoric and literacy, certain theories. Do you think that you have been more drawn down certain paths, shall we say, because of your background and your experiences? To give you a more concrete example of what I mean, are you familiar with J. Elspeth Stuckey's book *The Violence of Literacy*?

**Andre:** Yeah, I know of it. I haven't read it myself, but I knew what you're talking about.

**Sara:** That is a book, while I can respect her argument, that is a book that I violently disagree with, to go violent again. My reading of the book, I feel like she very much positions people as powerless. That we're victims, we're victimized by literacy, we're cogs in the machine, so to speak. She talks about how literacy hasn't accomplished much of anything good. And when I think about my family's story and my own story, I can't say that. I can't accept that argument with a straight face.

**Andre:** I'm a huge Freire guy. I love Paulo Freire.

**Sara:** I do, too.

As our interaction progressed, Andre and I began to develop a deeper understanding of literacy and agency—a moment where we worked together as researchers to create new knowledge and meanings for ourselves.

Thus, while the benefits of interactive interviews can be significant for those of us whose research focuses on marginalized identities, it may offer advantages for research on professional identities as well. The possibilities for interactive interviewing in literacy and composition research are exciting, especially since researchers often find ourselves interviewing fellow writing teachers and colleagues in other areas of expertise. This approach allows us to respect each other's expertise, talk about potentially difficult subjects, and move among researcher and participant roles and engage in theory and knowledge-building together.

Composition and literacy researchers cannot separate research methods from research data. To think so is a classic error of modernity, as Giltrow (2003) writes "our experience of modernity can convince us that form is separable from content" (p. 387). The form of the interview—the shape the interview takes, the questions asked, the ways in which they are asked, the roles of the researcher and participants—always affect the content: what information participants share, which narratives they deem to be tellable and untellable. However, Giltrow also writes that "this experience of separation may also arouse a compensatory sensitivity to specific content that has been overlooked" (p. 387).

Interactive interviewing is one such compensatory method by which "overlooked" populations can share their experiences of marginalization. It is a method that allows participants' and researchers' untellable narratives to be told. Interactive interviewing enables composition and literacy researchers to build reciprocal, collaborative relationships with participants, while diffusing the power imbalances

inherent in fieldwork. By making the researcher's own identity available for interrogation and co-inquiry, interactive interviewing allows researchers and participants to co-create knowledge and re-envision researcher-participant relationships.

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Like Sara Webb-Sunderhaus, Kelly Blewett, Darsie Bowden, and Djuddah A.J. Leijen are concerned with the impact that contextual research conditions play in shaping the data and studies that follow. The authors contend that the effacement or excising of location-specific conditions in the reporting of Writing Studies research does a disservice to the field. Drawing on three studies of responses to student writing, they explore how situatedness, a term borrowed from feminist theory, affects the approaches researchers take to shared questions. The studies highlighted employ seemingly oppositional methods (mixed-method and quantitative). By exploring the contexts in which each study emerged, it becomes evident that the research methods chosen reflect each author's positionality and institutional role at the time the study was conducted. While the three studies would not necessarily be "moving in the same circles" in most scholarship, in fact they are motivated by similar curiosities about how feedback affects students' writing processes. In all, the authors make a case that scholars should approach research by seeking points of connection rather than of difference, demonstrating how the "methodology of generosity" (College Writing, 2016)<sup>1</sup> referred to at the close of the Dartmouth '16 Conference can strengthen and inform research in Writing Studies. The following chapter by Jessica Early also examines writing in a school setting.

Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows A, D', M', N and P.

## Note

- 1 Anonymous participant (2016, August 10–12). [Conference reflection]. “College Writing”: From the 1966 Dartmouth Seminar to Tomorrow, Hanover, NH, United States.

# Situating Research Methods: Three Studies of Response

KELLY BLEWETT, DARSIE BOWDEN, AND DJUDDAH A.J. LEIJEN

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In *Situating Composition*, Ede (2004) argues the politics of location matter. Composition is not only a theoretical subject but is nested in practice(s). To disrupt the theory/praxis binary, Ede calls for more attention to situatedness, a term borrowed from feminist philosopher Haraway, which examines how contextual conditions influence action and perception. In this chapter, we examine how situatedness bears on research. A range of highly local conditions—geographic, linguistic, hierarchical, institutional, and financial—impact the development and execution of research projects. These conditions are often effaced from finished scholarship, which reports on results. In this chapter, we surface these conditions by offering snapshots of three studies of responding to student writing, which take up seemingly oppositional methods (mixed-method and quantitative). By showing how our studies were situated, we aim to disrupt entrenched thinking around methodological binaries (i.e., qualitative versus quantitative) and promote methodological generosity. The phenomenon of feedback is a useful one for a comparison like this, because it has long been a topic of interest in the field, including the Anglo-American Conference on the Teaching and Learning of English (Dartmouth '66 Seminar).

The British growth model (see Harris 1991) advocated beginning with student work rather than theoretical ideas, emphasizing the importance of responding to student writing individually. Since the Dartmouth '66 Seminar, the

scholarly conversation around response has plunged forward. Studies of what students think and do with comments have garnered considerable attention (Anson, 1989; Berzsenyi, 2001; Calhoun-Dillahunt & Forrest, 2013; Fife & O'Neill, 2001; Sommers, 2006, 2012; Straub, 1999, 2000; Wingard & Geosits, 2014). Prior (1995) explores the complexity of process of commenting, demonstrating how what students actually do in revising is mitigated by an array of circumstances, events, and forces—cultural historical, cognitive, affective and experiential—that is based on past experiences, present circumstances and students' perceptions of what's needed—and what's possible—in the time they have for revision.

The field continues to flesh out methodologies to explore this complexity with approaches drawn from activity theory, corpus linguistics and predictive statistical analysis, using data collected through composing protocols, instructor and student surveys, interviews, and measurements that document the degree of change from draft to draft, such that we have come to question the value of looking at text, writer, reader, community as discrete units (Prior, 1998). Instead most studies today attend to the maze of dynamic activity and relationships, including the studies profiled here.

## Research Project # 1, Kelly's Study

### Context

Project #1 is a mixed-method study that examines how relational perception influences students' interpretation of and emotional response to written and face-to-face feedback in two first-year writing classrooms. The guiding question was, "How do students' impressions of the teacher and the writing classroom impact their responses to individualized feedback?" Because Project #1 was conducted to satisfy the requirements of a dissertation, a genre which typically assesses the individual scholar, the researcher worked alone throughout the design, collection, and analysis phases of the study. The primary audience for her work was her committee. Building on previous work in the field (Neiderhiser, 2015), Kelly aimed to offer rich portraits of student writers while also conducting research that was replicable, aggregable, and data driven.

### Participants

Kelly pursued a purposeful sample of participants, enrolling two first-year teachers who were perceived as effective responders by previous classes (as evidenced by quantitative teaching evaluations), and four students in each of their classes

who differed from each other in terms of major, gender, ethnicity, and motivation to write (as measured by the Motivated Strategies for Learning Questionnaire). While the sample was diverse by some measures, all student-participants were US-born first-language English speakers, and both teacher-participants were white women.

## Data

To understand how participants experienced the feedback cycle, the researcher conducted hour-long interviews with each participant individually four times over the fall 2016 term. The first interview explored the participant's past experiences with providing or receiving feedback on writing. The second and third interviews focused on specific instances of response. The final interview, conducted after the term ended, asked respondents to reflect on their experience in the course and to elaborate on the larger themes regarding feedback and relational perception that had emerged. She also included pre-interview exercises (described below) for student-participants, which turned out to be significant during the data analysis phase.

To prepare for interviews two and three, the eight student-participants chose three emotions from a word bank of potential responses, which were generated based on the emotional words that participants used to describe their response to feedback during the first interview, as well as previous studies of emotion (McLeod, 1997; Micciche, 2007; Parrott, 2001; Plutchik, 1980; Shaver et al., 1987; Tobin, 1993). After they chose three words, each selected one dominant word and wrote a 250-word explanation of their selections. In addition to the interviews and this prewriting exercise, a student expressed an interest in tracking her affective responses to specific marginal comments using emoji stickers. This option was subsequently provided for all student participants, and six out of the eight students opted in. Thus, like object of study (the feedback cycle between teachers and students), the research method was dialogic and shaped by ongoing feedback. Each interview was transcribed, and each interview informed subsequent interviews.

## Method

The approach to the interviewing followed Seidman's guidelines for phenomenological interviewing (2013), in which the participants are regarded as the experts of the phenomenon under study. Like grounded theory, the insights in phenomenological interviewing emerge from the data set. A research journal was maintained to capture field notes and emerging insights. While each interview for each stage

followed the same general protocol, the shared dynamic between the researcher and the participants influenced the style and substance of the interviews, particularly during the later interviews when they were more familiar with each other. Kelly considered herself thoroughly entangled with the participants, as feminist scholars have emphasized is a part of qualitative studies (Fine, 1994, 1998; Sullivan, 1992), and as Webb-Sunderhaus explores in this volume.

Themes were identified from the data sets by coding half the interview transcripts for descriptive themes, such as voice, motivation, and trust. These categories then served as lenses to analyze the second half of the data. Kelly wrote analytical memos throughout the coding to organize emerging interpretations (following Saldaña, 2016). Ultimately 143 analytical memos ranging in length from a paragraph to several pages were generated. Additionally, she made spreadsheets to compare student answers to specific questions, their use of emoji stickers, and their chosen words in the prewriting exercise. As interpretations emerged, Kelly kept in touch with participants to see whether they agreed with these interpretations.

## Results

Ultimately Kelly found that students in both classes persisted through the revision process and responded productively to instructor feedback. Additionally, students arrived at a similar small subset of emotional responses via their wordbank exercises. The prevalence of words like *accepting* and *trusting* in these responses conflicted with the reports of doubt, distraction, disorganization, and confusion that characterized their individual narratives as well as their emoji-stickered responses. Students' belief in the teacher's expertise and care, as reported in the interviews, assisted them in overcoming resistance to negative feedback and in revising. Ultimately the study suggests that the teacher's ability to establish rapport with the entire class impacted individual students as they negotiated feedback. Thus, a key ingredient to effective feedback was not located in the actual feedback itself, but rather in how the students perceived the teacher and the overall class. Teachers looking to improve their feedback experiences with students, she recommended, should work on building rapport and demonstrating subject-area expertise.

Like much research in composition studies, Project #1 is deeply contextualized and not generalizable beyond each classroom. Even if the same approach were taken in selecting participants, gathering data, and analyzing the data, the same conclusions may not emerge, because data analysis is ultimately interpretive. Nonetheless, the results of Project #1 can assist in theorizing how relational perception, emotion, and feedback interpretation interplay in other settings.

## Research Project #2, Darsie's Study

### Context

Like Project #1, Project #2 seeks to contribute to the research on student responses to instructor comments, but the context and approach are quite different. The focus is on a larger population of students, all of them in their first quarter of a first-year writing course at a large, private, Catholic Midwestern university. The research question focused less on what constitutes a good comment—the existing literature on this is substantial (Sommers, 2000, 2012; Straub, 1999)—but rather *what do students, especially first-year writing students at University X, think and feel about their instructor's comments? Do the comments contribute to their learning?* The research process was governed by the specifics of University X's writing program: its size and configuration, the particular student population, the characteristics of instructor, and the exigence—in this case, to answer questions for instructors in the program regarding what students think about their comments.

### Participants

Thirteen instructors were recruited, all of whom were adjuncts who had been teaching in the writing program for more than two years and had regularly attended biannual faculty development workshops. Additionally, instructors were chosen who regularly commented on student papers using Microsoft Word's comment-and-track-change functions. The research team was composed of writing department graduate students and writing tutors at the university, and they were compensated. Recruitment of student subjects took place after the third week of classes to ensure that students were familiar with the course. Most students were working on their second formal essay of the ten-week term. Ultimately, out of the 54 students who volunteered, 47 from 13 different sections completed the data collection cycle. The demographic breakdown (diversity, age, commuter, transfer) was consistent with the first-year student enrollment at University X (about half of the students, for example, were students of color).

### Data

Assignments varied across these sections and included rhetorical analyses, evaluation papers, and a range of argumentative essays, all around 3–5 pages long. In addition to collecting drafts with comments and final revisions of each paper, students were interviewed twice, first right after they had received papers with

comments back from the instructors. In this interview, students were asked to share their understanding of each comment and explain what they planned to do in response to the comment (e.g., think about, edit, revise, ignore). Then, when students had completed revising these papers, they completed follow-up interviews in which they were asked to describe what they did in response to each comment and why and discuss what influenced how they revised. Interviews and interview transcriptions were completed by the research team.

## Method

Although, as the principal researcher, Darsie had numerous hypotheses about how students might respond to particular types of comments, largely based on existing scholarship on response, she wanted to try to avoid assumptions and to be open to what students shared. Thus, grounded theory was selected as the research methodology to explore how (and to what degree) instructor comments impacted students, particularly in view of their moves to the final draft. Instead of beginning with a hypothesis to be proved, *grounded theory* methodology, developed by sociologists Glaser and Strauss (1967), begins by raising generative questions. Then, in the course of observation (in this case, of student work, teacher comments, student interviews), researchers formulate theories and hypotheses, which are then verified through analysis (coding, note-taking and diagramming).

The research team reviewed drafts with comments and interview transcripts multiple times, with at least two researchers reading the same transcripts, annotating features and patterns that seemed to be emerging from the data. Before researchers began coding, they also reviewed coding methods for comment types and student attitudes from other studies (particularly Calhoun-Dillahunt & Forrest, 2013; Scrocco, 2012; Wingard & Geosits, 2014). Then both instructor comments and student interviews were coded, utilizing a dynamic process in which codes were created, refined, deleted, or added as the researchers' understandings progressed. Instructor comments were coded according to how they appeared: *in-draft*, *in the margins*, or *end comments*; and type of comments: *surface* (punctuation, spelling, typos, usage); or *substance*, or any comment related to the meaning or message of the text. Interviews were coded to account for what students thought or felt about each comment before they had an opportunity to revise (Interview 1) and then what students thought about changes in the revised draft to see if their ideas and attitudes had shifted over time and why (Interview 2). Codes included opinions about the comments, attitudes, confusion, attention to grade, approach to change, and what influenced the process.

## Results

Among the highest frequency factors that students had to negotiate was confusion about what instructor comments meant or called for, concerns about grades, the influence of high school writing instruction and time management. But the interviews also revealed students in the process of learning: reshaping ideas and language in response to comments, coming to realizations about the topic and format, wrestling with the concept of audience and the instructor's role, grappling with their own authority in conjunction with, or in opposition to the instructor's, and negotiating other influences such as peer review, what they read in and outside of class, or what parents and friends tell them. This "learning" (or learning in process) did not necessarily result in changes in the final drafts for a broad range of reasons. In fact, we found that some students made changes without much consideration because "the teacher said so" or because their grades depended upon it. Thus, the study called into question the goals of classroom practices. What, for example, constitutes *learning* when we talk about learning to write? And where do we look for learning? In the final draft? In the revised portfolio? In the reflective essays? If learning happens in the spaces in between these concrete events, that is, in the considering, weighing, questioning, and rethinking, how can we account for this kind of learning or be sure it is happening?

The study confirms that the interplay between teacher/comment/student is complex and informed by material and affective influences. Yet even though this research is replicable, different contexts (different students, diverse geographic or socio-historical locations, specific genres of paper or topic, types of instructors) would most likely produce different results. Further, the collected data collected was limited, and hence provided only a snapshot—student responses frozen in time—when there is no denying that an individual's writing process is constantly evolving and non-linear (Anson, 2012; Prior, 2006).

## Research project # 3, Djuddah's Study

### Context

Project #3 investigates peer response to writing within a non-English-speaking European context and approaches this data quantitatively using machine learning methods to build models of effective peer response based on a number of identified and coded features. Despite obvious differences to Project #1 and Project #2, all three projects share a similar focus: what does a response to writing do? More specifically, how does the response impact the person receiving feedback

(e.g. emotional response or revisions in a subsequent draft)? Djuddah's role at the university was two-fold. He was introducing a large integrated writing course in the language center, and he was a PhD student investigating the effect peer feedback had on the student population working with web-based peer review. The aim was primarily to find evidence which would support the value of peer feedback to the student population, but also to stakeholders such as faculties, institutions, and departments.

Data for Project #3 were collected at a public university in Estonia. This specific university has re-established itself as a top university offering high quality research and education. As with many universities in this region, and Continental Europe in general, writing is not a discipline. The teaching and learning of writing is primarily positioned in language departments or centers whose primary focus is on correctness in writing. This pedagogy primarily reflects the traditions of English for Academic Purposes (EAP) and Language for Specific Purposes (LSP), and "writing courses" often follow a genre approach to the teaching of writing (Hyland, 2004, 2007; Swales, 1990).

In contrast to Projects #1 and #2, Project #3 is situated in SWORD, a web-based peer response system, which has been implemented successfully in courses supporting disciplinary writing assignments (Cho & Schunn, 2004). SWORD allows evaluation scales, rubrics, and criteria to be customized; it also randomizes multiple peers who respond to submitted drafts, over any number of iterations. For example, in a class containing 20 students, each student submits a draft of their text, and the instructor randomly allocates 4 peers to respond to the uploaded draft. As such, the data consist of multiple drafts, and multiple peer responses to these drafts (for a full description see Leijen, 2017).

## Participants

In the context of this study, 43 students were enrolled in an English language academic writing course for chemistry students. All students were enrolled in SWORD, as the course was largely conducted as a web-based learning module. To enroll in the study and the SWORD peer review system, students had to indicate whether they would opt into the study upon entering the SWORD environment. Only the anonymized data of the students who opted in was used for data analysis. This procedure follows the guidelines of the ethics committee of the university, as European universities generally have no formalized IRB process.

All students are English L2 users. Students completed three iterations consisting of draft submissions, peer response, revision and resubmission in SWORD.

As a result, more than 1500 peer responses were collected by SWORD for data analysis.

## Data

Djuddah manually segmented and coded the data for features of response. An important aspect of the study was to develop a coding taxonomy of peer response that could be used by other researchers to investigate similar data sets in other contexts. Each of these contexts might produce a different or similar model. The main outcome is therefore to support the replicability of any studies on peer response.

The main purpose of Project #3 was to build a model of effective peer response. In other words, Djuddah and his colleagues aimed to determine which features of a peer response motivated a student writer to revise. The features of effective peer response were preselected from published research on effective response (for a list of these selected features see Leijen, 2017). They began by assuming that not all features were effective; some features might have either a positive effect or negative effect when combined with another feature. For example, is a peer response which includes affective language and/or suggests an explicit change more likely to be taken up by the writer? What about an explicit suggestion for change? Will that still have a favorable outcome when that suggestion is related to lower order concerns such as spelling and grammar? Once data were collected and coded, they aimed to identify which peer-feedback features predicted revision in the writer's subsequent draft.

## Method

The methodological approach, Machine Learning (ML), allows for the testing of multiple theoretical approaches to peer response. Generally, ML takes data and discovers a recurring pattern (modelling) in a set of predetermined features that can in turn be used on other sets of data to validate whether the same features are functioning in similar ways. As such, ML modelling was used to predict which response features would lead to a revision in the subsequent draft. Rather than taking the bottom-up approach to find answers to the question (as in phenomenological interviewing or grounded theory), the ML approach is more top-down. Preselected features (such as suggestions, justification, polite language use, etc.), provided the input for the analysis, and the ML method would in turn predict which of these features are important predictors for revision.

## Results

The results of the study indicated that the reviews of students that included a justification in their response to a suggestion for a higher order change lead more frequently to a revision in a subsequent draft (full overview in Leijen, 2017). In contrast to Projects #1 and #2, the methodological approach used here is highly replicable to different contexts and data, primarily because the analysis takes this top-down approach. As such, using this method, one would expect to find that the situatedness of the data (e.g. educational context, specific web-based tool, student populations) will offer comparable results, making it more likely to draw generalizable conclusions.

## Discussion

Although Projects #1 and #2 both pursue emergent themes regarding student responses to feedback in FYW through interviews, they were designed for different stakeholders. Kelly (Project #1) was concerned with the expectations of her doctoral committee. Feminist scholarship directed her attention to the researcher-participant dynamic and supported her decision to allow participants to impact the design of the study. In contrast, Darsie (Project #2) focused on the concerns of instructors in her writing program and how instructor comments align (or do not align) with writing program learning goals.

The genres in which the researchers imagined disseminating results also impacted study design. Kelly envisioned writing case studies and designed the study with this possibility in mind, including only 10 participants; the larger sample in Project #2 reflected Darsie's intention to provide data-driven patterns about students at her institution that would be used both for local professional development and as a contribution to discussions of writing assessment in the field of composition and rhetoric at large. These differences reflect the scholars' different positions within their institutions and their careers. Research support also played a role in study design; Darsie was able to enlist more participants and a research team because she worked within a large writing program, and she could provide compensation.

In contrast, Project #3 focused on peer readers in an educational environment where there are few "writing teachers" per se. Estonian writing instruction is largely supported by writing centers or other student support services, outside of an academic discipline. While individual teachers may draw from writing traditions that come from the US, research in Europe draws on disciplines such as linguistics, which are often quantitatively driven. As Djuddah sought to make his

work resonate in this environment, he turned to the approaches that were most respected there.

Our differing methodologies are not without potential conflict. A primarily quantitative researcher (Djuddah) or an adherent to grounded theory (Darsie) might critique some of the narratives generated in Project #1 as biased, pointing out that the order of the interview protocols shaped student answers. Meanwhile, a researcher immersed in feminist qualitative methods (Kelly) might be skeptical of the impersonal nature of the interviews in Project #2. Both Kelly and Darsie could be suspicious of the top-down approach utilized in Project #3, arguing that the established taxonomies overdetermine the patterns in the data, or that corpus-based approaches do not reflect the complex, lived experiences of student writers. And—under typical scholarly circumstances—we could be entirely unaware of each other's work.

The Dartmouth Conference of 2016, like the Dartmouth Conference of 1966, brought diverse researchers together to share the animating questions. In our case, we discussed the following topics as they relate to response: the significance of emotion when receiving feedback; how to measure social presence in written comments; and what evidence of learning could be systematically measured beyond reviewing changes to a draft. These topics will ideally give rise to new studies, pushing each of us in different (but shared) directions. We have also considered how each other's work might inform our own future projects. For example, one of the results of Project #2 was the range of influences that impacted students' revision processes; these results could inform future researchers who take up methodologies like Project #1. Further, the qualitative aspects of Projects #1 and #2 could contribute to the development of the taxonomies upon which the machine learning of Project #3 depends.

## Conclusion

Situating research methods allows scholars to better understand how contextual conditions impact the development and execution of research projects. As this essay demonstrates, situatedness impacted all three of these studies: how we defined our research questions, what methods we chose to investigate our questions, which stakeholders we were seeking to serve, and what forms our results initially took as they moved to a public audience. Surfacing these often-invisible conditions enabled us to better understand that methodological divides do not simply occur because of theoretical epistemological differences. By shifting our focus from methodological differences to situatedness, we also perceived what

brings us together: in our case, shared curiosity about the phenomenon of feedback itself. Coming together to examine our shared questions fosters conversations that will propel both our work as individual scholars and our field as a whole. What one Dartmouth '16 participant called “a methodology of generosity” (College Writing, 2016)<sup>1</sup> is important in such endeavors, because in an interdisciplinary field like ours, diversity will always be, and should always be, present.

## Note

1 Anonymous participant (2016, August 10–12). [Conference reflection]. “College Writing”: From the 1966 Dartmouth Seminar to Tomorrow, Hanover, NH, United States.

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Like Blewett, Bowden, and Leijen, Jessica Early is interested in studying student writing in a school setting. While the previous authors focused on the postsecondary context, Early examines the K–12 arena. The author begins with a personal account of her journey from high school English teacher to university professor and writing researcher, and the complex issues of literacy experience and access she encountered that motivate her quest. She details some of the challenges and solutions faced in designing and implementing social justice writing research within K–12 school settings, as well as practical design considerations such as access, collaboration, data collection, and analysis.

In all, Early offers workable guidelines from the perspective that writing researchers have the opportunity to “deeply root ourselves within the social contexts with which we work and, therefore, have the ability to respond to, reimagine, and, ultimately support the change of these contexts for the better.” The subsequent chapter maintains the focus on social context as it relates to school: Shawanda Stewart examines the efficacy of a pedagogical intervention in writing classes at an historically black university.

Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows B’, N, S, and N’.



# Conducting Writing Research in K–12 School Settings: A Review of Approaches

JESSICA SINGER EARLY

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I began my career as a high school English language arts teacher working at an urban school in the northwestern United States. I came to teaching with high hopes of sharing my love of literature and reading with young people. My students came to me from diverse ethnic, linguistic, and cultural backgrounds and with varied literacy experiences. In my first years teaching, I realized how students' reading and writing abilities were not, as I had assumed in college, simply signs of innate giftedness or hard work. Instead, I experienced how these practices are directly tied to issues of access, equity, and sponsorship within and beyond school (Oakes, 2005; Brandt, 2001). Access to challenging, engaging, and relevant literacy learning at my school was imbalanced and too often based on external forces largely out of students' control. I began to shift my understanding of what it meant to be an English teacher. I started to see it as much more complex than teaching a love of literature and reading. I needed to prepare students to become strong and engaged readers and writers for the world they were about to enter regardless of their literacy strengths or weaknesses entering my classroom. To do this, I needed to shift my teaching approach to include writing instruction and I also needed to address issues of equity and access surrounding literacy at my school.

My school provided unequal curriculum and instructional expectations for different groups of students who were sorted into high-track English courses, like Honors and Advanced Placement, or low-track, "regular," courses. While students

were told they could pick their English classes from year to year, the makeup of these classes was largely determined by the feeder schools they had attended since kindergarten, which was closely tied to neighborhood, social class, and race. Furthermore, the writing and reading expectations and curriculum offerings for these English courses were not equivalent. My school echoed the pattern noted by Wiley, in which the lower-tracked classes were largely test-prep and offered remedial reading and writing instruction, while the Honors and Advanced Placement courses were heavily literature-based with less prescriptive and test-driven writing (2000).

Over time, I worked alongside my department colleagues to challenge and change some of these unequal approaches to teaching and learning. We wanted students, regardless of ability grouping or class name, to have equal opportunities to strengthen their literacy practices. We worked to untrack our English department's ninth-grade course offerings to provide all students entering our high school an equal opportunity to engage with a rigorous honors curriculum (Early, 2010a). While untracking ninth-grade courses was an enormous accomplishment, this change to the sorting and scheduling of students brought about new and previously unrecognized challenges. For example, the untracked English courses were now far more diverse in terms of literacy experience and skill level. Many teachers, including myself, did not know how to support such diversity of learning styles, skills, and experiences. While my teacher-training program and my own interest in reading served as a foundation for teaching reading to diverse students, like so many beginning and seasoned teachers, I also lacked confidence, experience, and training in the teaching of writing (Kiuahara et al., 2009; Graham et al., 2014; Applebee, 2009). I did not know how to change my largely literature-based curriculum to include opportunities for students to learn to write, nor did I know how to teach writing other than to assign prompts and to provide models and formulas. I made it my goal to learn more about the teaching of writing.

As a first step, I applied for a National Writing Project (NWP) Invitational Summer Institute at a local college, which was a four-week professional development program on the teaching of writing for K–University teachers. In the NWP Summer Institute, I became deeply immersed in a professional teaching community invested in the study and practice of teaching writing. (For discussion of the NWP and the teaching community, see Lieberman & Wood, 2003; Whitney, 2008; Whitney et al., 2008; and, Whitney & Friedrich, 2013.) I read pedagogical and research-based pieces about teaching writing and learning to write (Christensen, 2000; Graves, 1983; Hillocks, 1986), presented and received feedback on a demonstration writing lesson based on my own classroom practice

(Gray, 2000), and wrote a draft of a professional article about my classroom-based teacher research (Singer, 2005).

As I gained experience and confidence teaching writing, I wanted to understand how certain kinds of instruction supported my students' writing practices and how I could better prepare them for the kinds of writing they would likely do in college, the workplace, and in the community. I tried to find answers to these questions, yet felt constrained by my lack of research knowledge. Eventually, these questions about teaching writing led me to pursue a doctorate. I selected a program in a graduate school of education with a focus on language, literacy and composition. I took research methods courses in interview methodology (Brenner, 2006), qualitative research design and discourse analysis (Green et al., 2005; Gee & Green, 1998), single subject design (Horner et al., 2005), statistical analysis (Hong & You, 2006), and writing research methods (Bazerman, 2008; Bazerman & Prior, 2004). A social science approach to writing research, gave me an understanding of writing as a social practice (Prior, 2006) learned over a lifetime with support, practice, instruction and skills (Bazerman et al., 2017). Each methodological approach offered new ideas, tools, and instruments to study the teaching and practice of writing within school settings.

In my transition from high school English teacher to university professor and writing researcher, my questions about and understanding of teaching writing have evolved; however, my core interests remain unchanged. I study the teaching and learning of writing in school settings to examine the ways writing researchers may collaborate with K–12 teachers to create more innovative and equitable writing instruction for ethnically and linguistically diverse K–12 students. I examine and seek to strengthen writing practices, curriculum, and instruction for diverse K–12 student populations. This chapter serves as a review of the research approaches I use in studying writing practices within K–12 school settings. I provide a number of practical and detailed design issues I have experienced in my studies including: 1) gaining access to school settings, 2) collaboration within school spaces, 3) data collection, and 4) analysis of student writing samples.

## Gaining Access to School Settings

Schools are necessarily highly protected and closed-off spaces for people trying to enter or participate within them from the outside. Because of this need for security and protection of the work taking place within schools, gaining access to conduct research can be a complicated and, at times, daunting process. Gaining permission to conduct K–12 school-based research requires school, district, and

university-level permission, which means navigating multiple institutional systems, procedures, and paperwork. It also means negotiating different institutional cultures and discourse communities. For example, school districts are primarily concerned with student and teacher safety and confidentiality. Districts require researchers to go through a research and evaluation office to present a research proposal for the study, and to gain fingerprint clearance before setting foot on a school site. Some districts have online portals for submissions, others have research officers who must be consulted. Districts also vary in the handling and processing of approvals. Some conduct this review process quickly and others take weeks or even months. These issues of access and permission require time, research, and persistence; therefore, I try to plan school-based studies six months to a year in advance.

Once I receive district permission, or have begun the process, I begin my work of gaining access to a school site by contacting the school administrator. First, I send an introductory email to share my project idea and set up an in-person meeting. When I write to school administrators with a research idea, I also share the instructional and curricular benefits of the project. Principals, like other school district officials, are deeply concerned with student and teacher safety and confidentiality, and they also want to make sure the research will benefit students and teachers' learning. If the principal is supportive, I ask for her/his help in navigating the district's process for gaining permission to conduct research at the school. School administrators generally want to ensure that research will directly align with and support their curriculum and assessment standards. Therefore, I look into the kinds of external pressures schools or districts are facing, like district or state assessments, school rankings (e.g. failing, making progress, exceptional) and enrollments (e.g. growing or shrinking), as well as news stories or press, before approaching a school. This initial contextual orientation helps me understand how or if my research will fit at a school setting and helps me make a case for how the research will support the wider goals, challenges, and demands of a school setting. After receiving all necessary institutional permissions, I work with classroom teachers to closely design and implement studies with their input and perspective and to receive student and parent permissions using consent (for parents) and assent forms (for students).

## **Collaboration Within School Spaces**

I almost always enter school communities as an outsider in terms of my race, social-class, education, and professional role. Because of this, I am cognizant of the

need to spend time building trust and growing relationships with the students and teachers I work with (Erickson, 1985; Horvat, 2013). As with any collaboration, there is always a push and pull between what I set out to accomplish and what I need to shift or change because of the nature of collaborative work in school settings. My presence as both a researcher and co-teacher in classrooms places me in new and nuanced roles alongside classroom teachers. K–12 teachers, particularly at the secondary level, are accustomed to being the lone teaching voice and authority in the classroom. As a researcher and professor at a university, I too, am used to an independent role in my teaching and in much of my work. A research and teaching collaboration requires a shift away from our roles as solo practitioners to allow for distinct perspectives, experiences, and ideas to blend and take shape together. These decentered and collaborative roles place the researcher and teacher in continual dialogue and partnership about teaching and learning, which is supportive, enriching, messy and, at times, uncomfortable. It helps to establish open communication with school-based partners and to continually check in, reflect, and revise our teaching and research plans during a study.

## Collecting Data in K–12 School Settings

When designing school-based writing studies, I first think about the best ways to answer my research questions using the methods in my wheelhouse. Next, I think about the specific conditions with which I am working. For example, I consider the time frame (e.g. year, semester, quarter, unit, week), the age of the participants (e.g. elementary, middle school, high school), issues of access and confidentiality, and logistics. Finally, I think about the ways I can answer my research questions through data collection instruments. My methodological choices vary depending on my research question(s). However, blending qualitative and quantitative research methods has helped me create more complete and nuanced portraits of the school-based writing communities I participate in. I also often position myself as a participant-observer within classrooms, as described by Spradley (2016), which means I deeply involve myself in the teaching and practice of writing, while simultaneously gathering data from multiple sources. Below I detail some of the data collection instruments I frequently rely on in my school-based research:

### Demographic Questionnaires

The demographic questionnaire is a fast and easy way to gather background information from students, including information about age, languages spoken,

self-identified ethnicities, and educational backgrounds before the start of a study (Sudman, 1983). Because of FERPA regulations, schools may not release information about students' GPA and state or district test scores without a complicated and time-consuming district approval process. Instead, I gather this information from students as self-reported data using the demographic questionnaire. Although the information may not be exact, it provides a sense of student perception of achievement in school and on state and district assessments.

### Opening and Closing Questionnaires

I use opening and closing questionnaires to gather information about participants' perceptions, experiences, ideas, and questions related to a study. For example, in my study of an after-school family literacy project, I distributed an opening questionnaire, which included three questions asking participating parents to: 1) Describe what you hope to learn or get out of the family literacy project, 2) Describe if and how you give feedback to your child about his or her writing, and 3) Share what you hope to take away from this after-school literacy project to use in the future. The closing questionnaire included four questions asking participating parents to 1) Reflect on your experience participating in the family literacy project, 2) Describe what you like about the experience, 3) Describe what you found helpful about giving and receiving feedback about writing with their child, and 4) Describe what you will take away from this after-school literacy project and use in the future. I also include a prompt for questions and comments, which gives participants a way to raise questions or make comments that they make not feel comfortable raising in person or that connect to other items on the questionnaire.

### Literacy History Surveys

I use literacy history surveys as a way to gather information about participants' past literacy experiences. For example, in a study of a family writing project for second-grade students and their parents, I created a survey of home literacy practices drawing from similar instruments used by Jordan et al. (2000) in family literacy studies on frequency of literacy-based activity and access to literacy materials and/or tools. I included questions from Van Steensel's (2006), Purcell-Gates' (1996) and Sulzby & Teale's (1986) family literacy surveys on the occurrence of eight separate literacy tools or activities: reading books, magazines, newspapers, video games, computer, book CDs or digital recordings of books, or visits to the library. Five questions (one each) addressed frequency of writing practices at home and oral storytelling without the use of books (cf. Palmer et al., 2001), frequency of library visits (cf. Jordan

et al., 2000), viewing literacy-focused television programs, such as *Sesame Street* (Jordan et al., 2000). The survey also included a question about the language(s) the parents and children used to read and write at home. Although there are certain limitations to questionnaires and survey instruments, these serve as a mechanism for understanding participants' self-reported literacy histories and practices, writing interests, goals, and questions before and after participating in the project.

### Self-Efficacy Surveys

I want to understand the ways writing instruction, teacher training, and writing curriculum may work to increase student and teacher writing confidence. To this end, I use pre- and post-self-efficacy questionnaires to measure participants' efficacy before and after receiving writing instruction or before and after taking part in a classroom-based writing communities. There are many examples of self-efficacy surveys available for researchers to use as models for their own work (Bandura, 1986; Shell et al., 1995; Pajares & Johnson, 1996; Early & DeCosta-Smith, 2011; Early & Saidy, 2014, 2018).

### Interviews

I use interview data to gain an understanding of teacher and student perspectives, histories, observations, and reflections related to my research questions. I often conduct open-ended, pre- and post- interviews with a subset of participants in a study as detailed by Spradley (1979). It is not realistic to interview all students within a classroom, with class sizes of 30 and up. I often interview students during lunch breaks or study hall periods. To make my research as non-disruptive as possible, I try not to have students leave class and lose instructional time. My school-based interviews are usually brief (15–20 minutes) and the questions are open-ended (Seidman, 2013; Early, 2010b).

### Writing Samples

In all of my research, I collect the writing samples created within a classroom writing community during a particular point in time (e.g. semester, unit, assignment, after-school program). I collect writing of three types: 1) Texts written and produced for the instructional curriculum, 2) written research memos and documents distributed to participants from the teaching team, and daily notes about my observations in memo form, and 3) email communication between classroom teacher and myself. I collect writing as it is produced in the classroom. First, I ask

the classroom teacher to give me all instructional materials she/he prepares and hands out to students during each study and label and file each document as a separate writing event or invitation. I take photos of instructional prompts, which usually appear on classroom whiteboards or smartboards, to connect the writing produced with the teacher-generated writing invitation or prompt. I also make or ask for copies of readings and other instructional material. I bring a laptop and a notebook to each class or project meeting to take field notes. I try to document student and teacher interactions, questions I have about material or process, and reflections about what takes place. I write these notes quickly and in short and interrupted spurts in between my work teaching, collecting data, and responding to or working with students. I add to my field notes or memos after a class ends or when I have time to reflect on the experience (see Appendix to this chapter for sample field notes taken at an ELA high school department meeting; see Early & Saidy, 2018 or Early & DeCosta, 2012 for example of classroom-based writing research study using student writing samples).

As I collect writing samples, I work with the classroom teacher to collect and organize them into folders, strip them of identifying information (using pseudonyms or numbers) and then copy all materials. I spend an hour or so after each class meeting or four to five hours at the end of each week to copy, file, and label all materials. I initially label everything by date and assignment or prompt name. I collect student writing samples at the end of each class meeting and scan or copy the writing that day to return to the teacher the next. Or, I provide pocket or portfolio folders for students to file their writing as it is produced. I collect these folders each class meeting and copy all of the written data at end of the data collection period. Because so much of the writing students produce in school settings is created with pen or pencil during class, the majority of my studies require me to collect hard copies to then copy and scan. From time to time, students produce writing on school computers or iPads and, in this case, I work with the teacher to have students use Google Docs and then share their documents with me. Collecting writing samples in classroom settings is labor- and time-intensive and requires a clear collection and organizational plan.

## Analysis of Writing Samples

I apply a “multidimensional and situated approach” to understanding textual data (Kamberelis & de la Luna, 2004, p. 239). My analysis of student and teacher writing samples begins through the process of data collection with the decisions I make as a participant observer (see Spradley, 2016), throughout my collection of writing

samples, and in my written observations and reflections about the writing community and context. I go through a multi-step coding or categorization process, as a way of making decisions about how to represent or portray the written work and what the writing communicates about the writers and about learning to write.

Categorization of the data is a fluid process. I merge or shift categories as needed as the analysis advances (see Charmaz, 2006; Glaser & Strauss, 1967). Rather than analyzing writing for “correctness” or completion or as isolated text, I deliberately take steps to examine written text production as a socially embedded, shared, and evolving practice within a community. First, I organize the data by individual and read each participant’s body of writing. Next, I organize the written texts into groups by assignment, participant group (if writing is done within a family or collaborative group) and read and analyze these as collaborative clusters. For example, I will read all writing produced by a writing or table group in a high school class together, or all writing produced by a family for one writing assignment in a family writing project. I reorganize the written texts by chronological writing events, which occurred in the writing community, and then analyze these as writing events. Finally, I organize and collapse codes generated through the multi-step analysis, into more general themes (see Early & Flores, 2017; Early & Saidy, 2018). Because I am deeply invested in demystifying the ways teachers and students grapple with, practice, and understand the process of learning to write, my work always includes and highlights direct quotes and samples of their written work.

## Final Thoughts

This chapter began with a personal account of my journey from high school English teacher to university professor and writing researcher, and the complex issues of literacy experience and access I experienced to lead me down this path. The chapter details some of the challenges and solutions faced in designing and implementing social justice writing research within K–12 school settings, as well as practical design considerations such as access, collaboration, data collection, and analysis. I came to my work as a writing researcher through the questions I formed early on as an English language arts teacher working at a socially diverse high school. Now, many years later, I work alongside and in collaboration with teachers, students, administrators, and families to create more equitable and collaborative writing opportunities for K–12 teachers and students. Conducting qualitative and mixed-methods research in classroom settings grants me the gift of participating in and witnessing the day-to-day work of classroom spaces. I do not take this gift

lightly. School contexts, and the professionals working within them, are too often unseen, unheard, undervalued, and misunderstood. As a writing researcher, I have the opportunity to share the successes, challenges, stories, lived experiences and expertise of teachers and students as they grapple with and succeed at the work of learning to write in school.

As researchers, we have the opportunity to deeply root ourselves within the social contexts with which we work and, therefore, have the ability to respond to, reimagine, and, ultimately to support the change of these contexts for the better. My hope is that school-based writing research will help us understand more about the ways writing practices develop over a lifetime and how learning to write in and for school is a complex, exhilarating, engaging, and ever-changing process. The more writing research can work to understand and portray what student writers bring to schools, what teachers bring to the teaching of writing, and what schools bring to students and teachers as writers, the more we can understand the full picture of what it means to learn to write in school.

## **Appendix 11.A. Sample Field Notes: Meeting Before a High School English Language Arts Department Meeting**

September 26th: 1:30–3:30

I arrive at MT at 1:15 and sit in my car in the parking lot for 15 minutes finishing up a phone conversation with Sharon. I walk through the front gates, say “hi” to the security guys sitting on stools. It is 99 degrees. I sign in at the front desk and then make my way to the back of the campus to the library. I walk up the stairway (which is not air conditioned) and arrive upstairs. I pass Kori’s room. His students are all sitting quietly and he is at his desk. I walk past his room to Lori’s class. She is at her computer entering reports for the fall semester. Her student teacher is in the room.

The chalkboard reads:  
Literary Terms Bank:

- Metonymy
- Symbol
- Enjambment
- Persona

- 1) What has Grendel done at Herot?
- 2) What are the exploits Beowulf claims when he arrives in Herot?
- 3) What features define Beowulf as an Anglo-Saxon hero?

Be specific! Answer using a paragraph and examples from the text.

When I arrive, Lori asks me to wait a few minutes while she finishes entering grades. She and her student teacher talk about a few of the students in their classes. When Lori finishes at the computer, she sits down at a student desk across from me. She shows me the *Atlantic Monthly* article on the Writing Revolution. She says she read it the night before as she was going to bed. She had highlighted big paragraphs in yellow and seemed excited. She said, “We are going back to the 1950’s.” She asked if I could order 6 copies of a book on teaching basic writing. She handed me an outline for the English Department meeting. She said they were going to talk about vertical alignment and the AP Vertical Teams Guide for English (something they had worked on the following year). English teachers walk in the room and greet me. They remember me from my essay workshop the previous spring.

Lori asks, “How do we get kids from simplicity to complexity? I am tired of getting seniors who are writing at the eighth-grade level. Last spring, I threw away the district curriculum and all we did was write. We shouldn’t have to do that.”

Department meeting begins.

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Maintaining the focus on student writing in a school setting, Shawanda Stewart addresses the effects of context in two senses, the context students bring with them, and the context of the classroom and learning environment. She begins by discussing the role of historically black colleges and universities, and her search for a writing curriculum that connects students to their communities and culture, recognizing: varieties of English, translanguaging, antiracist writing ecologies, and critical pedagogy. The author and her research partners adopted Critical Hip Hop Rhetoric Pedagogy as the basis for such a curriculum, and studied its effectiveness in a classroom setting using verbal data analysis of written texts (Geisler). Like Barton et al., Stewart and her colleagues analyzed student reflective writing. Choosing t-units as the unit of analysis, the authors coded for inhibiting emotions, seeking to understand how curriculum impacted student engagement and confidence in writing. Stewart argues that verbal data analysis is a useful method for those studying the impact of a curricular intervention, particularly when it is paired with other methods such as focus groups. Stewart's focus on context and culture leads the way to Ellen Cushman's critique of translation.

Readers are encouraged to seek other connections. The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows N, P, Q and B.



# First-Year Composition and Critical Hip Hop Rhetoric Pedagogy: A Verbal Data Analysis of Students' Perceptions about Writing

SHAWANDA J. STEWART

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In the case of first-year composition, there is a move toward demarginalizing students by recognizing language varieties in the classroom (Smitherman, 2000; Perryman-Clark et al., 2014; Young et al., 2013; Horner & Kopelson, 2014). At Huston-Tillotson, a private, liberal arts Historically Black University, a colleague and I created Critical Hip Hop Rhetoric Pedagogy (CHHRP), a one-semester, first-year composition curriculum designed to connect students to their community and culture with an aim to influence student engagement. This pedagogy, which follows the work and phraseology of linguistic anthropologist H. Samy Alim's Critical Hip Hop Language Pedagogy (2007), which itself draws upon students' experiences with writing and language, focuses on rhetorical awareness and strategies, and utilizes Hip Hop as the content for the course. In this chapter, I discuss how our research team conducted a verbal data analysis of students' pre- and post-semester reflections to determine the success of this pedagogy in decreasing the relative frequency of inhibiting emotions students expressed about writing.

## Literature Review

Our CHHRP empirical study adds to current theoretical conversations and pedagogical practices about student writers and writing instruction with particular

attention to students' rights to their own language (Perryman-Clark et al., 2014; Smitherman, 2000), translanguaging (Horner et al., 2011; Carnagarajah, 2006), antiracist writing ecologies (Inoue, 2015; Inoue & Poe, 2012; Condon & Young, 2016), and critical pedagogy (Freire, 2000; hooks, 2014). Like H. Samy Alim, our research team defines Hip Hop as a worldview that includes "a vast array of cultural practices including MCing (rappin), DJing (spinnin), writing (graffiti art), break-dancing (and other forms of street dance), and cultural domains such as fashion, language, style, knowledge, and politics" (Alim, 2009, p. 2). Hip Hop is a socially and politically conscious paradigm that "emerged from the social, economic, and political experiences of black youth from the mid- to late-1970s" (Aldridge, 2005, p. 226) where we can hear through rhythmic song lyrics or see through creative fashion, the intellectual activism to which Hip Hop artists contribute. Since the beginning, artists have taken on social justice issues such as police brutality, self-determination, and economic solidarity (Aldridge, 2005), in an art form materialized through multiple genres that pushes boundaries and questions injustices. As such, using Hip Hop content promotes students' critical consciousness because it demonstrates how "critical understanding leads to critical action" (Freire, 1974, p. 40).

Not only is Hip Hop a global culture, epistemology, and philosophy, but the nuanced, contextualized rhetorical features of Hip Hop culture provide an opportunity for students to discuss and write about language differences. In "(Dis)inventing Discourse: Examples from Black Culture and Hiphop Rap/ Discourse," scholar Elaine Richardson (2006) explains that "Hiphop discourse [is] a subgenre and discourse system within the universe of Black discourse which includes African American Vernacular English (AAVE) and African American Music (AAM) among other diasporic expressions" (p. 196). She goes on to state that "Hiphop is a rich site of cultural production that has pervaded and been pervaded by almost every American institution and has made an extensive global impact" (Richardson, 2006, p. 201) and further claims that Hip Hop discourse "(dis)invent[s] identity and language" (p. 201). The origins and pervasiveness of Hip Hop culture provide an angle from which students can think, write about, and understand language in relation to themselves and in the academy.

In the *Framework for Success in Postsecondary Writing* (2011), the Council for Writing Program Administrators and National Council of Teachers of English identify eight habits of the mind which contribute to students' success in college writing: curiosity, openness, engagement, creativity, persistence, responsibility, flexibility, and metacognition. Of these habits, we focused on engagement for our research design. Engagement is defined as "a sense of investment and involvement in learning" (p. 4), and instructors can foster it "when writers are encouraged to

make connections between their own ideas and those of others; find meanings new to them or build on existing meanings as a result of new connections; and act upon the new knowledge that they have discovered” (p. 4). Our research design also focused on self-efficacy. Albert Bandura, social learning theorist and psychologist, identifies self-efficacy beliefs “as an important set of proximal determinants of human motivation” (1989, p. 1175). Bandura (1982) writes that

perceived self-efficacy is concerned with judgments of how well one can execute courses of action required to deal with prospective situations” explaining that “self-efficacy judgments, whether accurate or faulty, influence choice of activities ...[and] determine how much effort people will expend and how long they will persist in the face of obstacles or aversive experiences. (pp. 122–3)

Linnenbrink and Pintrich (2003) point out that people’s judgement of their self-efficacy can vary based on differences in the task and environment. Our central goal in designing CHHRP was to draw on the relative ubiquity of, and the self-awareness present in, Hip Hop to address the emotional as well as critical components of successful postsecondary writing. We aimed to create a particular environment where students themselves are content experts so as to encourage higher self-efficacy and engagement.

## Methods

Students’ rich diversities in our first-year writing classrooms at Historically Black Colleges and Universities (HBCUs) are not new, nor is instructors’ recognition of these diversities, yet much of the work HBCU instructors do in the writing classroom goes unpublished largely because faculty commonly teach 4–4 course loads (and sometimes more), minimizing our time to participate in time-consuming research projects. Consequently, there is a need for more empirical research in composition and rhetoric studies conducted at HBCUs that investigates pedagogy and teaching methodology. Green (2016b) puts it this way: “HBCU compositionists might consider their classrooms as laboratories for the development of student rhetors, spaces where students are asked to experiment with language in ways that allow for deep social and cultural analysis that builds on the strengths of their personal traditions and the traditions of the institutions in which they work” (p. 164).

In 2015, our research team was accepted to participate in the summer’s Dartmouth Research Institute. While there, we learned numerous methods for conducting empirical research in composition such as designing surveys, conducting interviews, and forming focus groups, and we were able to identify specific research methods that provided a means for us to measure in particular what we

sought to learn from this study. Our team's interest in language ideology, critical Hip Hop pedagogies, anti-racist pedagogies, and student retention spearheaded our interest in pursuing this empirical research project. In the following fall semester, we piloted the course and subsequently used verbal data analysis to answer the following research question: Does our pilot freshman composition CHRRP course decrease the relative frequency of inhibiting emotions students expressed in pre- versus post-reflective essays?

## Participants

Study participants were students (ranging from first-year to junior-year classifications) enrolled in English 1301 (our university's first-semester course in our two-semester first year writing sequence) during the fall 2015 semester. Six sections of English 1301 using the CHHRP curriculum were offered, serving a total of 66 students. We collected data from a total of 40 students who were enrolled in the CHHRP sections.

## Data

Data consisted of 40 pre- and post-term reflections. These questions were designed to get students thinking about their past experiences and emotions regarding writing (pre-course reflection) and their current notions and emotions regarding writing (post-course reflection). By examining the role of emotion across the two reflections, we aimed to understand whether the CHHRP curriculum had opened students' minds to less negative conceptions of writing and of themselves as writers.

The pre-course reflection asked students to reflect on their writing experiences prior to attending college, specifically considering:

- Their experiences with classroom writing
- Their experiences with writing outside of the classroom, such as creative writing
- Their experiences with language, either positive or negative, inside and outside of the classroom
- Their feelings about writing for school
- Previous topics they've written about that were interesting to them

The post-course reflection, assigned at the end of the term, asked students to reflect on the following items in relation to their English 1301 course:

- What they learned that will benefit them in the future
- What they wish they had learned

- What they did well (or did not do well)
- How they will use what they learned the following semester
- What they will do differently in the future
- The assignment that was most beneficial to their learning
- The assignment they liked the least
- The impact (good or bad) that this particular course had on them as a student

It is important to note that for both the pre- and post-semester reflections, students were instructed to not simply respond to the items in the bulleted list; rather, they were encouraged to use these bulleted lists as possible topics to consider when writing their reflections.

## Analysis

In spring 2016, a verbal data analysis of students' pre- and post-semester reflections was conducted using Cheryl Geisler's (2004) verbal data analysis technique. We coded the essays for patterns of distribution and frequency of writing-related inhibiting emotions before and after participating in this course. Verbal data analysis of written text is a method that enables researchers to go beyond reading or listening to language to establishing a code that analyzes what the language is doing.

We were interested in the phenomena of engagement and self-efficacy. In other words, our research team wanted to hear from students, themselves, about their writing experiences before participating in their English 1301 CHHRP course and then compare their personal ideas about those experiences to their noted experiences following their participation in the course. We chose engagement from among the seven habits mentioned in the *Framework for Success in Postsecondary Writing* (2011) because we agreed (from personal observation and conversations with students) that lack of engagement seemed to be a widespread factor that hindered students' classroom participation and success. Additionally, although we believed that all seven habits have both co-existing and causal relationships, we agreed that if students are engaged, then an opportunity arises for the inclusion of other habits as well. Following, I will show how using a verbal data analysis enabled us to closely code for and delineate students' perceptions about their writing experiences based on their own analysis and evaluation of them.

To measure engagement and self-efficacy, we identified two initial dimensions for our coding scheme: temporal references and inhibiting emotions (see Figure 12.1). For temporal references, we coded for *when* the expressed inhibiting emotion about writing occurred: *past* (first day of class and before), *present* (during the semester, but after the first day of class), or *future* (after the semester).

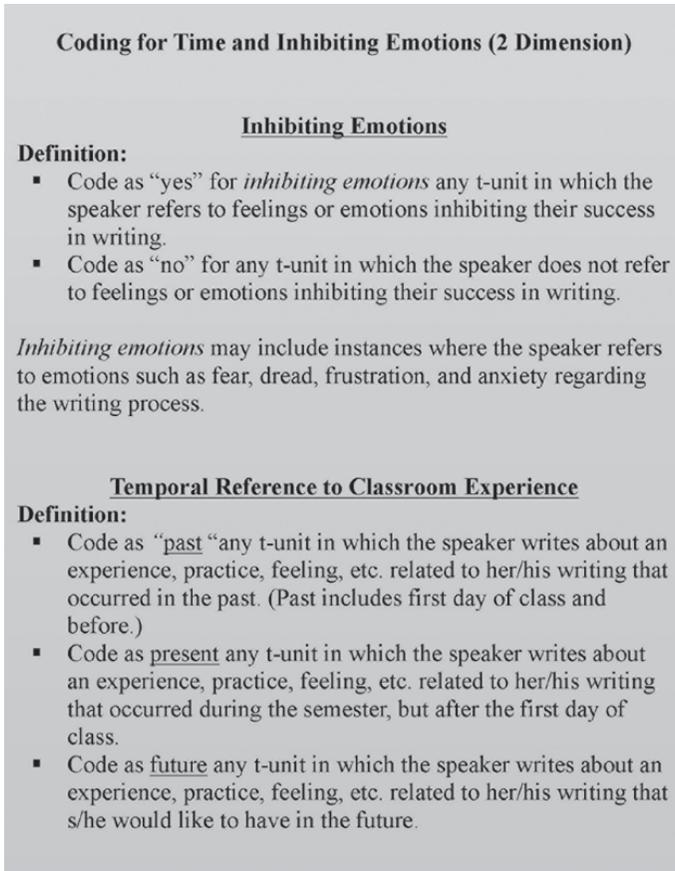


Figure 12.1. Coding dimensions time and inhibiting emotions.

For inhibiting emotions, we coded *yes* for any instance in which writers referred to feelings or emotions inhibiting their success in writing, *no* for any instance in which writers did not refer to feelings or emotions inhibiting their success in writing, and *n/a* if neither of the above scenarios applied. Our research team considered inhibiting emotions to be any emotion that negatively affected students’ interest in or ability to write.

Determining the segment of analysis appropriate to study these phenomena was an equally significant analytic decision. In *Analyzing Streams of Language: Twelve Steps to the Systematic Coding of Text, Talk, and Other Verbal Data*, Geisler (2004) explains that the first step to conduct a verbal data analysis is to “segment the data into some unit of analysis” (p. 29) in order to detect “the level at which the phenomena of interest occurs” (p. 29). While designing our study, we

considered segmenting by clauses, but found that because we had to break apart dependent and independent clauses, sometimes coders' interpretations of meaning varied more so than when coding by t-units (sentences); therefore, to avoid the risk of altering students' meaning by breaking apart their sentences, we chose instead to segment by t-unit. A t-unit is "the smallest group of words that can make a move in language [and] consists of a principle clause and any subordinate clauses or non-clausal structures attached to or embedded in it" (Geisler, 2004, p. 31). Because we were interested in the phenomena of students' perceptions about their own writing, we chose to segment by t-unit to achieve precise interpretation of students' reflections and to gain a comprehensive perspective of students' expressed experiences.

To ensure coding reliability, our research team tested our intercoder agreement. Together, the other two researchers on this project and I created the "inhibiting emotions" and "time" coding scheme (see Figure 12.1). We then separately coded the same t-units to determine agreement. From this first test, we discussed how and why we arrived at our findings, and repeated this process several times until we achieved an agreement rate of 80%. As we coded, we noticed various themes emerge about the types of emotions students were experiencing with writing, such as difficulty, resentment, and confidence. Consequently, we found a need to add two new dimensions, "category" and "conflict," to the coding scheme (see Figure 12.2).

Geisler (2004) explains that when revising a coding scheme, researchers should do so in order to "come up with a set of coding categories that best reveal the distinctions you consider important in tracking the phenomenon of interest" (p. 61) and to "help you to better understand the phenomenon of interest" (p. 61). The additions we made to our coding scheme accomplished both goals. After deciding more specifically which terms belonged under each category and measuring our intercoder agreement for these new coding dimensions, our research team finished coding the data and calculated the relative frequency of t-units that expressed inhibiting emotions.

We first calculated the *number* of t-units that included inhibiting emotions, did not include inhibiting emotions, and that were not applicable. From here, we were able to capture a relative frequency—the "proportion of coded segments [that] were assigned to a given category" (Geisler, 2004, p. 102)—of inhibiting emotions included in t-units from pre- and post-semester reflections. The category and conflict dimensions added more detailed information about students' reasons for expressing inhibiting emotions in each t-unit.

For example, in the excerpt from a student's pre-semester reflection below (see Table 12.1), there are two t-units listed. For each of these t-units, we identified whether the student expressed an inhibiting emotion to their interest in or ability

<b>Dimensions Added to the Revised Coding Scheme</b>	
<u>Category</u>	<ul style="list-style-type: none"> <li>▪ <i>Difficulty</i> – refers to student having difficulty with writing, teacher, school, course curriculum, etc.</li> <li>▪ <i>Hatred</i> – student expresses extreme dislike, or uses the word “hate” to describe writing, school, teacher, etc.</li> <li>▪ <i>Resentment</i> – student expresses resentment to writing, school, teacher, etc. Not as intense as hatred and not necessarily explicit</li> <li>▪ <i>Dread</i> – Student expresses a deep sense of anxiety, probably uses the word “dread”</li> <li>▪ <i>Motivation</i> – refers to student’s lack of motivation in completing writing assignments or in school generally</li> <li>▪ <i>Regret</i> – Refers to a student’s regret for not having tried harder, or not having better behavior, etc.</li> <li>▪ <i>Confidence</i> – refers to a student expressing they see themselves as a “bad writer,” explicitly or implicitly</li> <li>▪ <i>Anxiety</i> – student expresses a sense of anxiety when writing or attending school</li> <li>▪ <i>Focus</i> – student expresses difficulty in focusing on writing assignments or in class</li> <li>▪ <i>Fear</i> – student expresses a sense of fear when writing or asked to do work in class – different from anxiety only in the word the student uses</li> <li>▪ <i>Avoidance</i> – student describes avoiding writing assignments or classes with heavy writing loads</li> <li>▪ <i>Confusion</i> – student describes having been/being confused by writing prompts, writing, teachers, course work, etc.</li> <li>▪ <i>Frustration</i> – Student expresses a sense of frustration when writing, in class, with teachers, etc.</li> </ul>
<u>Conflict</u>	<p>—source of the inhibiting emotion</p> <ul style="list-style-type: none"> <li>▪ <i>Writing</i> – source of emotion is writing, including prompts, writing process, etc.</li> <li>▪ <i>Personal</i>– source of emotion is the student’s personal life</li> <li>▪ <i>Grade</i> – source of emotion student has received, or will receive on writing assignments</li> <li>▪ <i>Teacher</i> – source of emotion is teacher</li> <li>▪ <i>School</i> – general difficulty with school, as in with classes, or how the school was run generally</li> <li>▪ <i>Organization</i> – student describes organization in writing to be the source of the emotion</li> <li>▪ <i>Mechanics</i> – student describes sentence level work as source of emotion</li> <li>▪ <i>Social media</i> – student discusses writing in social media as either a negative or positive</li> <li>▪ <i>Personal writing</i> – student discusses emotion relevant to writing for oneself, including poetry, journaling, creative writing outside of a class, etc.</li> <li>▪ <i>Creativity</i> – student discusses creativity positively or negatively in light of writing</li> <li>▪ <i>Course Content</i> – refers to curriculum and topics for paper – any comments pertaining to the topics of the course/paper.</li> <li>▪ <i>Testing</i> – student refers to testing as source of emotion</li> <li>▪ <i>Grammar</i> – student refers to grammar as source of emotion</li> </ul>

Figure 12.2. Coding dimensions category and conflict.

to write, and whether this was a past, present, or future emotion. Then, using our added category and conflict dimensions, we looked deeper into the source of the inhibiting emotions. The combination of the collected data not only gave us an idea about students’ perceptions about their writing, but it also enabled us to pinpoint why students expressed these emotions.

Table 12.1. Excerpt from Sample Student Pre-Semester Reflection

Unit of Analysis—T-unit	Inhibiting Emotions	Time	Category	Conflict
Me personally my writing skills are not that strong.	Yes	Present	Confidence	n/a
My worst part of my writing game are putting together sentences and repetitive information.	Yes	Past	Confidence/ Difficulty	Writing

## Results

Our results show that the relative frequency of students' expressed inhibiting emotions about their writing decreased from those listed in their pre-semester reflections to those listed in their post-semester reflections.

We found that among 577 coded t-units in students' pre-reflection essays, 30 percent included inhibiting emotions regarding students' experiences with and attitudes about their writing (see Table 12.2). In contrast, the relative frequency of inhibiting emotions expressed in students' post-reflection essays was 15 percent (see Table 12.2)—a decrease from 30 percent to 15 percent. A second interesting finding to note relates to the source of the hindering emotions expressed by students. In their pre-reflections, these emotions were largely contributed to low confidence or interest in composing practices communicated with words and phrases such as “hatred” and “not interested.” However, we found that in post reflections, inhibiting emotions conveyed by students shifted from an expression of low confidence or interest to an admittance of poor study skills or procrastination. This shift shows students' greater awareness of not just their feelings about writing that have inhibited their desire or ability to write, but their acknowledgement of habits which have inhibited their writing.

## Discussion

Our research team considers HBCUs a cornerstone in the higher education of students who bring rich language diversities to our first-year writing classrooms. We also value and recognize the significance of bringing to the foreground these voices in our first-year writing program, agreeing with Inoue (2016) “that investigating language can promote explicitly an antiracist agenda” (p. xv). First-year

Table 12.2. Relative Frequency of Inhibiting Emotions

Pre-Reflections Frequency (Y or N)		
Inhibiting Emotion?	Yes or No?	Relative Frequency
Yes	172	30 percent
No	288	50 percent
n/a	117	20 percent
<b>Total</b>	<b>577</b>	

Post-Reflections Frequency (Y or N)		
Inhibiting Emotion?	Yes or No?	Relative Frequency
Yes	147	15 percent
No	715	74 percent
n/a	111	11 percent
<b>Total</b>	<b>973</b>	

writing at HBCUs is an especially significant curricular space. As Green (2016a) notes, “Much can be learned by examining the different ideological positions and cultural values students bring with them to HBCU writing classes and making spaces for these positions and values within or alongside the institutional assessment practices used to measure them” (pp.156–7). As such, we plan to continue work that seeks to reduce students’ inhibiting emotions about writing and that combats adverse language ideologies that exist toward the language varieties in our HBCU first-year writing courses. We will also use the results of our analysis to continue revising our CHHRP course and finding meaningful ways to improve student engagement and confidence in our first-year writing program. Verbal data analysis is an important method that can help us—and others with similar goals—investigate the impact of curricular interventions like CHHRP.

## Conclusion

One of the great benefits of verbal data analysis is the amount of data gathered from students themselves about their feelings concerning their own writing. As this chapter demonstrates, a close analysis of student reflections gave way to the emergence of new coding categories and deeper understanding of the phenomenon at hand. Yet verbal data analysis should not exist in a vacuum. In our case, the

research team used the emergent categories from the study shared here to shape more specific questions for a subsequent student focus group, which was held in December 2016. In the summer of 2017, we then completed a group assessment of students' rhetorical analyses completed in CHHRP classes—classes designed with students at HBCUs in mind. In all, investigating such curricular interventions is an iterative, ongoing process best informed by mixed-method approaches working in tandem. Verbal data analysis is an excellent early step because it offers a meaningful way to closely engage with student writing that can shape subsequent steps in the process.

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Themes of context and culture in teaching and learning writing continue here, as Ellen Cushman takes up the question of context as it applies to translation: specifically, reclaiming the traditionally colonial (other-owned) process of translation as a way for communities to govern and define themselves and to present alternatives to and within the ongoing effects of colonization. Cushman begins by explaining that translation has historically been a colonial process founded on the assumption of profound difference between the dominant and colonized cultures. This process locates the center of knowledge-making on and in the terms of the Western knower as it creates social and epistemic differences by marking cultural “otherness” as an object of study and fascination. She then offers decolonial translation as a method, in bi- or multi-lingual contexts, to reclaim meaning and to re-value indigenous ways of knowing at the linguistic level. Using examples from a Cherokee Lifeways poster and the work of Benny Smith, she frames an alternative set of tenets for organizing meaning, and in parallel, for organizing society—based on forging connections across differences and “working together to raise ourselves.” She posits that Writing Studies practitioners might benefit from reflecting on these methods.

In his response, Eric Leake employs metaphors of *dwelling* and *storytelling* as a means to enter Cushman’s work from an outside perspective (non-Cherokee)

and to, as he puts it, “follow Cushman’s invitation to understanding other ways of living.”

This pairing sets the stage for Sinfree Makoni’s exploration of language economies in culturally-specific contexts.

The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows B, B’, C’, and Q. Readers are encouraged to seek other connections.

# Decolonial Translation as Methodology for Learning to Unlearn

ELLEN CUSHMAN

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A poster of “Cherokee Lifeways” has hung on my office door for many years now. It was created during Chad Smith’s administration as Chief of the Cherokee Nation from 1999–2011. The Sequoyan that informs this poster was offered by Chief Smith’s relative, Benny Smith, the brother of a prominent medicine man and former Associate Dean of Students at Haskell Indian Nations University. The poster itself begins with the Cherokee word “*ᏍᏍᏍ* /gadugi/ people coming together and working.” Twenty Cherokee phrases follow *ᏍᏍᏍ* /gadugi/, which also happened to be the motto of the Smith administration. Each phrase is written first in Sequoyan, the writing system developed by Sequoyah and accepted by the Cherokee tribal council in 1821, then the phrase is transliterated and roughly translated into English. Taken together, these 21 phrases offer a glimpse into another way of understanding knowledge-making and social organization: through collective action.

Distributed during the Smith administration to employees and visitors to the Cherokee Nation campus in Tahlequah, OK, the poster asks Cherokee readers to see themselves as acting in ways that help to further the collective action of the tribe. It also asks readers to reconsider the structuring logics that are part of a collective which is based, not on individualism, but on shared humanity, connection with, and responsibility for each other. These phrases in Cherokee help readers to recognize, consider, and begin to realize alternative ways of being in the world.

To understand how the Cherokee Lifeways poster does this, though, requires readers to engage in *decolonial translation*. Decolonial translation is a methodology which seeks to make knowledge in and on local and indigenous people's terms, first and foremost. It does this by decentering the alphabetic lens and the privileging of Western knowledge made with and through the letter. Decolonial translation as a method provides an option to translation practices that have sought to erase differences in peoples' language and knowledges. The goal is to effect liberation from Western methodologies of translation that trace to an imperial past.

Translation itself is an everyday act in which writing researchers, teachers, and scholars and administrators engage. Each time we explain the process by which we've come to a finding in research, each time we explain a concept to a student, each time we identify a rhetorical theory underpinning our work, each time we explain a tenure and promotion or hiring process to a colleague, we are translating—trying to bridge an abstraction to a concrete scheme, an operating practice, or set of understandings we believe our audiences may have. Translation is so woven into the fabric of our workaday life, we fail to notice how often it happens across discursive registers and disciplinary lexicons while still working within the English language. For those whose first language is not English and those trying to recover languages erased by the monolingual mandates of many nations and the global economy, the code in which translation happens is always present as a tool to be mastered or whose mastery over us is to be unlearned. But to believe that translation is a neutral process, one that works only at the instrumental level of encoding and decoding, is to ignore the very real workings of power and our own contributions to circulations of power and in everyday acts of reading, writing, speaking and listening.

Decolonial thinking in writing and rhetoric engages in what Mignolo (2007, 2009, 2011) has called *epistemic delinking* from the understanding of writing through an alphabetic lens that makes transparent the Western epistemologies undergirding enunciations of knowledge. "Geo-politics of knowledge goes hand in hand with geo-politics of knowing. Who and when, why and where is knowledge generated (rather than produced, like cars or cell phones)? Asking these questions means to shift the attention from the enunciated to the enunciation" (p. 160). Challenges to this geo-location of writing research and Western conceptualizations of writing well have unfolded in recent years in three lines of writing research. The first concerns an ongoing effort in rhetoric and writing to understand ways in which rhetoric can be pluralized through analysis of rhetorical traditions across the Americas (Baca, 2008; Baca and Villanueva, 2009; Medina, 2017; Ruiz & Baca, 2017; Ruiz & Sanchez, 2016). The second line of research concerns the internationalization of writing research at the biannual Writing Research Across

Borders Conferences first hosted at the University of California, Santa Barbara, in 2008 and featured in Bazerman et al. (2012). Donahue (2009) argues that the internationalization of composition and rhetoric tends to focus on research from a geo-locus of enunciation from the United States outward thereby rendering writing research from other countries less valuable. Her research seeks to more fully understand language learning in disciplines in cross-national contexts, in an effort to understand English and its teaching more carefully and alongside many languages.

The third line of writing research with decolonial possibilities has taken up the limited and limiting ways in which English remains the coin of the intellectual realm of writing and rhetoric studies (Horner, Lu, et al., 2010). These scholars warn against replicating the implicit English-only mandate (Horner & Trimbur, 2002) in the field of writing and rhetoric. In recent challenges to the monolingual assumption, Horner, NeCamp and Donahue (2011) have asked writing researchers to consider multilingual sites and research traditions. They ask scholars to conceptualize what writing well is in various languages, to better research this through diverse methods that help to localize and generalize at once, and to create more capacious disciplines through translanguaging efforts.

For some years now, Lu and Horner (2013) have written at the nexus of these three lines of research, especially by focusing on translation. In “Living English Work,” Lu speaks of translation as a key entry point for students to begin to interrogate the global spread of U.S. English-only presumptions through the use of translation analyses. Such an approach, she argues, begins with the understanding that the translation of meaning works across and within language boundaries that have created ‘the other’ through a process of differencing necessary to maintain the social, epistemic and institutional hierarchies that discipline students and scholars alike. Rather than seeing “difference *as* the norm” (Lu & Horner, p. 587), a position that may also inadvertently flatten differences (Gilyard, 2016), my work begins by refusing to normalize the act of differencing in the first place.

In this chapter, I’ll extend the intersectional work across these three lines of research by delving into the decolonial potentials of translation as a way to epistemically delink from the alphabetic lens. In the area of translation studies, this work has been underway for some time (see Gentzler, 2008; Hannoum, 2003; Niranjana, 1992; Price, 2017; Rafael, 2015). The chapter demonstrates how members of the Cherokee Nation—first, Sequoyah, then, Benny Smith, then, myself as a citizen scholar—engage in decolonizing methods of translation. By analyzing the grammatical structures and semantics of the poster, I’ll demonstrate how Benny Smith uses translation in the pursuit of Cherokee (Cherokee-centered) perseverance and social strengthening. I’ll also demonstrate how members of the

field of rhetoric and composition might benefit from reflecting on the methods that Smith employs. Let me begin with considering the ways in which translation has roots in imperial legacies, and propose decolonial translation as a methodology and method.

## Translation and Empire

Translation as an imperial process has a long legacy of facilitating imperial and settler agendas throughout the world. As Niranjana has argued: “Translation [...] produces strategies of containment. By employing certain modes of representing the other—which it thereby also brings into being—translation reinforces hegemonic versions of the colonized” (p. 3). Representing the other is necessary work to control subjects, to contain them within a chosen category of identity, discipline, or social position (Vázquez, 2011). Translation by White outsiders to control Cherokee took place in several historical moments; however, I choose to overview only two for the sake of brevity and to serve as an illustration of my point that target language directionality matters little to the instrumental value of translation in imperialist agendas. Employing certain modes of representing the other in Christianity and disciplines, missionaries and academics have represented their civilizing missions and enunciations of superior knowledge through translation. Such was the translation work of the Bible into Cherokee, for example, first by John Pickering who created an orthography to represent all American Indian languages in order to translate the Bible to them, and by Worcester, whose first goal when entering Indian Territory was to learn Cherokee in order to preach in Cherokee. Both efforts were supported by the American Board of Foreign Commissioners in the early and mid 1800’s. And such was the translation work of anthropologists to preserve the language, manuscripts, and artifacts of indigenous others in order to create an imperial tradition from necessary Othered traditions.

James Mooney’s rationale for his late-nineteenth-century anthropological study of the Cherokee was clearly in this vein. The greater the difference from White man’s ways, the greater the anthropological interest in translating their primitive knowledges to White outsiders, to make clear the boundaries of tradition against Cherokee traditions. He set his sights on the remote Carolina hills where the “*ancient things have been preserved*,” (Mooney, 1900/1995, p. 12) rather than studying the Western Cherokee who he deemed to be more assimilated and therefore, presumably, less practiced in their traditions. In other words, it’s easier to gather evidence of cultural and linguistic difference with the Eastern Cherokee. Here Mooney places the geo-locus of enunciation of traditional knowledge in East

Carolina in order to make more starkly visible the differences of the Cherokees who were not removed to the West. He does so to make more exotic the other he wishes to study by illustrating their myths, stories and legends as more or less traditional, or primitive and non-civilized. The complete world views and ways of non-White peoples are scrutinized, found insufficient, and erased to show their traditions to be primitive, with the effect of demonstrating the clear boundary and superiority of White man's ways.

I chose these instances to illustrate a subtler point about language itself as medium of translation. It matters little if the target language for translation was English or Cherokee. The target audience, purpose, and desired outcome are what matter most to the translation effort. Either direction the translation went (the Bible into Cherokee or Cherokee stories into disciplinary knowledge) translation served to produce containment of Cherokee subjects: On the one hand, the containment of Cherokee ceremonial knowledge into the Christian theology; on the other hand, the containment of Cherokee stories into Myths and Legends (not knowledge, but quaint traditions and representations of the primitive oral culture). Regardless of the direction the translation went, in other words, it served to enunciate Western theologies and knowledge couched in narratives of conversion and representation of 'primitive' people. The imperial legacy of translation cannot be escaped. How then to understand this poster of Cherokee lifeways in and on its own terms? And more broadly, how to help students in our classrooms and colleagues in writing and rhetoric engage in translanguaging activities without recreating the imperial legacies of translation?

## Decolonial Translation Methodology

Translation into and on indigenous people's languages (or any language Othered by those who wield imperial languages and displace others) is inescapable and is today more necessary than ever. But it's translation with a different direction, purpose, exigency, and result. It's translation for all peoples and with peoples in an effort to offer decolonial alternatives to the social, epistemic, linguistic, and institutional hierarchies of modern life.

Decolonial translation is an epistemic method, a methodology, that seeks to reveal the gaps in knowing that were created by the colonial difference as it presents alternatives to these conversions of understanding into and on Western terms. Decolonial translation reveals the boundaries created by the imperial difference in an effort to include again the knowledges which have been lost or erased—to restore suppressed epistemologies.

With these goals in mind, the enterprise of decolonial translation becomes one quite apart from that undertaken by anthropologists and linguists who set their sights on the expansion of disciplinary knowledge in academe. To decolonize translation is to question discipline-building altogether, to make connections across differences, to appreciate knowledges and languages as equally valuable while respecting and understanding the social injustices and hierarchical arrangements creating those differences, and to find alternative ways of structuring being and knowing in this world. Decolonial translation works from a fundamental hope that through this work, we can imagine ways of being and being together on this earth without mining, pioneering, exploiting, taking, pillaging, differencing, but with localizing, exercising wonder, connection and healing, praising and working together, and understanding how deeply and fundamentally interconnected all beings and life are. In practice, decolonial translation begins by recuperating the instrumental logics of the original language.

## Decolonial Translation: A Telescopic and Iterative Method

Developed by Sequoyah and accepted by the tribal council in 1821, this eighty-five-character writing system has remained in use to the present. The instrumental, historical, and cultural legacy of this writing system has been central to the development of a literary canon of millions of pages of writings in print and manuscript form (Bender, 2002; Cushman, 2016; Parins, 2013) and has facilitated language perseverance efforts (Nelson, 2014; Montgomery-Anderson, 2015). The character-by-character transliteration follows with a rough translation into English coming last. This translation practice privileges the Cherokee writing system first, then the sound of the words next, with meanings that might make sense to the English speaker last. A standard practice in many Cherokee Nation communications since the passing of the 2003 language preservation policy, this method of translation encourages the use of Cherokee language in public and business settings. We see this pattern in the Cherokee Lifeways poster, which opens with the phrase “*SSV / gadugi/* People coming together and working.” In this phrase, and throughout the poster, the Cherokee writing system is featured first, followed by the alphabetic transliteration, then a free translation of what it means.

The translation process for complex, less-frequently used words in Cherokee begins by identifying the action in the morphemes, which are often located near the center of the verb phrase. Readers then circle to the left of the action to visualize the prefixes listed there. Information about who, what, in what ways, at what

distance, etc., is found in the prefixes. Readers' circular motion then continues to widen to consider the affixes, such as aspects of time, repetition, and completion, which become apparent from within the last morphemes of the word. The circle widens again to consider the words surrounding the verb form. I'm describing here a translation process common among translators who have taken advanced Cherokee classes offered by native speakers, by speakers who may not recognize a word, and for readers of manuscripts that have non-standardized spellings, which often require native speakers to sound out the words to hear what action may have been intended (see also Bender, 2002).

With such an initial decoding of the Lifeways poster in hand, I cross-referenced the verb stems against additional documents provided to me by Benny Smith and found on the the Cherokee-English Dictionary Online Database (at <https://www.cherokeedictionary.net/>) resource that has compiled all major and well-accepted dictionaries of Cherokee from Eastern and Western dialects. This triangulation of language resources lends additional semantic possibility to the translations provided on the poster and helps to correct for non-standardized spellings or dialectical differences that may emerge in the phrasings presented in the poster. These translations provide a decolonial option by working from the Cherokee syllabary first, transliterations, to close translations, then to glosses in English. The focus attempts to provide constellations of ideas clustered around longstanding ways of being.

Let me return again to “**SSY** /gadugi/ people coming together and working,” to illustrate. This phrase was a central theme of Chief Smith's oath of office taken in 2003 at the inauguration of Cherokee Nation officials (*Chief Stresses*, 2016). It featured prominently in a number of state-of-the-nation addresses and materials during the Smith administration. It's also the underlying form of **oᎠSSY** that with the prefix **oᎠ** /s/ added becomes the activity concept of words such as community, district, state, territory, and federation. In other words, in this Cherokee Lifeways vision of administration, all governing structures stem from and have at their heart the principle of people coming together and working. **oᎠSSY** offers decolonial possibilities for peoples to organize in ways that could potentially enact decolonial knowledge-making and organization of thought based on structures of concentric circles of interconnected meanings, rather than linear and hierarchical structures of thought. The initial decoding happens as a word is read, followed by a picturing of the location and the practices unfolding there, which accrue over time to form a structuring convention or operating procedure, linking then to place and knowing.

An initial analysis of the 20 phrases that follow **SSY** in the Cherokee Lifeways poster reveals they sustain three ideas: perseverance, treatment of others, and the power of words. The idea of “**SSY** /gadugi/ people coming together and working” is illustrated by the Cherokee phrases written in the imperative structure which

follow. These imperatives designate some of the ways in which Cherokees build and maintain relationships through treatment of each other in deeds and words. These imperatives to Cherokee people are not to be seen as totalitarian mandates nor are they to be seen as authenticity indicators. They are rather an enunciation of knowledge about the types of longstanding practices and understandings—Cherokee life ways—that have contributed to the ongoing perseverance of the Cherokee people.

## Perseverance

A longstanding conceptual framework, perseverance imbues much of the thinking in this Cherokee Lifeways poster specifically, and more generally speaking, in the ways in which Cherokees, along with many indigenous peoples, continue to survive.

Three of these phrases include the imperative to live, as in **ᏒᏚᏚᏚ** /itseh-esdi/ live. **ᏒᏚ** /itse/ is found in words such as **ᏒᏚᏚᏚᏚ** /itseiyusdi/ green, **ᏒᏚᏚ** /itse/ fresh, new (for inanimate objects). Here, **ᏒᏚ** /itse/ has a final suffix included. In Cherokee, the imperative is formed with the incompletive stem and the progressive future suffix **ᏚᏚ** /esdi/ (Montgomery-Anderson, 2015, p. 99; Pulte & Feeling, 1975, p. 291). Interestingly, **ᏒᏚ** /itse/ is not a verb, but an adjective that has been modified to make **ᏒᏚᏚᏚ** /itshesdi/ live into an adverb for the remainder of the phrase, as well as suggesting a metaphorical imperative to make fresh, newly green, or spring-like the verb of living. Further evidence of the adverbial function of this word that's been translated into the imperative is the fact that in the Cherokee phrases the word “and” is not included.

This understanding of perseverance rests upon the connective work of organizing as skilled teams help each other to never give up. In the face of adversity, the strength to carry on comes from supporting each other and working as a team. In this view the individual is relational, not autonomous. The call for all individuals to live and be very skilled in all areas of life suggests the need to develop oneself to the fullest to be able to contribute back to the people one hopes to help. And, as if the authors of the poster were anticipating the question, “how can one contribute to these support networks,” the ideas of perseverance are further illustrated with phrases related to the treatment of others and the power of words.



component of the building of society in which people are humanized on an everyday basis through their collective actions of taking responsibility for each other's bodies and believing in each other. The notion of the autonomous individual and family unit as isolated and insulated from other family units runs contrary to the Cherokee lifeways of treating each other with care, dignity, respect, and value as the basis of government, thought, economy, culture, ontology and knowledge. These imperatives are not just a tall order, but are an aspiration. When realized these would do two things, 1) build ongoing support for shared goals into the everyday actions we take with everyone and 2) build into relationships a mutuality that ensures all people are valued, respected, and humanized. Alongside the conceptualization of everyday acts of relationship-maintenance as central to government, we also find a conceptualization of the power of words in this document.

## The Power of Words

These Cherokee lifeways intersperse word and deed throughout, suggesting as well the powerful force of words in the creation and maintenance of mutually sustaining relationships. The ways in which we speak to and with each other have as much impact as deeds. The close relationships between words and deeds has been and continues to be something that Western modernity tends to underestimate or take for granted, but that remains central to this decolonial perspective.

These are some of the most complex phrases in Cherokee I've come across in a written document. Morphemically rich, the analysis for each one will take much more time and due diligence, but for now, I'll point out ways of better understanding two of the rough translations provided. The first phrase "be friendly in your commands to one another" here is a rough translation of a verb form ᄆᄆᄆᄆ / (d)anwis that also can be found in Cherokee words such as, "ᄆᄆᄆᄆ / didanwisgi/ medicine man" and "ᄆᄆᄆᄆ / kanvwia/ he's curing or doctoring him," as well as the noun, "ᄆᄆᄆᄆᄆᄆ / ganwisdisgi/prompt." The verb form in this suggests of the types of constructive promptings or recommendations for well-being rather than order or mandate one might think of when they hear the word "command." Such an understanding is echoed again in "ᄆᄆᄆᄆ ᄆᄆ ᄆᄆᄆᄆᄆᄆᄆ / duyogodv ditla detsadasehesdi/ direct one another in the right way." A closer translation of this might be:

ᄆᄆᄆᄆ / duyogodv/ honest directions

ᄆᄆ / ditla/ toward

ᄆᄆᄆᄆᄆᄆᄆ / detsadasehesdi/ you and two or more others direct, guide, and indicate to each other.

The power of words is illustrated in the ways in which we can speak to each other, where visiting with love, strengthening with encouragement, and remembering each other in prayer and healing figure prominently in the illustration of *SSY gadugi*—working together in deed and word builds the mutually sustaining relationships that strengthen the Cherokee people. Said another way, words themselves are conceptualized as deeds, rather than objects for ownership, authorship, decontextualized analysis, etc. Words are actions that build and maintain relationships. These words and deeds are presented in the imperative form precisely because they are imperative to the perseverance of the Cherokee people’s social organization to solve problems, address challenges, and strive together toward shared goals and desires. The imperative is to continue in these lifeways while recognizing that these ways have been practiced since time immemorial. Within these imperatives, a blueprint for knowledge-making and social organization emerges that offers a glimpse of what a decolonial rhetoric might look like.

## Decolonial Rhetorics and Sequoyan

These imperative statements in the Cherokee Lifeways poster are not to be read as indicative of any kind of authentic Cherokee life-world—there has never been such a thing. They are instead an illustration of one concept that helps to define authority in the Nation—that *authority* arises from everyday actions of people coming together and working, which accrue over time, to form local, community, territory and national governance of our people. The Cherokee Lifeways poster presents a set of structuring tenets for collectively organizing everyday acts of working together, thus providing meaningful connection to each other across differences. In other words, they illustrate one way that Cherokees have historically maintained sovereignty over ourselves by enacting *gadugi* in the Keetoowah way, as my language teacher explained—this is how we have worked together to raise ourselves.

The methodology and method of decolonial translation presented here has been an exercise in border thinking—a process that reveals both the creation of difference, and the means by which those dwelling in the borders might begin to engage in the “rewriting of geographic frontiers, imperial/colonial subjectivities, and territorial epistemologies” (Tlostanova and Mignolo, 2012, p. 72–3). Decolonial translation projects like this offer the possibility of revealing the colonial differencing that has happened, while also creating connection across these differences to create pluriversal, rather than universal, possibilities.

With these goals in mind, the enterprise of decolonial translation enters into discipline-building by making connections across differences, seeing knowledges and languages as equally valuable, respecting and understanding the social injustices and hierarchical arrangements creating those differences, and finding alternative ways of structuring being and knowing in this world. Decolonial translation works from a fundamental hope that through this work, we are an inclusive democracy of many peoples with ceremonies, languages, histories, and lands (Chavis et al., 2003; Holm, 2016; Washburn & Stratton, 2008), can imagine ways of being and being together on this earth. Through our everyday acts of translation, we can encourage pluriversal knowledges, concepts and discourses that help all peoples persevere. And we can help to sustain the important recuperative and restorative rhetorical analyses of all peoples.

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# Entering Decolonial Translation through Dwelling and Storytelling: In Response to Ellen Cushman

ERIC LEAKE

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As I worked through Ellen Cushman's preceding chapter, "Decolonial Translation as a Methodology for Learning to Unlearn," I recalled when Ellen identified her two intended audiences for decolonial translation of Cherokee as those who, like her, are also Cherokee language learners, as well as those who seek to understand an alternative way of organizing the epistemic and social world of daily life. I am in that second audience, and I expect many of you are, too. Like me, you may be wondering about the implications of this methodology of decolonial translation and how you might follow Cushman's invitation to understanding other ways of living. In this response I try to suggest some ways in. These are, admittedly, metaphorical, but I find them useful.

The first is to try dwell in the place and the language that Cushman has opened for us.

Dwelling connects to a place, because you have to dwell somewhere. It is not rushed; it is more of a long-term or open-ended stay than a stopover. We can dwell in places, in art, and in languages as ways of seeing the world from other perspectives. In the idea of dwelling I am reminded of Krista Ratcliffe's (1999) concept of rhetorical listening. She does not use the word "dwell," but Ratcliffe writes of understanding: "we might best invert the term and define *understanding* as *standing under*—consciously standing under discourses that surround us and others, while consciously acknowledging all of our particular and fluid standpoints"

(p. 205). I read Cushman as inviting us to stand under other discourses and ways of knowing and living. We can reach those places to stand via other languages and processes of decolonial translation, and in doing so we recognize that there are other places and other people already standing there to welcome us. Maybe we do that by actually dwelling in other places and other discursive environments, if we are fortunate enough to have those opportunities and to choose to do so. Perhaps we also might do so by clearing spaces nearer us so that other languages, those pushed to and past the borders, can visit us in our research and our classes and the sites where we dwell. In our research that might mean looking past the readily available terms, looking to other sites and ways of understanding, considering other research traditions and methodologies, exchanging, and making those connections across languages and epistemologies. That mirrors the work of this collection and the originating conference in attempting to step into other research methodologies that may feel unusual and uncomfortable. I am interested in how decolonial translation might complement other research methodologies and how other methodologies might productively push and inform decolonial translation.

A second way in might be in sharing stories, just as Ellen shared with the Dartmouth conference community her story of learning Cherokee. More significantly, in her chapter, she shares the story the language itself tells in “SSY /gadugi/ People coming together and working” (this volume, p. XX). Telling stories can work against colonial epistemologies—those which would erase other ways of knowing or own them so that they might be displaced—because stories have their own logic. The key then is not only the content of the story but how it is told, its structures and relationships. Telling stories requires trust. There is risk in telling somebody else your story because you lose control of a story once it is told. It might be reinterpreted or misused. A story told is no longer your own. Research is also a story, and we can recall research that once shared was used in ways the researcher would not have intended, in ways that might disappoint and distress or surprise and delight.

Languages can work like stories, each word having a history and telling relationships, helping people understand their worlds and their places in them. Like stories, languages move beyond the original speaker to gain significance and can be reinterpreted and used in different ways. To have sole ownership of a language, to be the only speaker and in complete control, would be lonely. Elsewhere Cushman has quoted Madina Tlostanova and Walter Mignolo, who write, “languages are not something human beings *have* but what human beings *are*” (cited in Cushman, 2016, p. 234). I understand stories to function similarly, not only as something we have but as constitutive of us. I understand stories and languages through the lens

of empathy, which helps capture the complexity of the work stories do. Of the give and take of telling and listening, Amy Shuman (2005) writes,

Empathy is always open to challenges, but at the same time, stories must travel beyond their owners to do some kinds of cultural work. Counternarrative depends on the possibility of critique of the master narrative, and thus, to some extent, on empathy with the counternarrative. (p. 19)

Cushman (this volume) proposes decolonial translation as a process of counternarrative, one that invites empathy as a means of critique of the master narrative. Cushman's counternarrative works not through displacement so much as replacement in advancing "pluriversal knowledges" (p. XX). Shuman (2005) also describes a failure of empathy, the failure of the story to travel beyond the personal. She writes, "We can begin to understand how storytelling is used in negotiations of power by asking what makes one story tellable and another story not tellable in particular historical and social contexts" (p. 19). This framework aids in my understanding of decolonial translation.

Languages, and all the stories and epistemologies and ways of living that come with them, must travel beyond their owners if they are to do some kinds of cultural work, such as that toward greater social justice and humanization. What makes one language speakable or writable and one not, in any particular historical and social context, says a lot about how language is leveraged in negotiations of power. Decolonial translation makes these operations visible. Another failure of empathy, or more accurately a misuse, is that of the conman, who in empathizing with you, in understanding you, is able to deceive you. Cushman alerts us to this history in translations of Cherokee as well.

A third way into decolonial translation is to think about how it might operate in our writing classrooms. There has been a lot of good work done on translanguaging and writing pedagogy, including in this collection and at the related conference, and so I will not restate it all here. Instead I want to relate pedagogy to dwelling and storytelling. Cushman's work pushes me to think of ways that we might rely upon our classroom environments as places for experiences. These experiences could use those classroom spaces and draw upon the language resources of our students in offering opportunities for dwelling and storytelling in another language or as another way of living, if only for a little while. Juan Guerra (2016) has suggested having students write about their own translanguaging practices and, more importantly, bringing students into our discussions of translanguaging, epistemologies, and language use and power matrices. I also appreciate ideas of trying to create spaces and opportunities for student experiences and other language dwellings. Perhaps we could create situations of role reversals or modifications, where

students have to work in a language that is not their own. (Here I am indebted to Sinfree Makoni, who has pushed my pedagogical thinking to focus on experiences with languages.) Perhaps we could make languages novel again to our students in some ways, such as through enactments of translation scenarios, and in doing so decouple them from the usual ways of reading, writing, knowing, and doing. The trick would be not to set students up as tourists but as participants in experiences that might carry over into how they relate not only to languages but also to one another and the different positions in which languages place us.

Finally, we can respond to Cushman's invitation by expanding that second audience of those who seek to understand another way of organizing the epistemic and social worlds of daily life. Cushman's proposal is marked by a sense of generosity and hospitality, trademarks of the cosmopolitan ethic she evokes. Here is the idea that we all are entitled to a home on this earth. Her emphasis is on commonalities, rather than differences, as ways of working toward a more inclusive world-making. This is not to flatten differences or treat them as equal, as Keith Gilyard (2016) has warned, but to acknowledge that differences are not all that we have. In Cushman's words, "Decolonial translation works from a fundamental hope that through this work, we can imagine ways of being and being together on this earth" in relationships of interconnection and healing rather than exploitation (this volume, p. XX). That ethic speaks to the motivation of her project and helps distinguish a methodology that invites others to dwell in places and share stories told in unfamiliar ways.

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Echoing and developing themes of context, power, self-determination, and the tension between top-down and diffuse authority that have emerged in preceding chapters, Sinfree Makoni traces connections between the literal language economies of the open-air markets of Zimbabwe, and the economics of language planning and power structures. He draws parallels between *integrationism* (integrational linguistics) and the economic lens of *System D* (sometimes summed up as ‘making do’). For Makoni, both approaches, linguistic and economic, focus on creative, innovative participants and reject top-down, rule-based structures. Through observations and interviews, Makoni makes a case for using applied integrationism to study the ever-shifting African linguistic terrain and individuals’ paths within it.

Responding, Tallinn Phillips offers a background for the uninitiated to better understand System D, addresses the ways in which the integrationism discussed by Makoni can be destabilizing to writing scholars, and connects Makoni’s piece to tensions faced by writing instructors between the “standard” and student identity. In her response, Pearl Pang highlights the refreshing and possibly corrective perspective in Makoni’s determination to take language study directly to the arena in which it is being used—to study language exchange as it is lived, and as a participant, rather than at an artificial remove. This set brings up the roles of researcher

and subject that Brian James Stone addresses in a completely different cultural context in Chapter Fifteen.

The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows B, I, C, J, and P. Readers are encouraged to seek other connections.

# Framing Economies of Language Using System D and Spontaneous Orders

SINFREE B. MAKONI

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## Introduction

Research into language policy and planning in Africa from an integrationistic perspective which examines the implications of integrationism on writing is limited. There is a tension between integrationism's philosophical understanding of language and the notion of language undergirding language planning. In language-planning, language must be reified and framed as a fixed plan that can be detached from context, users, and content—a decontextualization based on an idealized version of writing, which is in direct conflict with an integrationist approach to language. In this chapter I explore the implications for the teaching of writing if language is framed using integrationism, complemented by two analytical metaphors from economics, 'spontaneous orders' and System D.

## Background: Integrationism and System D in the Context of Language Use

A substantial body of literature approaches language policies mainly from educational, legal, and political—and more recently economic—perspectives. Discussion of language planning in education usually revolves around the language to be used

and when it can be introduced as a medium of instruction. Legal perspectives about language planning seek to address the status of a language (i.e., whether it is an official, indigenous, or minority language). Closely aligned to issues of legal status are controversies about which languages can be accorded language rights (Edwards, 2012; Garcia & Wei, 2014; Spolsky, 2012; Stroud, 2001). While academic research dealing with language planning from educational, legal, and political perspectives is growing rapidly, a very small corpus of research into language policies deals with the economics of language from an integrationist perspective. Integrationism rejects the conventional view of language as a psychological concern that takes written language (typically in the form of transcriptions) as a basis for analysis. Integrationism is a theory of communication that emphasizes the importance of context, and rejects rule-based models (Pablé & Hutton, 2015). At a general level, this chapter contributes to the development of integrationism, particularly its relationship with economics, and explores its implications for writing. Harris (2011, 2012) developed theoretical relationships between integrationism and areas of research such as writing and history of linguistic thought, but he rarely substantially discussed the role of economics. Integrationism offers writing specialists an important analytical template prioritizing contextual knowledge, while simultaneously rejecting rule-based approaches to language and communication and thus discouraging writing professionals from searching for mechanical rules to underpin how writing is constructed.

“Language economics” is widely considered to refer to the “obvious fact, admitted by everyone, that there exist, for example, a political language, an economic language, a judicial language and so on; that there exist particular systematic ways of using certain linguistic techniques and of adapting them to special ends” (Rossi-Landi, 1983, p. 67). Language economics thus functions on at least two levels: the financial costs of any given language policy; and the way language itself can function as both commodity and currency. In this chapter, I examine language economics in two ways: by considering the intellectual feasibility of analyzing language economics from an integrationist perspective; and by exploring the compatibility of economic metaphors (i.e., spontaneous orders and System D) with integrationism. I examine whether spontaneous orders and System D can be utilized as analytical metaphors for language policy and planning, and the implications of such frameworks for teaching of writing.

Conventionally, there are three dimensions to language policy and planning. Corpus planning deals primarily with norm selection, language codification, and spelling reform. Status planning addresses the official position of a language in a nation-state, for example whether it is an indigenous language, an official language, a first, second, or foreign language. Acquisition planning refers to the language(s)

one must learn in order to succeed in a nation-state or province. Typically, acquisition planning refers to either the languages used for instruction or those taught as subjects (Bright, 1992; Spolsky, 2012). Teaching of writing may be construed as a type of language policy and planning insofar as it aims at facilitating and codifying norms, including writing acquisition. By teaching writing, teachers are not only codifying language but enhancing its status as language.

Assessing the financial costs of language policy is useful because the process provides opportunities to determine approximate costs incurred when language policies are introduced, maintained, or abandoned. Expenses arise for teacher and administrator salaries, and for production of teaching materials. Another dimension relevant to economics of language is the financial benefit to individuals of learning another language (e.g., learning English for Spanish immigrants in the United States or English in collapsing African economies). Although estimating costs of implementing and maintaining specific language policies may help determine the financial feasibility of specific policies, arriving at these estimates is difficult because some factors relevant to language policies (e.g., ethnic affiliation, community aspirations, hopes, desires, and identities) are difficult to measure. However, in some contexts the projected cost of implementing language policies is not necessarily an important determining factor in language policy selection. This is particularly so in situations where language policies are driven by ideology and beliefs about languages' potential, real, or imagined roles in the formation of, or in response to, colonialism and globalization.

First, in language economics, policy language must be framed in segregationist terms for the financial costs of adopting specific language policies to be calculated. Second, research into language economics is founded on an idea of language as a fixed plan culled from incessant sociolinguistic variability. In this paradigm, differences between individual language users are irrelevant, as evident in use of terms such as *mother tongue* and *multilingualism*, which speak more to group identities than individual differences. Paradoxically, although such terms are misleading, an integrationist discussion of language must use them. That is, presuming or speaking of differences between first and second orders is necessary to the discussion of language economics in relation to language policy, even though second-order analytical frameworks do not capture actual language practices (Orman & Pablé, 2015). From an integrationist perspective, calculating and estimating costs of specific language policies—language economics—is founded on an assumption of the validity of segregationism and telementation, a philosophical perspective incompatible with integrationists' views about language (Pablé & Hutton, 2015).

In language-planning economics, financial costs of language policies are determined by experts who do not necessarily devote adequate attention to how

laypeople are affected by language policies; this practice may unintentionally reinforce and consolidate social inequality. In colonial and postcolonial settings, integrationism provides opportunities to challenge elitism. Harris (2011) seeks to counteract elitism by promulgating the notion of *lay speaker*—a central idea of his theory of integrationism. From an integrationist perspective, everyone is a specialist in the language they use (Harris, 1997, as cited in Hutton, 2011, p. 504).

Although particularly useful when addressing economics of language in postcolonial Africa, the notion of lay speaker also has problems. I prefer to speak of local conceptions about language rather than lay speakers, because the notion of lay speakers seems ahistorical, asocial, and politically neutral—perspectives incompatible with and difficult to maintain in integrationist postcolonial scholarship, particularly when addressing economics. The term “lay speaker” also echoes controversial mainstream notions of a “native speaker,” which feel disembodied from practice. From an integrationist perspective on language planning, language implementation and usage are more a type of “linguistic work” than an activity because:

Until recently, material production and linguistic production, in the form of manual work and intellectual work, were conceived to be separate though related homologically at profound genetic and structural levels. The novelty is that in the world of global communication linguistic production and material production have come together and become one. With the advent of the computer, in which hardware and software come together in a single unit, the connection between work and material artifacts, on the one hand, and work and linguistic artifacts, on the other hand, has been evidenced unequivocally [...]” (Petrilli, 2010, p. 105).

Even if I underestimate the limitations of constructs such as laypeople and segregationist views of language, an important assumption underlying any analysis of economics of language is that the two modes (economics and language) are separate fields and different objects of study. In an integrationist perspective, economics and language are treated as the same. Paradoxically, if they are the same (Rossi-Landi, 1983, p. 65) it is difficult to conduct research projects into economics of language and its impact on language planning. Additionally, in segregationist economics of language, further binaries such as spoken/written and verbal/non-verbal are retained. In an integrationist perspective on language economics these distinctions disappear, making an integrationist analysis of language economics separate from an integrationist analysis of language itself a conceptual infeasibility.

The idea that language is distinct from context looks philosophically easy because of an inherent logocentrism in language economics conflating language with writing (Pablé, 2020) and inadvertently construing language as an idealized version of writing (Pablé & Hutton, 2015, p. 36). A more productive approach opts for the term *communication* over language, wherein, for the costs of introducing

or maintaining specific language policies to be feasible, communication must be understood as a conduit, with meanings and messages encoded at one end and decoded at the other. The conduit metaphor is reinforced through terms such as “medium of instruction.” One way of understanding the impact of integrationist perspectives on language economics in colonial and postcolonial contexts involves not viewing communication as a commodity (including communication involved in language policy messages). In this view, language use is not essentially a consumption of communication, where production is production of communication (Ponzio, 1993; Rossi-Landi, 1983). From an integrationist perspective, language use must be conceptualized as human work.

Grin analyzes the value of English in economic terms to assess the benefits and costs of selecting particular language policies, as reflected in phenomena such as salaries related to English proficiency, in both “regulated” and unregulated spaces, and formal and informal economic contexts (1996). The value of English in African contexts is gradually declining because of increased use of urban vernaculars and the limited usefulness of English in formal contexts.

Local perceptions of language, central to a critique of the idea of lay speakers, are complicated because notions about language are neither homogeneous nor stable, but vary according to cultural background, academic history of language users, level of education, and political orientation, as well as the purpose for which language is used. For instance, in some colonial and postcolonial contexts, indigenous songs carry local cultural meanings not readily comprehensible to non-members of those communities. Extending this, notions about language proficiency in indigenous postcolonial languages include the ability to talk and sing; conversely, in Western lay experiences, singing ability is rarely considered a language ability. In some contexts, understanding of language includes beliefs that indigenous languages are under threat and, therefore, must be protected and rescued. That contemporary youth are unable to speak a given language well is a common refrain that reflects local ideologies (Bauman & Briggs, 2003).

In the context of Africa, when dealing with local conceptions about language, we must be cognizant of the significance of language in cultural practices. African life begins with naming traditions and prayers, and continues through greetings and songs, libations and lullabies, clan praise names and insults, funeral orations and spirit possessions, gossip and formal oratory, individual speech and epics of empires. The scope of artful speech is never-ending. One must also consider speech about speech (metafolklore), surrogate languages, gestures, and, in the absence of speech, culturally constructed silence (Yankah, 1995).

Another powerful idea reflecting the significance of culturally grounded understandings of folklore is apparent in the language performance of an *okyeame*,

who mediates between local chiefs and the audience in some Ghanaian contexts. The *okyeame* can be defined strictly as the chief's linguist (Yankah, 1995). In Ghana, stammering by a chief or his *okyeame* is a defining feature of the language. Local people may therefore experience stammering in *okyeames'* speech differently than implied by Western metalanguage. People who stammer in Western societies are viewed as having a speech impediment and may be stigmatized. Conversely, stammering is, in some African societies, a highly respected register and an indispensable aspect of royal speech. If ideas about local conceptions of language are seriously considered, it will be difficult to argue for the validity of universal metalanguage, since the cultural significance of the status of people like *okyeames* is peculiar to a specific African context.

An integrationist view of language economics construes a market *not* as a concrete place, but as a contextually improvised meeting of minds. Economic behavior is intentional, but no one has a bird's-eye view of physical and social markets. Markets cannot be planned nor their development paths predicted, as would be implied by rational (material) economics. In an integrationist orientation to language economics, prices are negotiable (von Hayek, 1988). Applying an integrationist perspective to language economics, it is plausible that prices are a product of communication behavior open to negotiation by two or more partners who are *part* of a communication event and not outside it. Conversely, in a segregationist view of language economics, prices, like language, are independent of most contexts, speakers, or communication practices. In such a scheme, prices may be fixed in advance and not open to negotiation:

Communication, in other words, is not a closed process of automatic "transmission" of given signs or messages from one person's mind to another's but of setting up conditions which allow all parties involved the free construction of possible interpretations, depending on context (Harris, 2020).

On the one hand, an interactive view of communicative practices is an intellectually valid way of framing language in which the economic impact of language cannot be easily measured and is therefore hard to determine. On the other hand, the economic impact of language when it is construed as a commodity is easier to measure—but framing language as a fixed-value commodity is not intellectually valid. It is the interactive (integrationist) view of language that is closer to the everyday existence of Africans in economic markets, for example in Makola, one of the biggest informal markets in Ghana and indeed Africa. Even with the emergence of major department stores, most Africans purchase their goods in open markets. The economic costs of policies are closely tied to modes and outcomes of interactional exchanges between seller and prospective buyer, as exemplified by

“market mammies,” Makola women who sell in the market. Their experience of language is tied to markets as sites of human exchange and interactional engagement, in which selling is critical.

To market women I have observed in open-air markets in Africa, the sale is everything. Their eyes dart back and forth, scouring the crush of higgledy-piggledy stalls and people willing to spend a little cash. The women compete vociferously for attention. Once they attract some interest, they persuade with gilded flattery and drive a hard bargain. The major issue in open-air markets such as Makola is how to coax prospective buyers using fixed interactional exchanges and theatricals, as described in this anecdote in which a Makola woman is coaxing a woman to buy cloth from her: “Nice colors for you, Madame,” she coos, draping a piece of purple and blue cloth over the shopper’s shoulder and standing back. “Make yourself happy, Madame. Buy, buy.”

This interaction is not only linguistic, it is integrated with non-linguistic features such as gestures and theatrics. Language use and commodities mutually reinforce each other. Language use in such contexts cannot be viewed outside the physical context of the market. This means language use and communication are not only embedded in context, but inescapably tied to the nature of the activities and tasks the individual is conducting when using language. These exchanges are targeted at evoking the buyer’s emotions to increase the likelihood of purchase. The market has a powerful human and social dimension.

The term “spontaneous orders,” also referred to ponderously as “spontaneous extended human order” or “self-generating structure” (von Hayek, 1988, p. 7), was coined by the Austrian economist Fredrick August von Hayek. He was best known for his defense of classical liberalism, growth economy, information economics, and spontaneous orders, and for his critique of government institutions, which he argued were a form of “fatal conceit.” If order emerges spontaneously, rather than by design, and language is a form of “spontaneous order,” then languages cannot be planned, making the enterprise of language planning infeasible. “Spontaneous orders” are incompatible with language policies because language-planning activities (e.g., acquisition planning, corpus planning) depend, to a large degree, on assumptions of the plannability or design of languages, which, adapting von Hayek’s (1988) term, may be framed as a fatal conceit.

I divide spontaneous orders into two types: strong and weak. In a strong form, organization is a consequence of interaction between different actors, and its path (or paths) is not determined by anyone. The emerging order is a product of a series of closely related actions and activities, not a fixed plan. In a weak version, some form of intervention shapes the final nature of the emerging order. Thus,

spontaneous orders do not completely rule out the role of intervention, if the form is weak:

My central aim has made it necessary to stress the spontaneous evolution of rules of conduct that assist the formation of self-organizing structures. This emphasis on the spontaneous nature of the extended macro-order could mislead if it conveyed the impression that in the macro-order, deliberate organization is never important (von Hayek, 1988, p. 37).

If the weak form of spontaneous orders accepts the plausibility and agency of intervention, then a weak form of language planning is possible. Language use and evolution are to some degree susceptible to intervention (such as usage guidelines and dictionaries, themselves continually evolving because they are not completely susceptible to planning). Language policies often relate to government budgets—what languages official documents and signage are printed in; what languages instruction funding supports—which is a secondary order (if usage is primary) and more susceptible to intervention.

Spontaneous orders are unlike organizations: They are scale-free, meaning their size is unpredictable. Spontaneous orders are not knowable in their totality because of the limits of individual knowledge. Networks, ecosystems, and peer-to-peer collaboration are examples of spontaneous orders. Organizations can be part of spontaneous social orders, but spontaneous orders are not part of organizations. Spontaneous orders are neither created nor controllable by anyone. In economic terms, they are consequences of human actions rather than human design. Informal markets are an excellent example.

Even though von Hayek is referring to economics when he argues that spontaneous orders are not designed and that no one can know each system in its totality, the argument resonates with integrationism. In integrationism, language is not knowable in its totality, primarily because everyone has their own language, and their knowledge may be radically different from that of other individuals.

Because spontaneous orders are not scalable, language analysis cannot be founded on segregationist assumptions of linguistic hierarchy such as “from phonetics to phonemes”—in which discourse analysis, syntax, word order, morphology, and pragmatics comprise the highest level. Such a philosophical position is only compatible with the economic idea of scalability and a segregationist view of language. Both the concept of spontaneous orders and an integrationist view of language dispense with such hierarchies. According to von Hayek, the invisible hand is more powerful than the unhidden hand. Things happen in self-organizing systems without direction, control, or plans. Spontaneous orders are a product of the workings of the invisible, resulting from the interplay of different actions and

actors. This has implications for language economics and language planning. “The interplay between different actors” is a precise description of bottom-up, continually negotiated, sociolinguistic processes.

Having satisfied myself of the compatibility of spontaneous orders and integrationism, I turn to analysis of another important issue particularly relevant in African economics: System D, a slang phrase with roots in Francophone Africa and the Caribbean. The French word *débrouillards* describes effective, self-motivated, resourceful, ingenious, and creative people. System D takes as its basic premise the idea that *débrouillards* describes all human beings, acknowledging that everyone is an expert in their own existence. It is a framework from which to challenge the notion of expertise (not necessarily to do away with expert status, but to impose circumspection on its usage, and certainly to do away with reductionist notions of “laypeople”). To analyze the compatibility of System D and integrationism, I situate the analysis within the context of an informal economy, because informal (indigenous, unplanned) economies are more analogous to language environments than formal (planned, rule-based) economies.

## **System D and *Débrouillards*: A Social Network–Based Language Study**

Informal economies are more viable than formal ones, and are to a large degree, the only rational choice because there is no substantial alternative economy (Vigouroux, 2013). Informal economies are so vast that if they were a single country, they would be what Robert Neuwirth (2011) refers to as the United Street Sellers Republic (USSR). The USSR is vast and constantly developing, such that it is expected to supersede the United States in size in this century. Informal economies interact with and affect formal economies at a dispersed, micro level, with an aggregate effect that might easily be underestimated. Similarly, in a linguistic context, most people function and move relatively easily across different social organizations, taking their language and language usage with them. Even when individuals temper their speaking behavior to fit the context of the moment, overlap is inevitable. The sociolinguistic imprint of such migration is evident in language practices, including bits and pieces of languages and discourses from many domains (e.g., rural and urban, local and regional, computer-mediated and cellphone-mediated discourses). To move across and within multiple contexts, meeting others from different countries and diverse socioeconomic and language backgrounds, requires the astuteness to use and create necessary resources. Further, if we accept the premise that adverse, “fend for yourself,” or predatory contexts provide an opportunity

to observe a high degree of such resourcefulness (Vigouroux, 2013, p. 299), we can seek them out in looking for linguistic *débrouilles* in which there are no distinctions between subject/object, verbal/non-verbal, culture/nature (Pennycook & Makoni, 2020).

## From Layperson to Local Expertise

Having established that in many if not most respects, System D can be fruitfully applied to language economics, I would advocate that a System-D lens, at least in regard to language, would be an even better fit if the concept of “layperson” were refined to one of *local expertise*. A layperson is uneducated or at least uninitiated into the full complexity of any given subject. An integrationist perspective would say that language expertise is held by the practitioners of that language, and that the presumed “experts” are in fact merely recording and codifying a continually evolving stream of meaning and usage. In the bus ranks in Zimbabwe, for instance, I repeatedly heard words referring to attractive girls and cars, some of them apparently originating from English and others from local vernaculars, with acquired meanings different from those in their original language. In order to understand the meanings, I was helped by temporarily being a member of local social networks. Here are some slang terms, followed by their literal meanings, with vernacular meanings in parentheses:

- *Masalads*: [Literal meaning unknown to author] (children from rich families)
- *Ndipei sand dzangu*: Give me my hammers (recognize my expertise)
- *Kumbanya*: To run (to date illicitly; to make informed decisions)
- *Makeke*: Anything tasting delicious (good-looking girls)
- *Chidhinha*: Brick (an old cellphone)
- *Reza*: Razor (promiscuous old man).

Additional associations whose slang terms I did not catch include:

- A piece of metal (beautiful girl)
- A bag/a pole (a good-looking car)
- To sprinkle (to tell)

The meanings of these words and expressions have not yet been found in printed dictionaries of the local language. Clearly, the experts in evolving language

are not in the academic halls of Zimbabwe, nor anywhere except where the language is being traded.

## Applied Integrationism and Conclusions

Applying an integrationist perspective to diversity in contexts and ecologies within urban centers, if language is based on practice, language users must learn anew how to use their languages in each context. Prior experience in language use in comparable contexts enhances the ease and speed with which language learning takes place. The applied integrationist perspective is potentially relevant to writing. Prior experience in language use enhances the ease and speed of learning to write in future. Pedagogically and practically, this means that if a student learns to write in one context, this enhances the speed and ease with which they can write in future contexts, even when confronted with new writing tasks in a different language.

In this chapter I have illustrated how writing may be conceptualized through the lenses of spontaneous orders and System D and expanded using integrationism as an analytical apparatus. The central feature here is communication, which “escapes capture in any systems-based model” (Hutton, in press). Contrary to orthodox views of language, spontaneous orders and System D can accommodate creative language practices more easily than orthodox writing pedagogy, which places a premium on normative and regulated social and language behavior. The prescriptive tendency in writing can be contained by using the notion of local expertise, which is not as normative as that of mother-tongue speakers.

Each individual travels a unique sociolinguistic, communication journey. Since no two individuals have identical social trajectories, travel provides each with social, cultural, and economic capital and is an important social index of adventures to be analyzed over time. Integrationism may be an even more useful lens on language economics if it builds into its system a way of adopting the historical perspective of each layperson, because “adventure is a particular form of migratory experience filled with risk-taking and quest for a new valorized identity through acts of bravery and intense experience” (Vigouroux, 2013, p. 306). In terms of writing, everyone has unique experiences, which “are the terra firma on which any reflections about language must be built” (Harris, 1981, p.204, as quoted in Hutton, in press).

Based on my own observations and interviews, as well as the literature, I believe African language economies are an appropriate sphere for applied integrationism, a discipline exploring the relevance of concepts from integrationism in diverse areas of social experience. It is true that some aspects of integrationism may have to be reframed in this context (e.g., the importance of shifting from layperson

to local expertise, and the need to examine distinctions between first and second orders case by case rather than categorically), yet by nature, applied integrationism is a revisionist subdiscipline that continually evaluates and reframes the notions that integrationism itself takes for granted. I find it an extremely useful lens on language economics in Africa, and I hope the revisions I have suggested may prove useful in other contexts.

## Summary

When analyzing language in Africa through the lens of integrationism, it is necessary to shift from the idea of *layperson* to *local expertise*. From this basis, I analyze the implications of analyzing writing through integrationism complemented by two analytical economic metaphors: “spontaneous orders” and System D. System D and integrationism are compatible because, in both cases, individuals are construed as able to solve problems to sustain a living in an economy of predation—this has implications for how the teaching of writing can be conceptualized. Both stress the importance of drawing attention to how individuals are able to draw upon their individual resources to create meaning, and highlight the importance of adopting a holistic orientation to communicative practices which blurs the binaries that underpin Western dualistic thinking, such as differences between speech and writing, verbal and non-verbal, subject-object, the past-present and future, mind-mindless. These insights, which come from an analysis of language practices in informal contexts in Africa and other postcolonial contexts, are potentially relevant to writing in formal situations.

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# Language as “System D:” Implications for Teachers & Researchers

TALINN PHILLIPS

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The 2016 conference, “College Writing”: from the 1966 Dartmouth Seminar to Tomorrow (Dartmouth ‘16 Conference) brought together scholars of Writing Studies, broadly defined. That breadth was its greatest strength, but also a challenge for many who participated; we were often nudged outside the boundaries of our typical discourse communities and knowledge bases. The discourses of integrationism and critical linguistics that Sinfree Makoni employs in this volume were unfamiliar enough that one evening several of us popped popcorn and set out to watch a TED talk on “System D” so that we could more fully understand his argument. The speaker, Robert Neuwirth, uses the term “System D” to describe informal economies. In System D, buying and selling may occur in the midst of a traffic jam, on an improvised boat, at mobile street kiosks, or on a blanket on the sidewalk. Storefronts, branding, and an office staff are all deemed unnecessary. Buyers and sellers interact very directly and perhaps even in unofficial places, such as buying phone credit while waiting in traffic during a morning commute.

While I initially understood System D as a synonym for the black market, I later realized that this definition was inadequate. Neuwirth notes that he coined the term based on a French colonial word, *débrouillardise*, or self-reliance; thus, to equate System D with the black market does it a great disservice. A System D economy isn’t necessarily hidden or illegal, it’s simply informal and impermanent. Its participants are using the resources they have in innovative, entrepreneurial

ways to leverage for more resources irrespective of any government economic planning. Neuwirth offers the example of Andrew, who “spent 16 years scavenging materials on the dump, earned enough money to turn himself into a contract scaler, which meant he carried a scale and went around and weighed all the materials that people had scavenged from the dump. Now he’s a scrap dealer. [H]e earns twice the Nigerian minimum wage” (TED, 2012). While those of us in developed countries might be tempted to belittle or avoid it, System D is, in fact, an economic powerhouse. Neuwirth argues that the world’s informal economies as a whole are worth 10 trillion dollars a year and would form the second largest economy in the world. There is tremendous power in what, from the perspective of economic privilege, appears to be informal, un-glamorous chaos. Makoni’s use of System D as a metaphor for language is similarly rich.

Those of us who study languages and language use have long recognized that *language* is a fuzzy and highly politicized concept. My first linguistics class opened with a joke in which the professor asked us how to tell the difference between a language and a dialect. The answer was that a language has an army and a navy. Language is a constructed term, developed to create boundaries between people for political ends. Language boundaries have often been poorly defined and there has always been more variation within a language than its users want to admit. Yet Makoni and other linguistic integrationists are endeavoring to take our understanding of language-as-variable to an entirely new level: *There is no language. It’s a myth that colonialism invented.*

The work of integrationists like Makoni is thus thoroughly destabilizing for those who teach and research language, for what is it, then, that we are teaching or researching? Makoni (2014) argues that “when we are teaching and indeed researching language, we are advancing specific views about language and society” (p. 715). While I may agree with this argument, nevertheless, our students still show up each week to learn “English” (however we choose to define it) so that they can meet their personal and professional goals. In personal conversations with Makoni, he described linguistic integrationism as primarily a philosophical project that doesn’t make strong claims about approaches to pedagogy or research methodology. Yet I argue that any philosophical project that is a response to lived experiences of oppression and de-authorizing people of their languages ought to have some implications for how we teach and research. As a teacher of language and writing, I am implicated in perpetuating this oppression. Integrationism is thus asking me to take some responsibility for colonizing language practices and joins a widening conversation within Writing Studies about language difference and pluralizing U.S. notions of rhetoric. See, for example, the work of Canagarajah (2014); Horner & Tetreault (2017); Horner et al. (2010); and others on translingualism

or Donahue’s (2009) or Anson & Donahue’s (2015) arguments about writing instruction outside of the United States.

Makoni (2013) draws on Harris’ (2006) work, arguing that “integrationism is critical of (i) ‘orthodox linguistics’ [...], (ii) the autonomy of language, (iii) homogeneous communities, (iv) a sender-receiver model, and (vi) professional linguists’ exclusive monopoly of knowledge about language” (p. 88). It is the kind of decolonial work that Cushman describes (this volume), in that integrationism values the diverse knowledge of individual language users across multiple languages/varieties and focuses on the connections and overlaps among those users’ knowledge. Integrationism then erases language boundaries altogether and leaves us with something closer to a color wheel with one idiolect blending seamlessly into the next. We can pinpoint any one dot or language user on the wheel but are only able to categorize with a label like “orange-y.”

How, then, to reconcile integrationism’s counter-colonial project with the Common Core? Or the Test of English as a Foreign Language (TOEFL) exam? Or my department’s first-year writing requirements? System D offers one way of responding to these difficult questions because it shifts the focus of attention from the form (i.e., grammatically correct and rhetorically appropriate) to the communicative outcome. For example, my friends and I were in Tegucigalpa and wanted to buy some local chocolates. The salesperson didn’t speak English and we had questions about prices, flavors, etc. None of us spoke much Spanish, but it turned out I had more lexis and grammar than my traveling companions. The process was messy, un-glamorous chaos, but it did result in the successful acquisition of chocolate. For a few moments I felt proud of my completely appalling Spanish. This moment of pride makes sense within a System D approach to language use; the communicative goal was achieved, even though my language didn’t meet anyone’s conception of a “standard.” System D values what a language user can accomplish instead of judging that accomplishment against a standard of correctness. Moreover, as with economics, System D language users are responsible for a tremendous number of successful language interactions each day; many of us use language “imperfectly” and still achieve our goals.

Conceptualizing language use through a System D lens then encourages us to undo some of the flattening that we’ve enacted with monolingual, colonial perspectives of language correctness and language research. A System D orientation to research might mean valuing methods like the case study that highlight individuals and their resourcefulness even while we simultaneously value the new insights we can gain through “big data” quantitative projects. Or, it might focus on studying the language acquisition necessary to meet a communicative goal rather than how a language user acquires the standard form. A System D orientation might also

mean teaching teachers to do action research in their classes so that they can tailor instruction more closely to their unique students' needs. In our public spheres, we can work to value teacher knowledge in our institutions, our communities, and in our civil discourse. When we value the knowledge of exemplary teachers, we're also valuing the individuals in their classrooms and teachers' hard-won experience of how to teach those students most effectively.

System D challenges us to value all of the ways that individuals do make meaning and achieve their linguistic goals in the world. Then if, as writing teachers, we want our students to understand themselves as System D entrepreneurs, we might continue to assign projects like literacy narratives, journals, and other personal writing projects that help students develop their own voices and share their own stories. We might also take the time to teach student writers to use their personal experience effectively in service of the professional—to write from their personal experience with rhetorical purpose and with rhetorical effectiveness in the manner of Victor Villanueva or Gloria Anzaldúa, for instance. We might empower students by working together to identify System D compositions (like those from the aforementioned authors) that achieve their ends without being “correct” or to showcase compositions that achieve their goals precisely because they are “incorrect.”

We can also integrate translingual projects into our curricula and explicitly teach students how to use their idiolects rhetorically. Canagarajah (2014) describes translingualism as “conceiv[ing] of language relationships in [...] dynamic terms” in which “the semiotic resources in one’s repertoire interact more closely, become part of an integrated resource, and enhance each other. The languages mesh in transformative ways, generating new meanings and grammars” (p. 8). Canagarajah then advocates a translingual pedagogy of *codemeshing*, or bringing a writer’s different linguistic codes together within the same text rather than keeping them separate. He writes that writers who codemesh

are not using their own English varieties wholesale but [are] using [them] only in a qualified manner. In using [Standard Written English], they are able to signal to readers their proficiency in the elite genres and norms. However, in bringing [in] their own languages in measured ways for significant rhetorical and performative reasons, they are representing their identities and pluralizing the text. (p.113)

Codemeshing engages a System D orientation to language use by valuing writers’ unique language abilities; however, it also recognizes that sometimes The Standard must be followed in order for writers’ communicative goals to be achieved. In codemeshing, System D writers employ all of their available language resources strategically and rhetorically while still achieving traditional ends. Student writers

might then be encouraged to be System D entrepreneurs by writing for their own communities, employing their available codes to compose letters to the editor, website copy, posters, flyers, informational videos, or other public genres while making the case for their rhetorical choices. As teachers do this, we’ll increasingly find that our students are able to meet audiences’ needs in ways that, as members of different discourse communities, we cannot. When we teach writers to compose effective messages to their own communities, we highlight the value of all students’ linguistic repertoires instead of finding student writers deficient.

As teachers of language and writing, we are sometimes painfully aware of the conflict between the world we wish our students were living in and the world they are actually living in. We don’t want them to trade their home cultures and languages for The Standard or, worse yet, be ostracized for learning to use it. Yet we know that such things sometimes happen anyway and that our students will sometimes be harshly judged for using home languages. Our challenge is to dwell in that tension, helping students to grow in all of the ways that are important to *them*, even when those ways feel like they’re at odds. Our students deserve to retain mastery of their home languages and also be proficient in academic English. They deserve the opportunity to compose for a wide range of audiences, not just audiences that value The Standard exclusively. They deserve to learn dominant rhetorical conventions as well as how to disrupt those conventions with other rhetorics. They deserve for their rhetorical knowledge to be valued *as* they are taught to compose successfully in academic and professional genres. Makoni’s use of System D as a metaphor for language use thus challenges us to actively seek out the many languages and rhetorics that students bring to our classrooms and then also to find ways for students to use and develop their unique linguistic repertoires.

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# “Responding to Makoni”: An Integrationist Attempt

PEARL KIM PANG

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Although policy makers will continue to undertake language planning and segregationists will continue to analyze language as if it exists outside of context, integrationism and System D, in their applicability to language, demonstrate that the most meaningful studies of language are likely to be those situated in context, which view language as highly individual and interactional (Makoni, 2016).

We read with natural sympathy towards integrationism; not only is segregationism a deeply loaded word but is described as “language [having] to be reified and framed as a fixed plan that can be detached from context, users, and content—a decontextualization based on an idealized version of writing, which is in direct conflict with an integrationist approach to language.” (Makoni, this volume, p. XX) It’s natural to assume we don’t compartmentalize, reify, frame and fix because these moves are currently considered negative in Writing Studies. With the discipline-wide embrace of a translingual approach to language learning, segregationism seems redolent of monolingualism: it’s outmoded. So we approach integrationism as if it’s a *concept* we can grapple with in the same vein, using our habitual modes of academic engagement such as naming, categorizing, comparing/contrasting. We fail to admit that such moves are reifying, framing and fixing. In order to name, we pull out one variable amongst the complex variables involved in an actual moment of language exchange, pretending that the variable can meaningfully exist outside of time.

Categorizing imposes an academic frame, one that doesn't necessarily exist in the real encounter. Inherent in comparing/contrasting is decontextualization, razing individual differences and complexities of the language encounter to privilege arbitrary comparison. Hence these assumptions and habits get in the way of fully understanding observations such as "language use has to be conceptualized as human work" (Makoni, 2016) from an integrationist perspective. We approach the ground of integrationism with whatever lens we happen to wear, not recognizing the baggage it carries, pulling from it bits that make sense on our terms. This then is how the segregationism that Makoni points to works: there is no movement or interaction, just sifting and sorting, ignoring context. Segregationists put distance between themselves and the context as a matter of due course. They inhabit a conceptual sphere unrecognizable from the ground of context.

Makoni's insight is so simple and obvious that it might even be difficult to accept. Language is a concept, a construct. All the ways academia talks about language use are at a remove (at times, vastly removed) from how it's actually used in real life, in context, by individuals in interaction. An integrationist approach dwells in the moment of interaction, privileges it, delights in it, trying to collapse the gap between the conceptual and the actual. In the Makola market, and in the bus ranks of Zimbabwe, Makoni is more concerned with how language is lived; segregationists are concerned with how language works, forgetting that in studying it, they have made language a specimen in a lab, sometimes even conflating the taxidermied version with the real thing.

In arguing that analysis belongs in the rich, fertile ground of how language is *lived*, Makoni is aware that the academic translation is often awkward. But at least the attempt is more honest, privileging language as lived rather than language in the conceptual, abstracted from the dynamic uses of how people actually use it—in real time, in context, and individually. His courage shows the limitedness of the analyses on the page, which can never fully capture the lived moment of language; this is Makoni's gift to us.

In an attempt to practice integrationism, I give you the essence of my speech as given at the conference, "College Writing": From the 1966 Dartmouth Seminar to Tomorrow. My speech tries to give the situated context, the highly individual interactions of our exchanges in the genre all of us are most familiar with, a narrative. If context is dismissed as such, much will be missed. Undergirding the speech is a philosophical stance allied with integrationism, that the concept cannot be divorced from the individual. Indeed, interaction with the individual or conversation with the Other is the human work that allows us to imagine the possibility of concept.

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Like Ellen Cushman's and Makoni Sinfrey's, Brian James Stone's approach to Writing Studies is firmly rooted in an ethical commitment to self-determination and diffuse authority. In this chapter, Stone discusses the need for developing international, ethnographic Writing Studies research methods that position researchers and subjects as "global citizens immersed within the delicate, discursive web of cultural contexts." From this perspective, he presents the methodology, methods, data analysis, and results of an ethnographic, interview-based, comparative case-study of student and faculty perceptions of writing about art within a postcolonial, British academic framework at a studio arts university in southern Pakistan. His findings challenge an assumption of many Writing Studies scholars and teachers: that multilingual writing is a straightforward, comparative process. Stone highlights the experience of translingual individuals, for whom academic writing in British English involved not only translation, but also finding entry points that would allow them to bring their experiences into an English-language academic conversation. Further, the interactive nature of his study altered the questions and perspectives from which it began, uncovering elements of academic writing experience otherwise hidden.

By implication, Stone's findings raise questions about methodology that echo those explored by other authors, notably Sara Webb-Sunderhaus in Chapter Nine. Stone's emphasis on writing as a self-defining act opens the door to Chapter

Sixteen, in which Deborah Brandt discusses research methods for understanding the changing landscape of literacy.

Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows B, S, I and E.

# Cultural Rhetorics and Art in Pakistan: Ethnographic Interviews of Studio Arts Faculty in Southern Pakistan

BRIAN JAMES STONE

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## Introduction

International writing studies research, though relatively new to the U.S., is developing in an era in which there is a growing awareness of the colonial nature of cross-cultural research and the myriad troubles that may arise when a “westerner” is embedded within a “foreign” culture in order to observe the “other” and report back to a privileged, academic audience. It is developing with these important perspectives at the fore, pushing for the development of research methods and methodologies that “consider who *we* are as *global citizens of higher education writing studies* rather than intellectual tourists out to see what’s going on beyond our borders” (Donahue, 2013, p. 150). In developing research methods for international, ethnographic writing studies research, understanding our position as global citizens, immersed within the delicate, discursive web of cultural contexts, is ethically imperative.

The following is a case study that uses such methods and that provides insight into the complexity of a hybrid cultural situatedness and the translingual experience of two writers and their attendant challenges coming to terms with academic writing. In this study, I will highlight the results of ethnographic interviews with two consultants who we will call Tahreem and Ruby, in order to provide a sense of

student and faculty perceptions of writing about art within a postcolonial, British, academic framework at a studio arts university in southern Pakistan.

Tahreem and Ruby discuss the complexity inherent in negotiating the interplay of cultural, religious, artistic, and academic discourses, revealing the extent to which academic writing challenges individuals to break with deeply engrained ontological and epistemological orientations. The findings of this study demonstrate the complexity of the “multilayered meaning-making dynamic that defines writing research today” (Donahue, 2016, p. 147) and, as such, goes beyond a comparative framework in telling us about the flexibility of linguistic, rhetorical, and cultural difference.<sup>1</sup> Finally, Tahreem’s and Ruby’s experiences with academic writing reveal the complex ways the personal and cultural histories of multilingual writers inform the ways they navigate academic discourse.

## Project Background

This research was carried out at the “Art and Cultural Studies Workshop” (hereafter ACS Workshop) at the Indus Valley School of Art and Architecture (IVS), a nonprofit, degree granting, studio arts institution in Karachi, Pakistan. This research was made possible by the collaborative efforts of the American Institute for Pakistan Studies, the Institute for South Asian Studies at UT, Austin, and Princeton University.<sup>2</sup> The purpose of the workshop was professional development for 15 arts faculty from universities in Pakistan representing 5 institutions in the southern region. The primary focus of the workshop was refining knowledge of art history in south Asian art, as well as critical theory, a task accomplished by 2 of my colleagues, Iftikhar Dadi and Zahid R Chaudhary. My role was to facilitate a workshop with faculty participants, most of whom have master’s degrees or MFAs in the visual arts, on academic writing and publishing strategies, as well as curricular development.

In addition to facilitating this portion of the workshop, I interviewed 5 participants, asking them to share their attitudes and perceptions of writing both in their own academic/artistic careers, as well as in their classrooms. I was interested in learning more about how writing is taught, perceived, and practiced not only in a Pakistani university, but in a studio arts school. I was also interested in how cultural factors might influence curricula and pedagogy, as well as the challenges students might face learning British academic English and western forms of argumentation in a south Asian cultural context.

## Literature Review

Recently, there has been much writing studies scholarship that has grappled with the difficulty of defining translanguaging and setting forth a translanguaging model for writing instruction.<sup>3</sup> In their introduction to a special edition of *College English*, Lu and Horner (2016) attempt to account for the richness of translanguaging pedagogy. They describe a translanguaging approach to composition as concerned with “language (including varieties of Englishes, discourses, media, or modalities) as performative: not something we have but something we do” and “all communicative practices as mesopolitical acts, actively negotiating and constituting complex relations of power at the dynamic intersection of the social-historical (macro) and the personal (micro) levels” (p. 208). Canagarajah (2011) writes that translanguaging is a neologism that stands for the assumptions that “for multilinguals, languages are part of a repertoire that is accessed for their communicative purposes; languages are not discrete and separated, but form an integrated system for them; multilingual competence emerges out of local practices where multiple languages are negotiated for communication” (p. 2). Translanguaging approaches accept the presence of multiple languages in communicative events, the fluidity of language and identity, and that language is bound up in material social history and always emergent (Horner and Tetreault, 2017).

Central to many articulations of translanguaging is culture and cultural rhetorics. Following anthropologist Joel Sherzer, I define culture as a discursive, semiotic process. In this light, we might think of cultural rhetorics as the discursive practices that are constitutive of our experience of reality, that bring about persuasion and identification, and that constitute culture as semiotic. Sherzer writes that discourse “is the nexus, the actual and concrete expression of the language-culture-society relationship. It is discourse which creates, recreates, modifies, and fine tunes both culture and language and their intersection” (p. 296). Culture here is viewed as “symbolic behavior, patterned organizations of, perceptions of, and beliefs about the world in symbolic terms” (p. 295). Such a view of culture complicates comparative methodologies that oversimplify complex rhetorical traditions in order to neatly taxonomize multilingual practices (Severino, 1993).

## Methodology, Method, and Data Analysis Methods

After my invitation to participate in the ACS Workshop and subsequent research approval, I began to develop the research questions that I thought would best guide this project.<sup>4</sup> At this stage, I was thinking quite broadly, unsure where the

research might take me, and this was reflected in the research questions that served as a catalyst for my interview questions. The initial, developmental questions were as follows:

What writing assignments are included in studio arts program curricula at IVS, and how are they assessed?

What genres and writing tasks do faculty at IVS encounter?

What challenges do students and faculty face when writing academically, especially the senior and master's thesis projects?

How is writing taught?

What are the distinct features of what we might identify as a local, cultural rhetoric within the studio arts community in Pakistan?

As will be detailed below, these questions served as a starting point, but my perspective shifted considerably, as did my consideration of what was significant, as the interview process itself revealed much that I had not considered.

My ethnographic observation began at the two-week long ACS Workshop itself but continued for several months after. At the ACS Workshop, I was responsible for leading a series of activities on writing instruction and writing practices. During the workshop, I took field notes regarding writing perceptions. Ideally, an ethnographic study would cover a longer period of time than the two weeks I was allowed at IVS. However, regardless of contextual factors limiting the duration of the stay, digital media have allowed for continued conversations, observations, and questions, and have served to inform revision of notes and continued elaboration of an understanding of the cultural context of the workshop participants at IVS. For example, following the ACS Workshop, the two primary consultants in this study stayed in touch with me on social media, allowing ease of access for follow-up questions. When attempting to get a better sense of the writing culture at IVS, I was able to follow up on responses to questions months later, as data analysis led me to consider both questions and responses in new ways, or inspired follow-up questions.

The richest source of data for this study was the interviews I conducted with two primary consultants during the ACS workshop. The consultants were selected solely based on their interest in the research topic and their willingness to volunteer. The interview questions were semi-structured and were developed according to ethnographic interview methodologies based on Spradley's (1979) general questions framework. They were intended to investigate the translanguaging practices and perceptions of consultants within the current IVS writing curriculum.

I approached the interviews with an awareness that the interviewees were from a privileged background that allowed them to benefit from an education in British English, an education certainly not available to all Pakistanis, while also understanding the political implications of English language education in a postcolonial society.<sup>5</sup> I was aware that perceptions of “standard English” in Pakistan are unique from those promoted by many writing studies scholars in the U.S., and I did not want my disciplinary perspectives to overshadow or color the views of my consultants.

The initial ethnographic interview questions were designed primarily with perceptions of writing and affective writing experience in mind. Prior research experiences led me to believe these elements of writing would be prominent in this international context. Many of the questions I composed were descriptive, asking consultants about the type of writing they had done as students and that they do as faculty members (Spradley, 1979, p. 60). I was interested in their perceptions of such writing. However, during the first interview I realized that translation of cultural experience and different ways of knowing and being in the world were emerging as dominant themes. This led me to develop contrast questions, questions that allow the interviewer to “discover the dimensions of meaning” consultants employ to distinguish among experiences (Spradley, 1979, p. 60). In order to be as consistent as possible, I jotted down interview questions that came up organically during the interview process so that I could maintain a degree of consistency across interviews. However, an ethnographic interview includes a good deal of informal, friendly conversation, and at times it was in these informal conversations that important themes came to the fore and inspired new questions. Rapport between interviewer and interviewee is essential and, of course, varied from participant to participant. Therefore, each interview was unique and yielded different data.

The responses gathered during interviews were transcribed and coded according to major emergent themes (grounded theory). As a methodology, it “ensures that the findings, and subsequent theories derived from those findings, are accurate to the data and not limited by previous research” (Migliaccio and Melzer, 2011, p. 80). It allows the researcher to discover what is happening in the present context without fitting data into predetermined categories. As noted above, it was during the interview process that I noted unexpected, emergent themes. However, it was not until I transcribed and reviewed the interviews that I began to discover the concepts relevant to the codes that emerged: perceptions of writing, affective writing experience, descriptions of translingual experience, and rhetorical attunement.

The research questions focused on perceptions of writing and affective writing experience, but across several interviews I coded, I discovered that translation,

both linguistic and cultural, and adaptation to dominant persuasive strategies were prevalent. These codes were then grouped into two categories, translingual experience and rhetorical attunement. Though the grounded theory approach is often a means for discovering new categories, these categories are already prevalent in writing studies research. Therefore, though the grounded theory approach did not lead to new discovery, it allowed the data to be understood more fully outside of the initial intentions of the researcher. The findings also contribute to theories of translingualism and rhetorical attunement as they highlight the dialogic interaction of various domains of experience. Ideally, the coding process would have involved other researchers in order to ensure the validity of the codes; this is a limitation to this study.

While much of interest came out of each interview, Tahreem's and Ruby's stood out as representative of each emergent, thematic category, providing rich insight into their experience writing about art within an academic context while struggling with abstraction, translation, and the demands of a British, academic style. For this reason, the project became a case study of these two consultants.

## Findings of the Study

### Experiencing One's Self in One's Writing

As was noted above, the interview questions were developed according to preliminary research questions, but also evolved organically throughout the interview process. While I was initially interested in attitudes and perspectives of writing within the IVS curriculum for purposes of curricular innovation, the interviewees quickly led me to an interest in their translingual experience and rhetorical orientation. Below, I will highlight those parts of the interview that most clearly relate the complexity of cultural, rhetorical, and translingual experience of writing about art in British English.

An essential finding of this study is the significance of a personal connection to writing, especially when writing about art, and student perceptions of success. The extent of the trans- and inter-cultural experiences of the workshop consultants marked a high degree of complexity in their development as writers, a fact that highlights the shortcomings of a simple "comparative" methodological approach.<sup>6</sup> Also, multilingual experience proved to be a resource, rather than detrimental, in navigating academic writing tasks.

The best example of this was provided by Ruby, who told me that a real challenge for her was shifting from workplace writing to academic writing while she completed her master's degree at a university in New South Wales. This participant,

from a Pakistani cultural background, trained in a British style education system in Pakistan, received her graduate education in Australia. Ruby described writing her senior thesis as very daunting and said that she “sort of struggled through it.” More specifically, she highlights her struggle writing about her art academically in English:

I think for me it was, uh, rounding up my thoughts. They're sort of very scattered in very different ways. And just sort of pulling them together, but through the writings of others, as well. Like this whole structure of academic writing was very daunting. Do the literature review and do this, and certain words you should not use, some are better to use in academic writing. I thought that there were too many perimeters to go through. But, uh, I think initially when I started my draft it was very stilted and regimented, but towards the end, I, at one point, I thought this is just not going anywhere, and I had sort of written quite a lot by that time. *And I just said, forget it. I'm just going to write what I want to write. Let me sort of just get a flow out of my thoughts. So I just started, for a background on my MFA thesis, I started writing my background, that connected to me, and made sense to me, and from there I developed a flow. And then started[...](italics mine).*

Ruby felt a sense of distance, a disconnection, from academic writing. It was not until she brought in her own personal experiences that she felt a connection with the project and was able to truly begin to develop her writing, to develop a “flow.”<sup>7</sup> Through connecting her project to her personal experience, Ruby was able to draw on her multilingual resources and develop a practice that worked for her.

In addition to the personal disconnection, Ruby also faced a challenge translating her experience from Urdu into English:

So, later on when I started to, again, writing, I just found it very problematic. *I couldn't find the vocabulary.* And again, majorly now it is English writing that I am indulging in because Urdu platforms are not there anymore. With the (sic) that I am engaged with. The art scene here is sort of, again, *primarily English loaded.* So, I have to write in English. And I thought I had sort of lost that touch.

I italicized these sections on Ruby's personal experience as this seems to be of primary importance in such culturally situated writing contexts. For students negotiating linguistic identity as academic writers, finding their *self* in the writing process is an integral aspect of developing a sense of oneself as a writer, in developing a relationship to academic writing. One major difficulty Ruby expresses is the process of translating her artistic experience from Urdu to English, the difficulty of finding the right words in another language to express something so personal and intangible as artistic experience. The challenge of translating one's

artistic experience, one's cultural perspective, and one's language is the challenge of translanguaging.

### Translingual Experience

Both consultants expressed frustration organizing their thoughts in an academic manner, as well as in developing an academic style, points that are significant in our considerations of experience and perspective. Though novice writing students generally struggle with such elements of academic writing, we must look more closely here to better understand the nature of their translingual experience.

For the consultants in this study, the prefix "trans" is linked to the writing experience in several senses, including transcultural and translingual, but also represents the dialogic interaction of distinct domains of experience. In addition to finding a personal connection to her thesis in order to successfully complete it, Ruby also pointed to issues of organization of thoughts, describing her own thoughts as "scattered." Tehreem echoed similar experiences with her own writing, describing it as "abstract." She reflected on her experience becoming an academic writer and the rhetorical negotiation she engaged in:

And also my writings when I was a student here they were accepted for being unclear, which was fine, and, and, not unclear, it's not a good term to use, I'm not putting it down, but it's more abstract and more, hmm, ahh, circular arguments and things like that, *you can't really get your grip into them immediately*, ok? But ah then when I was doing my master's, at that point I realize that my own writing used to suffer from something like that, so description, open-ended, you know, inconclusive arguments, where I wasn't able to, where I thought I had made the point but I hadn't really, so just left hanging and ah, that's when I realized that I had to change my style of writing to be able to communicate more precisely. And so that made a huge difference.

Tahreem's reflection on her indoctrination into academic writing reveals a sense of anxiety similar to that described by Ruby. She uses the figurative phrase "can't really get your grip into" in order to describe the *transition* from personal to academic discourse, specifically academic argumentation. Abstraction might figure largely in Tahreem's production of visual art, but in academic writing, she had to learn to create something more "concrete." One might encounter an argument or a concept, but to grasp it is something altogether different. In encountering art, it can be through the experience rendered by the encounter with the abstract that meaning is produced. Yet how might one grasp this abstraction? How might one render this experience, and the experience of artistic creation, in a manner that one might "get their grip into"? These two domains of experience, the "abstract" and the "concrete," brush up against one another in dialogic interaction, and this

element of academic writing proved to be a serious challenge to both Tahreem and Ruby. Though we often think of translanguaging experience as one wherein a subject dialogically moves between two or more languages, we can rightfully call the movement between the language of artistic abstraction and that of academic precision a “transdiscursive” experience.

Tahreem’s experience was not just one of improvement, but of continual struggle between multiple domains of experience, cultural and rhetorical, academic and artistic, academic and religious. When prompted to say more about her experience in becoming an academic writer, she describes academic writing as “clinical,” in opposition to her cultural and religious background, which is more “abstract”:

... So religion is a very big part of our culture, right?... So, in the family as well people tend to speak in more abstract ways, and things are not very *clinical*, right? So the concept of God. I mean, it’s an *abstract concept. It’s not tangible*. And a lot of our, you know your way of arguing out things is related to ... we have not had a very democratic kind of background. So the kind of talk that we normally engage in is also stemming from, somebody, you know maybe a religious teacher, somebody uh, some elder in the family explaining something to you. So it’s never been *about concretes*. It’s always been about abstract thoughts and letting go of things and letting somebody else come to terms. Religion, on the other hand is very rigid. But the arguments are not. They are very abstract. So there is a demarcation between the two ... And so I feel we are more receptive to things like that, we grasp maybe abstracts more clearly than we understand tangibles ... That’s my way of thinking.”

One challenge that is highlighted here is moving from a cultural context in which an answer is given from an authority figure, and where questioning is not encouraged, to a western, academic context, specifically that of the British education system, in which, for example, discovering one’s own ideas, inventing them, is valued, ideas that are to be elucidated and defended. She describes this epistemological and ontological orientation as “clinical,” and she explains how culturally she struggles with this way of thinking, with this way of being in the world. Above, Ruby referred to her writing as “stilted and regimented,” as she was intimidated by “too many perimeters” and talked about her thoughts as “very scattered in different ways.” In both instances, academic writing was seen as “very daunting,” and there is a tension between abstract and concrete, even though that which is thought of as less democratic, namely religious thought, is also more abstract.

## Discussion

The translingual experience operates on several levels here, including linguistic, rhetorical, and cultural. The first described by both consultants is the challenge of writing in English. Part of this is what we might call the local level of composition, including grammar, mechanics, and vocabulary, specifically word choice. As Ruby said, identifying the prescriptivism in her writing instruction, “do this, and certain words you should not use,” and that she “couldn’t find the vocabulary” to express her ideas about her art. She accessed her own linguistic resources in order to meet the prescriptive expectations of British academic writing, demonstrating that what might be perceived as detrimental was, in fact, a resource.

Another aspect of this experience is transitioning between means of discursive organization, between circular and linear organization of arguments, abstraction and the concrete or tangible. While words themselves refract and reflect cultural and ideological orientation, we can also identify another aspect of this process expressed by both consultants and that we can identify as discursive. As noted above, discourse is the expression of the language-culture-society relationship, and it is discourse that “creates, recreates, modifies, and fine tunes” the intersection of culture and language (Sherzer, 2007, p. 296). Therefore, one’s experience of discourse(s) is one’s experience of culture(s), and in asking students to write “academically” we ask them to negotiate cultures, in this case a complex interplay of languages and domains of experience. It is important not to oversimplify the cultural experience of someone with as diverse of a background as Ruby, but what she describes above is her movement between cultural domains, between domains that overlap and interact dialogically, but that we can see as distinct in her negotiation. In learning to write her thesis in a British academic style, and in a “standard English,” it was not simply learning new vocabulary and rhetorical patterns, but a cultural dialogue that challenged her to cultural negotiation.

Tahreem’s responses highlight the transrhetorical aspect of her experience writing her thesis, and when she draws this distinction between the abstract and the concrete/clinical, she points to a negotiation between cultural rhetorics, what Rebecca Lorimer (2013) calls “rhetorical attunement” (p. 168). Academic writing, the “clinical” and “concrete” way of being in the world, a nexus of a culture removed from our daily experience of reality as members of a cultural group, is a stratifying force at odds with her own culture’s way of being in the world. In Tahreem’s description of her cultural and social background, one does not argue one’s ideas, but rather, one “lets go,” and lets “somebody else come to terms.” One embraces the abstract with indifference to that which is tangible, the very heart of religious experience and belief. Academic writing demands a different way of being in the

world, as well as a different way of knowing. It is far more than simply developing a thesis and mastering appropriate diction.

Ruby points to a similar experience in her description of the circularity of her thoughts, which is what she struggled with while working on her thesis. The circularity of her arguments, which her advisors had told her was a sign that her thesis was not going anywhere, was a reflection of her religious and cultural experience, a complex aspect of her transrhetorical experience and negotiation. Having learned to read and write using the Quran in primary and secondary school, a text that enacts argumentation in circular and abstract patterns, linear forms of academic argumentation were counter-intuitive to Ruby. In her early drafts, she was drawing on the cultural resources she had at hand. Lorimer (2013) says of such an experience, “And if we consider multilingual resources to be not discrete skills but practices informed by personal and cultural histories, then we need to rethink how to cultivate and assess these practices. Fundamentally, we need to account for the depth and complexity of everyday multilingual practices and better understand how all writers act with multiple languages to navigate a larger discursive system” (p. 168). The multiple languages both Tahreem and Ruby act with in order to navigate academic writing include religious discourses, artistic discourses, as well as, of course, everyday language.

## Conclusions

From this case study, one can gather the significance of and the need for international writing studies research. The cultural and linguistic complexity of Tahreem’s and Ruby’s background certainly challenges many assumptions writing studies scholars and teachers carry into their research and teaching practices. Translingualism involves much more than a switching back and forth between languages and contexts of language use, but is bound up in one’s experience of culture and reality, carrying serious consequences for those subjected to standard practices. Methodologically, this study also highlights the value of an ethnographic interview model. The questions and perspectives I had begun with were altered by the inspired participation of my consultants, leading me to uncover elements of their experience with academic writing I otherwise would have never discovered. As we continue to grow and change as a field, we must continue to discover innovative means of investigation, bearing in mind the complexity of culture and communication in the act of composing academic texts.

## Notes

- 1 I am here following Joel Sherzer in defining culture as “symbolic behavior, patterned organizations of, perceptions of, and beliefs about the world in symbolic terms” (p. 295)
- 2 I would especially like to express my gratitude to Kamran Asdar Ali, whose warm-hearted kindness and support made this trip and research possible
- 3 For an overview, see especially De Costa et al, 2017; Horner and Tetreault, 2017; special edition of *College English*, 2016; and Donahue, 2016
- 4 I would like to especially thank Christiane Donahue and Chris M. Anson for their guidance in this stage of the research project. Any perceived shortcomings in this area are my own.
- 5 In short, I was cautious not to offend my consultants by asking questions that challenged the value of the British English that had given them access to higher education and distinguished them within a multilingual society. Though many writing studies scholars and sociolinguists in the US have fervently challenged the value of Standard Edited American English for decades, I was sensitive to the social and cultural context in which I was situated
- 6 One of the first challenges to overly simplistic contrastive rhetoric is made in Severino (1993), and the shortcomings of the perspective is central to the contemporary work of cultural rhetorics scholarship
- 7 This finding reinforces those of recent qualitative research carried out in an HBCU context that found student experience, especially linguistic experience, when incorporated into the curriculum and carefully considered in a “culturally sustaining pedagogy” (Paris and Alim, 2016) had a positive effect on student success and retention (Stone and Stewart, 2016).

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While Brian James Stone (Chapter Fifteen) situates writing as an act in which the writer defines self through navigating complex layers of languages, context, and meaning, in this chapter, Deborah Brandt examines the development of literacy as *readers* become *writers*, another act of self-definition. Brandt presents her research methodology for investigating the changing relationship between *reading* as the primary activity for building and exercising literacy and *writing* as the primary vehicle. In her study, Brandt collected biographical testimonies and analyzed how the contexts of work and workplaces catalyze literacy change, and how historical relationships between writing and reading manifest in interviewees' accounts. As Brandt's research developed, sought-for patterns emerged along with some that were surprising.

In her response, June Griffin places Brandt's contribution to literacy studies in a middle territory, neither entirely ethnographic nor entirely focused on case studies, following "the literacy narrative not of a person but of populations over a period of time." Griffin examines the immense time commitment required by contemplative, in-depth research such as Brandt's, a commitment without which such work would be qualitatively impossible. With Brandt's contributions as her example, she makes a compelling case for "slow scholarship," currently endangered

in the academic marketplace. This discussion of research-informing-framework-informing-research brings us to Clay Spinuzzi's exploration of the conceptual frame of third-generation activity theory (3GAT).

Readers are encouraged to seek other connections. The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows L, G, N, F, and S.

# Studying Writing Sociologically

DEBORAH BRANDT

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Because of the jobs they hold, it is not unusual now for people in many walks of life to spend three hours, four hours, five, sometimes eight or more hours a day with their hands on keyboards and their minds on audiences, writing texts of various kinds. In a service economy, writing has become a dominant form of labor. For the first time in the history of mass literacy writing appears to be overtaking reading as the skill of consequence, and for many people writing now serves as the principal grounds of their literacy development over time. This is a phenomenon that the field of writing studies is well poised (and, I would argue, obligated) to better understand. What happens when writing, not reading, becomes the dominant form of daily literate experience? How does a societal shift in time and energy toward writing affect the way that people develop their literacy and understand its value? How does the ascendancy of a writing-based literacy create tensions in a society whose institutions—especially the schools—were founded on a reading-based literacy, around the presumption that readers would be many while writers would be few? Further, and to the point of this chapter, what methods are at hand to gain answers to these questions?

Interest in the rise of mass writing began brewing for me back in the late 1990s as I was concluding work on *Literacy in American Lives* (2001), a book that traced changing conditions for literacy learning among 90 Americans born between 1895 and 1985. In the course of that study I developed (slowly and bumbly!)

a method of data collection and analysis that used the testimonies of everyday people to trace social forces and processes of change around literacy that appeared to press on everybody. This is not to say that those forces and processes looked or worked the same in everybody's life or meant the same to everybody or had the same effects. But the project focused on figuring out how mass literacy as a force of change manifested in everyday life. Could I identify brute facts about literacy and literacy learning as they surfaced over time—facts that people seemed to take for granted and felt compelled to deal with—while keeping in mind that such brute facts could be a lot more brutal for some people than others? In short, I wondered, how did the “massness” of literacy show up in particular times and places and with what impact?

In the course of that research I made two unanticipated discoveries that demanded more systematic investigation and that led eventually to a second book, *The Rise of Writing* (2015). One discovery was that work and worksites were major agents in compelling changes in literacy. To a degree I did not anticipate, economic transformations were foregrounded in people's accounts of twentieth-century experiences with literacy learning, registering in a speed up of literacy processes; rising expectations for skill levels; compulsory rounds of learning, obsolescence and relearning in contexts of successive technological changes; and an increasing demand for writing in economic production.

The second finding (maybe ironic in view of the previous one) was that deep-seated cultural dissociations between reading and writing going back centuries still seemed to manifest and matter in contemporary literacy experience. Over time, mass reading and mass writing in the U.S. have been taught, promoted, managed, codified, and treated differently in educational, legal, and cultural systems. That history of dissociation was palpable in people's accounts.

A third finding—one that I had hoped for and is most pertinent to the theme of this volume—was that in-depth interviewing among people of different generations was a productive method for studying changes in mass literacy.

## A Project Emerges

So a new project was born out of the old one, a project that would zero in on work and writing and on conflicted relationships between reading and writing. After gaining human subject approval from my university, I sought participants whose jobs required them to write on average for at least 15 percent of the workday. Given constraints of time and resources, these participants lived and worked in the general region where I also lived and worked, a Midwestern, mid-sized city

that is home to a large public university and state government with an additional economic base principally in health care, insurance, biotechnology, light industry, and retail. Using information from the U.S. Census Community Survey, I identified employment sectors that depended on writing and I began what amounted to a process of cold calling to recruit participants to the study. I emailed individuals directly when their addresses appeared on company or agency websites, or I called business owners or personnel or information officers in business and government for leads. Sometimes, after learning about the study, colleagues or friends provided contacts, and in some cases those I interviewed encouraged me to talk with co-workers, so I did. I sought avenues and contact strategies that I hoped would lead to an inclusive pool of participants in terms of gender, age, race, and ethnicity, as well as occupation and the size of the organization for which participants worked.

As the questions of the study clarified themselves, I crafted the participant pool into 30 people working in the private sector and 30 people working in the public sector. Missing from this study, by design, were people whose jobs require little or no writing. More about this selection process appears later in this chapter, and even more can be found in Brandt (2015). I began to conduct one to two-hour interviews with volunteer participants in 2005 and continued, as I found the time, through 2012.

## Biographical Sociology

The in-depth personal interview belongs to an eclectic bundle of biographical methods with a range of emphases, approaches, and protocols. The version I use treats interviews as a sociological tool.

Like oral history, biographical sociology often explores the experiences of non-elite people whose voices are usually absent from official representations. In this approach, participants are considered not so much as objects of study but as witnesses to socio-historical processes, witnesses who can report out from their particular locations in place and time and social structure. I often think of the interviews I conduct as depositions. I gather testimony from eyewitnesses, friendly to my case, who come from the scene under investigation. The interview questions, it should be noted, are not the same as my research questions. I do not ask participants to tell me where and how they fit in the history of mass literacy. Nor are my questions necessarily ones that study participants would have about their own or others' literacy.

Rather, the interview questions are deliberately and instrumentally tailored to help me answer my research questions. I could say that interview questions

represent a theory of my case but I do not mean a theory of what I am going to find; rather the questions represent a theory of how to look. They are purposeful, directive, and probative but not cross-examining. Witnesses are taken at their word. Their testimonies are treated factually in order to make something of the facts that they present to me. But to pursue the truth, all the testimonies from all the witnesses need to be considered in relationship to each other.

The aim of this method, as French sociologist Daniel Bertaux (1981, 2003) has described it, is to gather facts about people's lives, to accumulate accountings of what they have done, how they have done it, where, with whom, for how long, to what degree, in what manner, with what materials, and with what perceived results, as well as to determine what has been done to people and how they reacted to it. The focus is on processes, events, actions, materials, and contexts (Bertaux & Delacroix, 2000). Subjective viewpoints of interviewees are a critical ingredient; subjectivities carry the values and affect that give a testimony its human meaning. But these subjective viewpoints are not what I pursue per se and they are not where my interpretations begin or end.

Individual accounts matter for what can be systematically and objectively gleaned from them, in my case, about how the history of mass literacy—past, present, and future—manifests in particular times, places, and social locations; how particular members of society enter into its force; and with what effects on them and others. This means asking a lot of what and how questions: What writing are you responsible for at work? What is typical? What for? What kinds? What did you use to do that? How would you have learned how to do that? How would you have known how to do that? How much time did that take? How did that affect you? What did you do about that? Asking how, what (and when) questions helps to direct people's attention to historically and contextually specific conditions of routine existence.

Although my research is peopled, my focus is not on people but on what their life experiences can show us about mass literacy as a historical and socially structuring force, a force that will be present in but also always exceeding an individual's account. The aim is to uncover systematic patterns in people's testimonies that reveal structuring forces up against which people live their lives. In my analysis I search for appeals to such structuring forces, as resources, constraints, explanations, puzzles, and problems in people's encounters with literacy. The more these appeals turn up across cases, the closer I come to what I pursue.

This method has been criticized for a number of reasons (Briggs, 1986, 2000; Chamberlayne et al., 2000; Gubrium et al., 2012; Riessman, 2007). Some of these reasons will be taken up later in the chapter. But I have found no richer and more reliable method for tracing relationships between biography and history, individual

and society, present and past, stasis and change, as well as relationships between the problems individuals experience and the collective issues of which those problems are a part. These relationships, according to C. Wright Mills, are at the heart of the sociological imagination (2000).

## Analysis and Discovery

Now it is important to state that these relationships do not just announce themselves in interview data. They are not just there for the quoting. Designing questions, finding participants, and collecting interviews are just the beginning steps. Then it is time for a long and painstaking process of data analysis and discovery. This analysis is best known in our field as grounded theory (Bryant & Charmaz, 2007; Charmaz, 2006; Corbin & Strauss, 2014; Glaser & Strauss, 1967, 1999).

For me, the method begins with a close, line-by-line reading of an interview transcript looking for mentions of processes, actions, events, materials, reactions, or other details that potentially pertain to my operational questions. In the most recent study, those operational questions were: (1) How do work and workplaces catalyze literacy change (what changes, how, when, among whom, to what degree, with what effects etc.)? and (2) How do historical relationships between writing and reading manifest in accounts of writing intensity (how, when, among whom, to what degree, with what effects, etc.)?

In the early stages of this kind of inquiry, I try to find as much potential evidence as I can and create many descriptive categories to capture it. (This is a categorizing stage akin to freewriting. I do not worry too much at first about consistency.) Then I move to the next interview script and repeat the process, except now I add in some more questions: How does this evidence compare or contrast with what I found in the previous interview(s)? What's the same? What's different? What's newly present? What's not present? As this process continues with more interviews, some categories drop out, either because they prove anomalous or because I can no longer remember what I meant by them (the sign, for me, of a poorly conceived category).

Other categories emerge as “hot”—evidence shows up frequently within and between interviews, often with intriguing detail attached. Categories also start to merge together and are renamed as I gain a greater conceptual handle on phenomena of interest. Howard Becker (1998; 2014) calls this analogic thinking—you start seeing what disparate-seeming events and processes actually have in common (and what seemingly similar events and processes actually lack in common). Categories start to rise to higher levels of generalization and you start developing

a grounded definition of, say, change or reading-writing conflicts that starts to clarify (and blessedly hasten) the analytic process. I know I am on the right track when I can put more and more evidence into an ever smaller and conceptually denser set of categories. In time I can look over the evidence in those categories and start making claims about phenomena of interest. I can begin to see meaningful patterns. Now I have a theory of the case. Then, I take this theory back into the data. The process reiterates. I may see more or I may see less and will need to adjust the theory until the explanations begin to exhaust the data. Only at this point do I begin to reach grounded answers to my operational research questions.

## Sensitizing

There is one other important component of this method that I have not yet mentioned. It has to do with preparing or sensitizing oneself as the researcher in ways that can aid the inquiry at every stage. Mostly I accomplish this sensitizing through wide-ranging background reading. For both *Literacy in American Lives* and *The Rise of Writing*, I read, for instance, as many historical studies as I could about the initial spread of literacy in North America (U.S., Canada, Mexico) as well as in other societies, past and present. Such deep background can aid in preparing interview questions and helps me hear or see relevant traces of history in people's accounts, either as we converse or later when the analysis begins.

Such background reading is not directly imposed on the research. It is not used as a theory to be applied or tested. Rather it hovers around, helping to build the kinds of intuitive sensitivities that are helpful, even required in this method. I was paid a high compliment once, after giving a conference presentation, when an attendee said to me, "The thing about your research is that you can hear what people are telling you." That is exactly my aim: not just hearing what a person means by his or her words but hearing the significance of those words in the bigger picture. Wide background reading has the potential to help develop that capacity. Reading is certainly not the only way to attain sensitivity, but sensitizing oneself to larger time frames, contexts, systems, etc. is a helpful and even necessary form of preparation. It is time consuming to build this kind of flexible infrastructure for research. But it is a time investment that can reap rewards and make other parts of the research process go more efficiently.

## Interaction and Reiteration

While I have described components of this research process in a sequence, in practice the parts are simultaneous, interactive and iterative. Analysis of interviews begins even as I am still collecting them. The interview script is refined based on experience. Questions that do not work are eliminated. New ones are added to probe areas that emerge as potentially relevant. Reading goes on throughout. Participant selection can even be revised.

For instance, I discovered when interviewing a first group of government writers that they had pervasive experience with legacies of conflict between reading and writing. The rights of reading citizens that are enshrined in the Constitution constrained their writing processes at work and their expressive range as private citizens beyond work. So although not part of the original design, I carved out a sub-study of government writers in order to be sure those issues were explored in enough depth. The same thing occurred with the phenomenon of ghostwriting, a practice that turned up with unanticipated frequency among the writers I interviewed. As I came to understand its significance and its relevance to my research focus, I added more probing questions about ghostwriting to the interview script and sought out a wider variety of ghostwriters to add to the participant pool.

## Sampling and Its Discontents

Qualitative methods like the ones I use are often criticized for trying to draw big generalizations from small samples. But these criticisms often stem from a misunderstanding about the generalizations that are being drawn. They are not generalizations or predictions about the experiences or behaviors of demographic groups. When I study the writing experience of an insurance underwriter, she does not stand for all insurance underwriters in the country. When I study a white American man, it is not in order to generalize from his experience to all white American men. When I characterize writing in 2015 I am not claiming it will be the same in 2050. The findings of my study have no predictive intentions in those ways.

Rather, the generalizations that emerge from this kind of research are conceptual and interpretive. Some would call them theoretical. The aim is to forge evidence-based (i.e., grounded) conceptual frameworks powerful enough to have explanatory worth when tried out in other contexts. If your analysis is sound, the concepts should be able to work elsewhere, beyond the initial cases studied. But how they work and what they mean and the effects they have—all of that will need

to be worked out afresh through analysis of new evidence in new contexts. In the process of extending the theory in this way, the explanations may be revised or proven to be wrong. The main conceptual claim in *The Rise of Writing* is that earlier sponsorship arrangements of mass writing (including its past relationship to reading) manifest and matter in people's literacy and can be made visible through analysis of their experiences. Whatever may happen in the future, that past—in some form—will still be present, mattering, and available for analysis. But in what way will need ongoing research and conceptual development.

Still it could be asked how any generalizations at all can be drawn from a small sample. How could analysis of accounts by fewer than a hundred individuals result in conceptual generalizations strong enough to hold up on a broader scale? For one thing, it is important to note that the individual life is not the unit of analysis in the research that I do. Rather, the analytic units are what I call "mentions," discrete verbal references to events, processes, actions, facts, presumptions that pertain to the phenomena of interest. Many, many such references can occur within a single interview. For one chapter in *The Rise of Writing* I coded all the interviews for expressions of *mass writing cognizance*—verbal evidence of interviewees' explicit or tacit awareness that they wrote among other people who also wrote. I analyzed the different ways that they used that awareness to warrant or make sense of their own actions or other people's actions. By the time I finished analyzing 60 interviews, I had identified more than 700 "mentions" of this awareness. So a study like this can generate a prodigious amount of data. The other, related thing to remember is that the analytic focus in this research is on social forces (processes and structures) with which the people I interview are in relationship. The effects and meanings of these forces are not pre-determined, of course, and neither are people's responses to them. But they are at work everywhere and everyone lives with them. So to identify these forces at work in the biographical history of even one individual is to find out something sociological.

With all of this said, I do not mean to imply that diversity, difference, identity, individuality, or systematic discrimination are not germane to findings in this kind of inquiry. Would more participants, more inclusion, more diversity improve and strengthen the conceptual claims I can make? Absolutely. In a grounded study, the testimonies of research participants provide the finite universe of data with which you must work and beyond which you cannot go. As a result, the sample necessarily excludes experiences, conditions, events, times, locations, and perspectives of people not in the study, all factors that could potentially change or challenge the conceptual claims. In order to study writing intensity, for instance, I chose to interview people who wrote intensively in their work or avocation. I wanted to learn

from people who worked most closely and most regularly with the phenomenon that interested me.

But I might have looked at writing intensity through the eyes of people who do not or cannot write much in their work to see how they encounter the phenomenon and with what impact on them and their literacy. Their experiences would have added greater scope, depth and nuance to the findings. That is a follow up study that remains to be done. So sampling decisions have consequences and limits. Similar limits are posed by the small sample of questions that I choose to ask participants. We often do not think of an interview protocol as a sampling method but it is (Becker, 1998). When people take an hour or so to answer the questions that I ask, I gather only a sample of what they potentially have to say. The only remedy I can think of for both sampling problems is to keep asking more people better questions on the way to making stronger theory.

## In Conclusion: The Big So What?

I have been describing methods I use for pursuing operational research questions, mid-level questions that are grounded and instrumental: How does work catalyze change around literacy? How do long-standing cultural dissociations between reading and writing manifest in contemporary experience? But when all the analysis is done, the most important questions still remain: What is the significance of the findings? For whom do they matter and why?

Of course these larger value questions are there at the beginning as they motivate a study in the first place and at least tacitly shape its design. But they re-emerge with more specificity and urgency later, as part of the rhetorical project of writing up the study. This is when the grounded theorist must go beyond the data given and be in dialogue with a discipline. What argument or intervention is simultaneously most warranted by the findings and most needed by the field? It is helpful to imagine a dialogue between research participants and the field of writing studies. How can the accumulated testimonies I collect improve what we do? How have research participants helped to identify problems or gaps or misunderstandings or misadventures in teaching and research? I also try to think in the other direction too. How might the accumulated wisdom in the field of writing studies illuminate the experiences and problems expressed in the testimonies? Can the interests of the field and the interests of the research participants (as I understand them) be brought into some kind of alignment? Can I see relationships between what workaday writers struggle with when they write and what we struggle with as researchers and teachers of writing?

Gradually these heuristic questions help me reach those difficult but inescapable decisions about focus, emphasis, and organization necessary for proceeding to public presentation.

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# Response to Deborah Brandt

JUNE A. GRIFFIN

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It would not be an exaggeration to say that Deborah Brandt has done more to help us understand historical shifts in the history of American mass literacy than anyone else. The recipient of the 2017 CCCC Exemplar Award, a Guggenheim fellowship, and two MLA Mina Shaughnessy Prizes (one each for *Literacy in American Lives* and *The Rise of Writing*) among numerous other awards, Brandt's research has made visible the ways cultural and economic change in twentieth century America put pressure on individuals to adopt new literacy practices and the role of literacy sponsors in changing people's practices. Brandt's most recent book, *The Rise of Writing*, draws on seven years of interviews with dozens of people in varied occupations and makes visible the "workaday" writing that drives our information society. Typically treated and often devalued as alienable property, this writing, Brandt demonstrates, is nonetheless crucial to our inalienable democratic rights. Brandt's insights into shifts in American mass literacy are transformative—which is why it is important to understand well the methods she uses to arrive at her understanding and think about the implications her findings might have for the future of those methods.

Deborah Brandt studies writing sociologically, using in-depth interviews and grounded theory to understand mass literacy—historical shifts bigger than any one person's story. Her methods are at times misunderstood as ethnographic and then criticized for not going far enough in understanding the contexts of each

participant's story. At other times, they are viewed as being too particular. These critics suggest she should include a broader sample of participants. But her work lies in a middle ground—in the literacy narrative not of a person but of populations over a period of time.

While holding in mind this important frame for her work as occupying a middle space, I'd like to do something that I recognize is a little unfair: I would like to ruminate on the ways her own practices do not fit so well into her narrative of mass literacy. In doing this, I'm not making a "gotcha" argument, but rather, in the spirit of Brandt's scholarship, I want to make visible aspects of her *work*—some of the *labor* involved—that may not be so evident.

The pivotal observation of her paper for the conference and of her book, *The Rise of Writing*, is that for many people, writing is overtaking reading as their primary literacy practice. She has told us about the ways reading is being subordinated to writing, and that for many writers, reading happens within acts of writing. Remember, for example, the IT security expert Brandt mentioned who talked about searching for "nuggets" and "scanning [texts] for little bits of stuff [he] can use." This is a reading practice I suspect will be familiar to many writers—writers who are often pressed to meet a deadline for an employer, a publisher, or a class.

This is not Deborah Brandt's reading practice.

In her working paper for the institute that preceded this conference, Brandt described *reading* as "An important component of her method," and explained:

It has to do with preparing or sensitizing oneself as the researcher in ways that can aid the inquiry at every stage. Mostly I accomplish this sensitizing through wide-ranging background reading. For both *Literacy in American Lives* and *The Rise of Writing*, I read, for instance, as many historical studies as I could about the initial spread of literacy in North America (U.S., Canada, Mexico) as well as in other societies, past and present. Such deep background can aid in preparing interview questions and helps me hear or see relevant traces of history in people's accounts, either as we converse or later when the analysis begins. Background reading is not directly imposed on the research. It is not used as a theory to be applied or tested. Rather it hovers around, helping to build the kinds of intuitive sensitivities that are helpful, even required in this method.

This brief description gives us a window into her research methods and the role reading plays in both the in-depth interviews and in her analysis of those interviews through the practice of grounded theory. It is the broad reading, the slow steeping in histories, that has improved her ability to perceive when there is something rich behind what someone has already said and makes her adept at framing productive follow up questions. Broad reading is equally integral to the successful practice of grounded theory because it is a key component to the sensitizing necessary for the analysis. It is possible to acquire a broad and deep context

for the topic one studies through means other than reading (e.g. participating in conferences, seminars and think tanks, listening to audio or watching video), but these means are also time-intensive. Moreover, some of them incorporate reading into the practice and others are, in many instances, a mediated form of reading. Whatever medium one uses, to pursue questions best answered through grounded theory, one will have to invest a considerable amount of time becoming fluent in the contexts important to their topic—fluent in the sense that the context is so familiar one need not think about it.

In her working paper, Brandt went on to say:

I was paid a high compliment once, after giving a conference presentation, when an attendee said to me, “The thing about your research is that you can hear what people are telling you.” That is exactly my aim: not just hearing what a person means by his or her words but hearing the significance of those words in the bigger picture. Wide background reading has the potential to help develop that capacity.

This focus on hearing resonates with Ratcliffe and others’ work on rhetorical listening, and prompts me to think about the role reading can play in sensitizing us and developing our abilities to listen past cultural codes that too often limit what we hear. I’ll return to this idea, but for the moment I’d like to underscore the ways Brandt’s sensitizing reading practice works across two dimensions of activity: reading improves her ability to listen and be responsive to the person she talks with in her in-depth interviews and it also makes her more perceptive and thoughtful in recognizing the patterns across the experiences of all of the people she has interviewed in order to get at what is the real object of her research: changes in mass literacy.

As I think about Brandt’s methods, I am struck by how time-consuming they are: The time it takes to get IRB approval, identify participants, arrange meetings, conduct the interviews, transcribe them, work through the many iterations of analysis that are necessarily part of grounded theory—all of that is evident and no doubt familiar to scholars interested in writing studies. But we should also factor in the work of reading widely and deeply. When we add in the time it takes to do the quality and quantity of reading her method demands, we see the time it takes to complete a project of this scope and quality far exceeds the time most faculty are given for tenure and promotion.

During the seminar preceding the conference, Brandt mentioned it took her eight years to write *Literacy in American Lives* and that she had to “take it on the chin” at her institution because during those years she was viewed by colleagues and administrators as a non-productive faculty member. I take the liberty of sharing this because it makes me worry more than a little bit about how higher

education (at least in the US) is itself an economy that values writing over reading, an economy that depends upon the transactional value of the written text and is implicated in systems that push people to value writing over reading or to rush into writing prematurely. My fear is that few scholars will be willing to “take it on the chin” —few will be willing to risk their jobs to do this kind of research, but the field desperately needs people who are willing to ask big questions and do the time-consuming work it takes to answer them.

I’m not alone in my worry. The growing “slow scholarship” movement makes a strong case for intervening in the accelerating academic marketplace (a tenuous subset of the information economy) in order to secure a place for research that answers questions that cannot be answered quickly. The call is coming not only from writing studies scholars such as Lindquist or literary scholars such as Berg and Seeber, but from social scientists like Hartman and Darab, scholars of higher education administration such as Shahjahan, and through the collective manifesto of feminist geographers (Mountz, et al.). All recognize the growing pressures on scholars to produce work quickly while also performing an increasingly long list of administrative tasks. To the extent that we value the work of scholars such as Deborah Brandt, we must find ways to value—not just in words but in deeds—precisely the kind of sensitizing reading Brandt enacts and that is critical to the effective deployment of her research methods. That is, we must create institutional structures that give scholars time to develop long-term projects and not just reward the annual production of texts. Further, we need to continue to teach and promote broad and thoughtful reading because it has potential value not just inside academia but outside it as well; to the extent that reading can function as a means to sensitize us and make us better rhetorical listeners, I think it is a project well worth our time.

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In this chapter, Clay Spinuzzi makes a case for incorporating analytical feedback into conceptual frames as he examines the evolution of activity theory and suggests a new direction. The first two generations of activity theory (a framework for analysis of writing in social context) answered a need within writing studies by bridging a research gap between individual, cognitivist approaches and collective, social approaches by shifting focus from either an individual or society, to the web of interactions between individuals and society. Not only did activity theory give researchers from different schools of thought a shared theoretical framework, but it also brought fresh relevance to previously conducted research. Third generation activity theory (3GAT) added the dimensions of dialogue and interacting networks of activity. And yet, the fundamental orientation of 3GAT has led to methodological problems in its application to composition, theory, and development.

Spinuzzi digs calls for another evolution of activity theory, fourth-generation activity theory (4GAT), which would integrate sociocognitive as well as social research; it would be rebuilt around *dialogism*, and would take into account multiplicity by regarding each object in the activity network as multiple. Finally, it would incorporate interfering (and synchronizing) cycles of development.

In her response, Ann Shivers-McNair highlights Spinuzzi's commitment to putting different approaches in the field into meaningful dialogue with one

another. From her own work studying the dynamics within a makerspace, Shivers-McNair echoes the limitations of 3GAT, points to exciting potential for 4GAT, and discusses the implications of one proposed dimension for 4GAT: chronotropic interference.

From here, the broader topic of framework and context is taken up in Chapter Eighteen by Joanna Wolfe, discussing the benefits of quasi-experimental research in the classroom context. Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows O, G, J, F and H.

# What's Wrong with 3GAT?

CLAY SPINUZZI

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Third-generation activity theory (3GAT) is a version of activity theory, a methodological framework that emerged from a branch of Soviet psychology, developed in Scandinavia, and has been applied in a variety of fields in North America and elsewhere. In the 1990s, 3GAT offered an answer to a methodological problem in composition research: the problem of connecting social and cognitive perspectives on writing. But two decades later, 3GAT's own methodological problems are becoming more obvious. Here, I overview the methodological problem that composition faced in the early 1990s, then outline 3GAT's development to understand why it addressed this problem so well—and how it has developed its own methodological problems. Finally, I suggest a way forward.

## How 3GAT Solved a Methodological Problem

Through the 20th century, composition in the US was generally not considered to be a field of study, but rather an uninteresting pedagogical specialization. As James Kinneavy complained, “Composition is so clearly the stepchild of the English department that it is not a legitimate area of concern in graduate studies, is not even recognized as a subdivision of English in a recent manifesto put out by the major professional association (MLA) of college English teachers [...], in some universities

is not a valid area of scholarship for advancement in rank, and is generally the teaching province of graduate assistants or fringe members of the department” (1971, p.1). Indeed, “*There is no definite concept of what the basic foundations of composition are*” (p.2, my emphasis).

Fourteen years later, Kinneavy’s colleague Maxine Hairston hailed composition’s gains, but argued that compositionists remained limited by their colleagues in literature, their “intimate enemy.” Hairston exhorted us to develop our own theories and conduct our own research. We thus needed “guidelines to define and govern good research,” she argued, and should “extend our connections to disciplines outside our field [...]. by establishing connections and credibility outside of English departments, we stand to improve our standing with the whole university community” (1985, pp. 279–280). To emerge as a discipline, composition needed a research orientation. To extend Hairston’s point, composition had a broad research object (writing), but it also needed a paradigm within which to understand its research object and the boundaries of its investigation; methodologies to underlie, motivate, and guide research; methods through which researchers could investigate phenomena consistently; and techniques for implementing those methods (Spinuzzi, 2003, 2005).

Unfortunately, there was no unanimity about what this research field should look like. Several research agendas sprang up, drawing from different bodies of knowledge but without an agreed-upon paradigm for validating and connecting research (North, 1987). Hairston’s colleague Lester Faigley (1986) sums up three competing camps. Expressivists, who focused on individuals’ authentic expression, had a comparatively thin, anecdotal research tradition. Cognitivists systematically investigated and compared individuals’ writing processes, drawing on the paradigm of information-processing cognitive psychology; they used experiments and think-aloud protocols to map out common processes using both quantitative and qualitative measures. Finally, social constructionists applied the proposition that “human language (including writing) can be understood only from the perspective of a society rather than a single individual” (p.535); they investigated social context by drawing from “poststructuralist theories of language, the sociology of science, ethnography, and Marxism” (p.535). Empirically, they drew from sociology and anthropology, using primarily qualitative measures. Exchanges among these camps grew more heated (Berkenkotter, 1991) leading to “sweeping generalizations about the character or ethos of researchers in general,” as Faigley’s colleague Davida Charney put it (1998).

Meanwhile, research methods textbooks for composition studies tended to be paradigm-agnostic, presenting different methodologies as legitimate but paradigmatically separate ways to investigate research questions (Kirsch & Sullivan, 1992;

Lauer & Asher, 1988). The methodologies sat uneasily next to each other, barely interacting, like shy teens at a dance. (Yes, some studies published at the time were mixed-method studies, but the research textbooks generally did not cover mixed-method research in enough detail to execute it well.)

This state of affairs was problematic for many scholars, including Charney's future colleague—me. As a new PhD student in 1994, I read the framework essays and the exchanges in our field's journals, and I felt torn. Cognitivists offered a focus on individual development, empirical meaning-making, and comparisons across populations. But social constructionists accounted for the indeterminacy of interpretation and the contingent, cultural context of meaning-making.

If only, I thought, we could put these two together, yielding a sociocognitive framework.

It was at this point that David R. Russell visited my graduate seminar to discuss a paper he had been working on (Russell, 1995). It was about 3GAT.

3GAT is sociocognitive, theorizing and investigating cognition as thoroughly social. Thus it offered a solution to composition's tangled methodological problem. First, it addressed the social-cognitive divide via a dialectical synthesis. Second, since it accounted for individual and social development, it could underpin composition research across various contexts. Third, it provided a way to integrate different methodologies—both cognitivist and social constructionist. A 3GAT research design could investigate meaning-making across mixed methods. And fourth, thus it could reinterpret and integrate previous work across paradigms.

3GAT was taken up by various composition scholars (e.g., Bazerman, 1997; Berkenkotter & Huckin, 1995; Haas, 1996; Russell, 1995, 1997a, b). It wasn't the only such approach, but it was uniquely suited to the challenges of composition research through an accident of its development.

## 3GAT's Development

Why was 3GAT such a good fit? It's a long story, but in Engeström's (1996) account, activity theory developed through three generations (cf. Spinuzzi, 2018).

### The First Generation (1GAT): Vygotsky (1924–1936)

In the first generation, Soviet psychologist Lev Vygotsky developed the idea of mediation (Vygotsky, 1978, 2012; cf. Engeström, 1996, p.132), in which an individual could control her own actions using physical or psychological tools. As Engeström puts it,

This idea was crystallized in Vygotsky's (1978, p.40) famous triangular model of "a complex, mediated act" [...] commonly expressed as the triad of subject, object, and mediating artifact[...]

The insertion of cultural artifacts into human actions was revolutionary in that the basic unit of analysis now overcame the split between the Cartesian individual and the untouchable societal structure. The individual could no longer be understood without his or her cultural means; and the society could no longer be understood without the agency of individuals who use and produce artifacts. (p.132)

Vygotsky based his psychology on the 6th thesis of Feuerbach (Wertsch, 1985), in which Marx claims that the human essence is actually "the ensemble of the social relations" (Marx, 1845). This ensemble of relations was what Vygotsky attempted to understand, examining it within children's development. Vygotsky founded his new Marxist psychology on Marx's dialectics in (1867/1990) *Capital*. Thus, Vygotsky (1934/2012) treated thought and language as initially independent but passing through each other to create a developmental interactional-dialectic relationship.

### The Second Generation (2GAT): Leontiev (1931–1979)

Vygotsky's colleague A.N. Leontiev continued this work on a Marxist psychology. As Engeström says, in 1GAT, "the unit of analysis remained individually focused. This was overcome by [2GAT, in which] Leont'ev explicated the crucial difference between an individual action and a collective activity." He adds:

The concept of activity [...] turned the focus on complex interrelations between the individual subject and his or her community. In the Soviet Union, the societal activity systems studied concretely by activity theorists were largely limited to play and learning among children, and contradictions in activity remained an extremely touchy issue. (Engeström, 1996, p.132)

Leontiev shifted his unit of analysis from Vygotsky's word meaning (and, more broadly, semiotic tools that mediate joint activity; cf. Blunden 2010) to object-oriented labor activity (Leontiev, 1937/2005; Kozulin, 1999; van der Veer and Valsiner, 1991).

Leontiev based his psychology, not on the 6th thesis of Feuerbach, but on the 1st (Wertsch, 1985): "The chief defect of all hitherto existing materialism—that of Feuerbach included—is that the thing, reality, sensuousness, is conceived only in the form of the object or of contemplation, but not as sensuous human activity, practice, not subjectively" (Marx, 1845). Human activity became Leontiev's central focus. Thus the unit of analysis shifted from an individual's mediated activity to a

collective's cyclical, mediated activity (Kozulin, 1984, p.111). Leontiev drew from Engels' dialectics, not Marx's—a savvy move, since Engels constituted the basis for Stalin's (1938) dialectics.

Leontiev contributed the notion of the activity system. He also contributed the levels of activity, which describe how collective activity is oriented toward a social object; how individual actions collectively constitute activity; and how habitual operations in turn constitute those actions (Leont'ev, 1978; Leontyev, 1981). This work earned him the Lenin Prize in 1963, and his activity theory became dominant in the Soviet Union. However, although activity theory “was taken up and recontextualized by radical researchers in the West” (Engeström, 1996, p.132), it was not until 1987 that activity theory was developed into the form that would be taken up in composition research.

### The Third Generation (3GAT): Engeström (1987–Present)

#### Engeström describes 3GAT:

When activity theory went international, questions of diversity and dialogue between different traditions or perspectives became increasingly serious challenges. It is these challenges that the third generation of activity theory must deal with.

The third generation of activity theory needs to develop conceptual tools in order to understand dialogue, multiple perspectives, and networks of interacting activity systems. [...]

In this mode of research, the basic model is expanded to include minimally two interacting activity systems. (Engeström, 1996, pp.132–133).

In the 1980s, Engeström and Susanne Bødker separately applied activity theory to design research: Bødker (1991) applied 2GAT to participatory design (Bødker, 2009; Spinuzzi, 2002, 2005), while Engeström (1987/2014, 1992, 1996, 1999) applied it to studies of expertise. Their work merged into the version of 3GAT most often seen in studies of expertise, human-computer interaction, and composition. Such studies faced methodological disagreements between individualist, cognitivist approaches and collectivist, social approaches (Spinuzzi, 2020).

In taking up 2GAT, Engeström (1987/2014) added several things. First, he provided a graphical heuristic for picturing Leontiev's activity system (and added a component, rules). Second, he integrated Ilyenkov's (1982) theorization of contradictions. Third, he expanded analysis to two or more interacting activity systems (activity networks). Fourth, he applied analyses of historical changes to work organization. Fifth, he supplemented the dialectical base with Bakhtin's dialogics

(1981). The resulting 3GAT focused more on interpretation and interactions, especially disagreements. This emerging 3GAT tradition understood individuals' thought and language as inherently social, and larger social processes as inherently psychological. The unit of analysis was neither the individual nor a "discourse community" (Berlin, 1988), but a shared activity oriented toward a social object, achieved through sociocognitive actions and operations. 3GAT's explanatory framework could integrate macro, meso, and micro levels of analyses to understand both social and individual development. Soon, it undergirded a growing number of papers and syntheses in composition (for overviews, see Russell, 2009, 2010; Spinuzzi, 2011).

## But What Has 3GAT Done for Us Lately? Methodological Problems with 3GAT in Writing Research

Today, 3GAT faces at least four methodological problems in writing research: in application, theory, phenomenon, and development. These problems have been exacerbated by its orientation toward design research, which deeply affected how 3GAT was taken up in composition. Below, I first discuss this pivot, then explore how it has led to these methodological problems.

### The Pivot: Design Research

As mentioned earlier, in its third generation, activity theory was reoriented from general psychological problems to *design research*. This shift has been underexplored in the literature.

For instance, David Bakhurst criticizes 3GAT for straying from "a fundamental explanatory strategy" to "a method for modelling activity systems with a view to facilitating not just understanding, but practice. [3GAT is] a way of modelling organizational change" (p.205) with "a model or a schema that has minimal predictive power" (p.206). 1GAT and 2GAT, as Bakhurst says, saw "the concept of activity as a fundamental explanatory category that is the key to understanding the nature and possibility of mind." For instance, Leontiev used activity theory to investigate the development of mind (1981) and the formation of consciousness and personality (1978). Study participants were selected and studied; they did not participate in developing or interpreting the research. But 3GAT represented a shift to design research—research that is conducted not *on* participants but *with* participants, oriented toward participants' interests, yielding joint emergent

knowledge. In 3GAT, the point was not to provide a “fundamental explanatory strategy” but to model change and facilitate practice. The model has “minimal predictive power,” but its descriptive power *facilitates researcher-participant deliberation*. This deliberation yields codesigned work organization, practices, and tools.

This deliberative orientation was needed in studies of work organization and human-computer interaction (Engeström and Glaveanu, 2012; Bødker, 2009)—and composition, which involves examining and facilitating participants’ activities, co-exploring their tacit knowledge, and deliberating with them about improving their practice. That is, 3GAT became a suitable framework for *researching writing as design work*.

3GAT entered composition through the works of Engeström and Bødker. But it entered relatively soon after this pivot, before it had addressed some of the problems entailed in this reorientation. So 3GAT studies of composition have inherited those problems: in application, theory, phenomenon, and development.

### Problem 1: Application

In the mid-1990s, 3GAT offered a framework uniting social and cognitive concerns: the individual and collective, the cognitive and social, were taken to be a single phenomenon (Spinuzzi, 2003). But in the intervening years, the “socio” has overshadowed the “cognitive.” Few studies investigate and characterize individuals’ cognition and learning via levels of activity. In contrast, the activity system has frequently been deployed as a heuristic for characterizing social systems and—essentially—a coding scheme for field research. In practice, 3GAT is applied as a social framework.

Other fields share this tendency. Engeström (2014) warns:

there is a risk that activity theory is split into the study of activity systems, organizations, and history, on the one hand, and subjects, actions, and situations, on the other hand. This is exactly the kind of split the founders of activity theory set out to overcome. (p.xvi)

We see this disjuncture early on. Bødker’s (1987/1991) dissertation focused on the micro-level of breakdowns, points at which the participants’ unconscious operations yield unexpected outcomes. Her studies examined how individuals interacted with interfaces, making their tacit knowledge explicit so that it can be deliberated. In contrast, Engeström primarily focuses on contradictions, long-simmering tensions in and across activities. These contradictions drive change in a given activity (1992) and the reassessment and change that are key parts of expansive learning (1996, p.137; 2016). Although both strands yield the 3GAT that has

made inroads in various fields, Engeström's focus on social systems has generally been ascendant. In writing studies, that tendency has translated to field studies emphasizing text circulation over textual features.

## Problem 2: Theory

3GAT's Marxist-Leninist roots assume a shared objective reality (Stalin, 1938) accessible via a single perspective and approach. This orientation is reflected in Leontiev's books (Leont'ev, 1978; Leontyev, 1981), which provide the most recognizable methodological tools of activity theory: the levels of activity (collective activity, individual goal-directed action, and habitual, unconscious operation) and the activity system (the unit of analysis, including subject, object, mediational means, and division of labor). These tools are grounded in a monologic, monoperspectival (or forced-perspective) view of the world, a view that presumed a single community and a clear hierarchy for each activity. Leontiev and his contemporaries studied activities such as schoolwork and rehabilitation, in which a more advanced practitioner (teacher, doctor) led less advanced ones (students, patients) in vertical learning toward a prescribed outcome. More broadly, the USSR's centralized economy and ideology emphasized a single sanctioned viewpoint.

When activity theory migrated to the West, however, it was applied in less restrictive, less hierarchical cases. Thus 3GAT has been significantly retrofitted, driven by the shift toward design research, which required researchers to seek participant perspectives to understand emergent multifaceted activities and facilitate deliberations about them. Examples included participatory design research, in which systems designers and workers had to understand each others' work (Bødker, 1991), and studies of expertise in nonhierarchical cases (Engeström et al. 1995). Thus, 3GAT has embraced multiperspectival (Engeström, 1999; Holland & Reeves, 1996) and polycontextual (Engeström et al. 1995) understandings of activity (see Spinuzzi, 2008, 2011). Engeström has thus appropriated conceptual tools from actor-network theory (Engeström and Escalante, 1996), rhizomatics (Engeström, 2006), network theory (Engeström, 1987/2014), Bakhtinian dialogism (Engeström, 1987/2014), and management theory (Engeström, 2007).

This retrofitting embedded tensions in 3GAT. For instance, Engeström (1987/2014) drew from Bakhtin's dialogism, which is the antithesis of the Stalinist dialectical materialism on which Leontiev's work is built (Bakhtin, 1986, p.147). Similarly, in composition research, we have coordinated 3GAT with dialogism (e.g., Russell, 2010), actor-network theory, and rhizomatics (Spinuzzi, 2008). Tensions among dialectics and dialogics, monoperspectivism and multiplicity, modernism and post-modernism, remain latent in 3GAT's theoretical apparatus: object, contradiction,

activity system, and activity network remain problematic, especially as we continue to examine writing in more networked environments and activities (e.g., Fraiberg, 2017; Read, 2016; Read & Swarts, 2015).

### Problem 3: Phenomenon

As the above suggests, activity theory was built for and applied to hierarchical cases in a specific milieu—the Soviet Union. 1GAT and 2GAT assume hierarchically organized activity such as collectivized agriculture, industrial work, and formal education.

Yet 3GAT was applied to rather different phenomena. Engeström (1987/2014) applied it to “communities of investigative learning [that] are typically networks that cross and transcend boundaries between workplaces and training institutions. Such transitional communities rely on a high degree of lateral interaction and communication between relatively autonomous teams” (p.36, his emphasis) (e.g., Engeström et al., 1995; Engeström, 2008; Miettinen, 2008; Tuomi-Grohn & Engeström, 2003).

Moving from hierarchies to networks changes how one conceives the phenomenon under study. Hierarchies tend to enforce a single perspective on an object. But in networks, objects are shared by specialists, who have different perspectives by definition. These objects tend to be emergent and projective (Spinuzzi, 2011, 2015). In effect, 2GAT was built around an object with one true essence (or officially sanctioned perspective). 3GAT adapted the approach, but in applying it to activity networks, legitimized objects with multiple valid perspectives. As 3GAT was applied to further and broader cases, shared objects became harder to analyze monoperspectively.

As Engeström argues, 3GAT

still treats activity systems as reasonably well-bounded, although interlocking and networked, structured units. [...] [but] In social production and peer production, the boundaries and structures of activity systems seem to fade away. Processes become simultaneous, multidirectional, and often reciprocal. (2009, p.309)

Studies of writing in social and peer production (Jones, 2008; Morgan & Zachry, 2010; Swarts, 2009) have indeed demonstrated that this writing is difficult to describe as well-bounded or happening in structured units—it involves norms, of course, but not necessarily common aims or expectations. But, Engeström argues, social and peer production can still be analyzed via activity theory (pp. 309–310), and he suggests that addressing the phenomenon may involve developing a 4GAT.

## Problem 4: Development

Development has been a consistent focus: 1GAT examined individuals' minds developing socially in school settings; 2GAT examined how attributes such as personality and consciousness emerged from social systems organized around labor; and 3GAT examined how people worked within large-scale social structures.

But development becomes complicated in 3GAT. In 2GAT, the *activity system* is the unit of analysis, and development relates to the cyclical achievement of the object. To use Leontiev's illustration, in a hunting party, the object is the quarry, which the hunters seek to turn into dinner (1978). The hunting party repeatedly and cyclically achieves this transformation, gaining expertise. Such activities have their own tempos: the hunting party might undertake a new hunt biweekly, while the farmer transforms her field annually (Engeström and Escalante, 1996).

With 3GAT's shift to design research comes the concept of *activity networks* (Bødker, 1987/1991; Engeström, 1987), which is necessary for analyzing design within interconnected systems of expertise. Consider a writer, who labors to produce her *object* (a script). The script is then given to a television announcer, who uses the script as a *tool* in a second activity (Bødker, 1987/1991, p.37). Or consider a sick child, who is the *object* of both a general practitioner (GP) and a hospital physician, who have different expertise and work within different bureaucratic systems (Engeström, 2001). In these cases, the interlocking activities have different objects or attempt to transform the same object differently.

Activity networks lead to three related problems.

One: participants in an activity network must engage in *horizontal learning* to coordinate, cooperate, and collaborate across the network (Tuomi-Grohn and Engeström, 2003). For instance, the GP and hospital physician who share a patient must learn a little about each other's work: intake procedures, reporting requirements, arrangements with insurers, etc., often through complex and unacknowledged writing practices (cf. Opel & Hart-Davidson, 2019).

Two: since activities are dynamic, their connections constantly change. If the hospital changes its intake process, the GP may have to retool her own work processes due to *quaternary contradictions* (Engeström, 1987/2014) forming between interconnected activity systems. In a highly interconnected, highly variable environment (say, telecommunications), an individual's work may change constantly, forcing the individual's learning to look less like spirals (Engeström, 1996) and more like eddies (Spinuzzi, 2008; in writing studies, see Carradini, 2016; Fraiberg 2017).

Three: the interconnected activities may not follow the same transformational cycle. For instance, a GP may tend to work at a high tempo, helping patients to rapidly become well; a physician specializing in chronic illnesses may work at a slower tempo, understanding that the patient will take a much longer time to get

well. In such cases, cycles can interfere, producing interrupted or multisided development as well as erratic or stochastic contradictions between activities. This issue, practically untouched in the 3GAT literature, is discussed extensively in John Boyd's warfare theory (e.g., Osinga, 2007). Studies of writing across the lifespan touch on this problem (Bazerman, this volume; Poe & Scott, 2014).

Together, the four major issues—application, theory, phenomenon, and development—pose methodological problems for 3GAT. To make 3GAT useful for writing studies, we must be able to address multiperspectivity, polycontextuality, and multiplicity; interconnected activity networks; unfinalizable dialogue; and even complex mediation in which multiple objects are in play at once (Bødker and Andersen, 2005). These extensions have been built onto the rambling house that is 3GAT, and they are not wearing well because the foundation has shifted.

## A Way Forward for 3GAT?

With these four challenges in application, theory, phenomenon, and development, it may be time to reinvent 3GAT.

It's been done before. Earlier, we saw Engeström's (1996) account of how activity theory developed linearly through three generations of activity theory. But it's more accurate to say that these generations represented significant pivots: points at which one argument lost traction and was in danger of fading, and had to be translated in the Latourian sense (Latour, 1987; cf. Spinuzzi, 2005, 2020) to regain traction (Table 17.1).

When we consider activity theory's development as an often-idealistic, often-opportunistic argument unfolding across different rhetorical environments, we can consider how to participate in it. How might we pivot 3GAT to address the issues it's currently not addressing well? How can we retain and build on its strengths, while interrogating its foundational premises as claims, then modifying or substituting them in ways that preserve the argument's overall coherence?

The limits of 3GAT suggest a direction for developing a 4GAT, one that better suits it for writing studies.

### Solution 1: Apply 4GAT to Sociocognitive, Not Just Social, Research into Writing

Writing studies needs an *integrated scope* approach that addresses writing research at the levels of activity, action, and operation simultaneously (Spinuzzi, 2003). Such an approach addresses the problem of application by tying social and cognitive

Table 17.1. The Three Pivots of Activity Theory, in Which Rhetors Translated Arguments to Address New Conditions

Pivot	Key rhetor	Key characteristics of the pivot
1	Vygotsky	<p>Founded his Marxist psychology on the 6th thesis of Feuerbach: “the human essence is no abstraction inherent in each single individual,” but rather “In its reality it is the ensemble of the social relations” (Marx, 1845).</p> <p>Based his reasoning on Marxist dialectics.</p> <p>Unit of analysis: Word meaning or sense, investigated through dyads of more and less developed individuals.</p>
2	Leontiev	<p>Refounded psychology on the 1st thesis of Feuerbach (“sensuous human activity, practice”; Marx, 1845) and on Engels’ account of the development of man (1971).</p> <p>Based his reasoning on Stalinist dialectical materialism (based on Engels’ articulation of dialectics).</p> <p>Unit of analysis: activity system.</p>
3	Engeström, Bødker	<p>Rearticulated activity theory to address design research in workplace learning, expertise, and human-computer interaction.</p> <p>Engeström based his reasoning on Ilyenkov’s dialectics, Bakhtin’s dialogism, and Western cultural psychology.</p> <p>Unit of analysis: networks of activity systems.</p>

concerns together, providing an account of how the mind-in-society (Vygotsky, 1978) creates, innovates, and interprets. Yet such an approach doesn’t get at the core issue in application, which is that in practice, 3GAT is being applied to field studies without also being applied to smaller-scale studies of defined sociocognitive phenomena.

One such phenomenon has been core to 3GAT since the initial work by Vygotsky and his colleagues: mediation. Those researchers explored phenomena such as memory aided by cultural tools, including texts. How might we reimagine these early, focused studies of mediation in a more controlled and focused setting than a field study? Even those of us who are interested in field studies might consider investigating research questions such as: How do people use texts to mediate their project planning? What roles do texts play in brainstorming? What different strategies do people use to read documents, and under what conditions?

## Solution 2: Rebuild 4GAT around Dialogism

As mentioned, Engeström interprets Bakhtinian dialogism as a variation of dialectic that can help us understand expansive transitions in social terms rather than in terms of individual thought (1987/2014, p.248). But Bakhtinian dialogism is substantially different from Leontiev's Stalinist dialectics: it is unfinalizable; it resists the monologism implied in 1GAT and 2GAT; it acknowledges different understandings without validating one over another. It is, in short, a better fit for addressing emergent objects in multi-stakeholder deliberations. It is also a better fit with the concept of multiplicity.

As researchers in a field that makes textual interpretation central, we should find this shift easy in practice. A harder proposition is that of rethinking activity theory around this new core. In this undertaking, we might consider Blunden (2010)'s proposal to rebuild activity theory around the unit of collaborative projects.

## Solution 3: Understand the Object as Multiple

Each object in an activity network is *multiple* (de Laet and Mol, 2000). And that means more than *multiperspectival* or *polycontextual*, terms that have been used in 3GAT to address the inevitable differences in understanding that different research participants have. Objects are not just taken up differently, they are ontologically different things in different activities. For instance, Mol (2002) shows that *atherosclerosis* is defined, detected, measured, and treated in radically different ways by specialists, even though it retains enough relative coherence for them to coordinate their work. Such objects are not “out-there,” but they are also not “in-here,” in the imaginations of individual practitioners; they are “among-us,” made coherent enough and stable enough to ground interactions within activity networks.

The multiple object makes sense in a dialogic 3GAT—in theory. But it must be developed further.

## Solution 4: Theorize Interfering Cycles of Development

Finally, networked activities' cycles can interfere with each other. The activity systems in a network might attempt to transform a common object with varying cycles (cf. Spinuzzi, 2017). Such interferences are central to the work of military theorist John Boyd, who argued that each entity interacts with its environment through a cycle in which it observes, orients, decides, and acts (the so-called OODA loop). If that entity is an adversary, one can interfere with its OODA loop by isolating it physically, mentally, or morally (1986, Slide 5). In inducing confusion and disorder among adversaries, Boyd says, we must avoid these ourselves, and

the best way to do so is to gather from other disciplines and activities to surface new repertoires that can fold our adversaries inside themselves while avoiding the same fate for ourselves (1987, Slide 45). That is, by interacting more broadly with our allies, and by developing broader repertoires, we can avoid becoming isolated even as we induce isolation in adversaries.

Boyd focused on exploiting the dissonance of cycles to gain competitive advantage. But we might instead explore how cycles become synchronized to reinforce beneficial interactions across linked activities. My colleagues and I (Spinuzzi et al., 2016; Spinuzzi, 2017) glancingly addressed this issue. But much more must be done to theorize and explore this question of development in activity networks: in workplace studies such as the ones I do, but also in studies of education and civic discourse.

What's wrong with 3GAT? I've reviewed four problems (application, theory, phenomenon, and development) that have surfaced as it has been applied to writing studies, especially professional writing studies. These problems require a pivot—but activity theory has been pivoted before. In this chapter, I've suggested how we might pivot it again through reapplying it, rebuilding it, reconceptualizing the object, and retheorizing development. If this pivot can be accomplished, I think a newly reinvigorated activity theory can continue to provide valuable insights for writing studies.

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# A Response to Clay Spinuzzi's "What's Wrong with 3GAT?"

ANN SHIVERS-McNAIR

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In his chapter in this volume, Clay Spinuzzi describes encountering third-generation activity theory (3GAT) as a graduate student and realizing the ways in which 3GAT answered key methodological challenges in writing studies, particularly in offering a way to synthesize work across social constructivist and cognitivist paradigms. I had a similar experience encountering Spinuzzi's work on activity theory as a graduate student grappling with methods for studying writing in context. By then, as Spinuzzi explains in his present essay, 3GAT had been retrofitted to mitigate the Soviet influence on activity theory, particularly in the assumption of a unilateral objective, with Western frameworks, such as Bahktinian dialogism and Latourian actor-network theory, that assume and engage the multiplicity of objectives. Indeed, in Spinuzzi's *Network* (2008), I found a generative account of both activity theory and actor-network theory for examining writing in context, and I was struck by Spinuzzi's description of how he set the two approaches in conversation:

I extend activity theory's account of networks and texts through sustained contact with actor-network theory. I say "contact," not "conflict": dialogue, not simply grafting the most desirable aspects of actor-network theory onto activity theory. I won't resolve the contradictions between the two frameworks, but I will examine them and use the tension between them to develop activity theory in a useful manner. (p. 29)

I admire Spinuzzi's commitment to placing activity theory and actor network theory in meaningful dialogue rather than simply blending the most convenient aspects of each, and I see the same care in his present review of what 3GAT has accomplished, where it falls short, and how a fourth-generation activity (4GAT) might overcome those shortfalls as a method for examining writing in context. Spinuzzi's engagement with the temporal, geographic, and epistemological forces that have shaped iterations of activity theory and their uptakes in writing studies offers us a path for pivoting activity theory in a way that avoids superficial grafting of frameworks and encourages, instead, sustained contact across frameworks.

Like Spinuzzi, I am interested in the potential of a 4GAT. I acknowledge and appreciate the compelling work he and others have done to nuance activity theory. In my own work, which primarily involves examining written communication alongside nonalphabetic forms of communication through workplace ethnography, I have not taken up 3GAT because I do not find that it quite gets at the sense of temporality that my participants and I experience. For example, I studied a makerspace in Seattle—a warehouse full of fabrication technologies like 3D printers, laser cutters, sewing machines, CNC routers and populated by inventors, artists, and entrepreneurs trying to carve out a System D economy (as Sinfree Makoni [2016] has described), but with the tools of neoliberal capitalism. I quickly learned that despite the name “makerspace,” neither “maker” nor “space” are a given, and I spent a year observing and documenting how objects and objectives *become* objects and objectives (or not), how makers *become* makers (or not), how mediational means *become* mediational means, and how writing *becomes* writing (or not). But mapping these things with 3GAT triangles has not made sense for me, because people and things are constantly becoming, *not* becoming, or *un*-becoming.

One might ask, is not actor network theory better for such Deleuzian becomings? And I would say no, because for me actor network theory is too flat: it does not capture the ways in which these becomings and un-becomings mark differences that are both dynamic and systemic. For example, when a freelance writer and makerspace volunteer who documents the work of the makerspace through written and visual content is seen as less of a “maker” than someone who operates a 3D printer, that marking has material and rhetorical consequences. And when that writer is later embraced as a maker after adding 3D printing skills to his repertoire, that (re)marking matters, too. Because I have found that the boundaries of “writing” and “making” (and “writer” and “maker”) shift over time, as do the consequences of those boundaries, I have focused on creating genealogies of these ongoing makings and markings at the case study level. As I look ahead to future studies, I am considering how I might scale up this work.

And this is why I am excited about the possibilities in Spinuzzi's proposal for a 4GAT pivot. As you will recall, one of his proposals is to more fully develop and conceptualize dialogism in activity theory, and this made me think about another, closely-related Bakhtinian concept: the chronotope (literally: time-space). My attention to time was also inspired by examinations of time in plenary talks at "College Writing": From the 1966 Dartmouth Seminar to Tomorrow. It is perhaps not surprising, at a conference that looked both backward at the first Dartmouth Seminar and forward to the future of our field, that time figured prominently in plenary talks: from neural connections (Galbraith, 2016) to colonial matrices (Cushman, 2016), and from human lifespans (Bazerman, 2016) to disciplinary arcs (Anson, 2016; Brandt, 2016). Furthermore, bringing the Bakhtinian chronotope into 4GAT would build on the work of Paul Prior (1998), who has already given us an articulation of the chronotope in terms of activity theory: specifically, in conceptualizing "literate activity as social practices that are situated, embodied, mediated and dispersed" (Prior & Shipka, 2003, n.p.). Prior (1998) and Prior and Shipka (2003) have also given us an articulation of chronotopic lamination, or the layering of these time-spaces, for studying writing. Prior and Shipka explain that chronotopic laminations are "the dispersed, fluid chains of places, times, people, and artifacts that come to be tied together in trajectories of literate action along with the ways multiple activity footings are held and managed" (n.p.). Prior and Shipka's conceptualization of chronotopic laminations as fluid chains could serve as a model for the development of a dialogic 4GAT in which relationality is both fundamental and dynamic.

This is where things get even more exciting (at least for me). What if, in addition to thinking about chronotopic lamination and activity theory, 4GAT could theorize chronotopic *interference*? This gets us back to another piece of Spinuzzi's proposal for a 4GAT: theorizing interfering cycles of development in writing contexts. Interferences and disruptions, at whatever scale, are spatial, temporal, and material. The ongoing making, unmaking, and re-making of objectives, objects, makers, writers, writing, languages, media, mediational means, systems—these are space-time-matter phenomena that are "situated, embodied, mediated and dispersed" (Prior & Shipka, 2003, n.p.). And while chronotopic laminations help us see fluid chains stretching across more-or-less linear time, I would suggest that the notion of chronotopic interference could help us get at another kind of temporality that is non-linear: one in which every act of writing creates and disrupts chronotopic chains. In other words, the act of writing a technical manual for 3D printing, for example, yields not only the manual but also a chain of past activities leading to that manual and future possibilities proceeding from that act. When a coworker supplements that written manual with physical objects to demonstrate

different printer settings, a new chain of past activities and future possibilities is made, while other pasts and possibilities are unmade. And when a researcher observes and engages the manual creators, still more past chains and future possibilities are made and unmade.

Indeed, chronotopic interference could be a fruitful way to account for the researcher's own role in the knowledge-making process. Chronotopic interference could also support accountability to absences and erasures in acts of writing: after all, interference from overlapping waves both creates and erases wave patterns. When you drop two pebbles near each other in a pond, the ripples from each pebble come in contact and create new ripples, while other ripples are canceled out. Chronotopic interference could help us account not only for activity but also for inactivity, for undoings, for the bodies and possibilities that are absent or erased in ongoing acts of writing, and for the researcher's role in recognizing, intervening in, or perpetuating erasures. Certainly, such an approach presents challenges for modeling that may exceed 3GAT's triangles (or any two-dimensional polygon), but I believe a fourth generation of activity theory, as Clay Spinuzzi has proposed, can be a framework through which we can embrace and meet these challenges in writing studies, and I look forward to that work.

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In the previous chapter, Clay Spinuzzi made a case for expanding the framework of activity theory (interactions between individuals and society) to incorporate specific dimensions and contexts. Here, Joanna Wolfe takes an in-depth look at quasi-experimental research, directly connecting this mode of informing pedagogy with classroom outcomes. While the quasi-experimental approach is sometimes dismissed for being reductive, Wolfe champions *self-consciously and ethically reductive* quasi-experimental research, giving examples of such studies that have proven valuable in her own teaching, and discussing the approach's applicability in specific contexts. She shares some surprising results, comparing the effects on student work of giving them only an argument-tutorial handout vs. that same handout in addition to a revision-tutorial handout, and demonstrates the practical value of the quasi-experimental approach for writing studies and pedagogy, despite its comparative dearth in current literature. Making the case that applying experimental controls (as far as feasible in the classroom setting) and quantifying observations constitutes a powerful way for writing studies practitioners to reveal and challenge their own assumptions, Wolfe gives us specific situations in which applying these methods leads to well-supported pedagogical decisions, which in turn translate into better outcomes for students.

This exploration of quantitative research and pedagogy is on the level of student outcomes; it is not its purpose to investigate *why* the studies she cites show what they do. Research into such cognitive mechanisms is taken up by David Galbraith in Chapter Nineteen.

Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows R and Q.

# In Praise of the Reductive: A Case for Quasi-Experimental Research

JOANNA WOLFE

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When I was a graduate student searching about for a dissertation project, I originally planned to complete a project in critical pedagogy. I was enamored by the theoretical scholars I read and wanted to model my scholarly and teaching self after their examples. However, I became disillusioned when I learned that some of the scholars I found so inspirational were unable to translate those inspirations into lived classroom practice.

This is not the kind of teacher-scholar I wanted to be. While good theory remains important, I shifted my focus to closely examining the actual (rather than hoped for) effects of specific pedagogical practices on students. I learned to systematically look for gaps between theory and practice, trying to escape the bubble of seeing what I hoped to see.

This desire to systematically analyze and iteratively improve my own teaching led me to quasi-experimental research—a method that is frequently maligned as “reductive” in the writing studies community. Quasi-experimental research examines the performances of comparatively large groups of students on specific measures, averaging scores for entire groups in order to come up with quantifiable units of comparison. Unlike theoretical research, it focuses on the actual implementation of pedagogical practices. Unlike richer empirical methods, such as case studies or ethnographies, quasi-experimental research flattens individuals so it can report on trends and patterns in the aggregate rather than relying on

the simultaneously nuanced and isolated analysis of individual students or specific instructional moments.

This chapter provides a defense of—and call to action for—self-consciously and ethically reductive quasi-experimental research. For those of us who want more than anything to improve the quality of our instruction, quasi-experimental research can play an indispensable role in informing our practice. Yet it is often dismissed as reductive and decontextualized, and therefore anti-humanist.

This chapter proceeds by first defining and providing examples of ethically reductive quasi-experimental studies that have informed my own teaching. I then discuss the dearth of published quasi-experimental research in writing studies and review common arguments made against this research method. I argue that rather than dismissing quasi-experimental research as reductive, we should see its reductive lens as a tool that can provide powerful insights into our pedagogical practices.

## Quasi-Experimental Research in Writing Studies

Quasi-experimental research, as I am defining it here, is an attempt to collect empirical (often quantitative) data in a way that can be replicated in order to systematically compare and contrast two or more groups. One of the most common uses of quasi-experimental research is to test the effect of a classroom intervention, or new type of pedagogy. For instance, a researcher might systematically compare students in a control group taught using a common pedagogical method with students in an experimental group using a new technique. The researcher then systematically collects and analyzes data such as class papers, tests, or attitude surveys to see if the intervention had the desired effect. This type of research is termed “experimental” because the researcher is deliberately trying to create conditions that will allow her to compare and contrast the different populations. It is modified with the word “quasi” because it typically takes place in real classrooms where many experimental variables cannot be controlled.

Because ethical and responsible quasi-experimental research requires some sort of external validation outside of the researcher—such as external readers rating papers or students directly reporting their perceptions on surveys—it has the ability to show us that we are wrong about certain assumptions or beliefs. It makes us less prone (though certainly not invulnerable) to seeing what we want to see, and it can help us more persuasively advocate for the changes we want to see in our curriculum.

Let me provide some illustrative examples of quasi-experimental studies. The first study (see Figure 18.1) compares an experimental rhetoric-based curriculum

in introductory “Writing about literature” classes with traditional instruction in these classrooms. This is a classic quasi-experimental design. The paper rankings were completed by literature professors blind to the study purpose and conditions. The rankings were then triangulated with other data sources, including tests of students’ abilities to recognize literary analysis and surveys measuring student engagement with class texts. There was a real possibility that the data might not have supported the approach, as had been the case with a prior attempt to use a highly abbreviated version of this curriculum. The study, therefore, involved real risk-taking.

Whereas the first study compares classes taught using different curricula, a second study takes a more narrow approach, looking at the effects of two different handouts on students’ revision practices. Table 18.1 shows that students receiving a handout on argument made more meaningful revisions than those receiving a handout on revision strategies or those without a handout. This finding is remarkable. How many times have we as writing teachers exhorted our students to revise to little avail? Butler and Britt’s argument handout—even without any accompanying instruction—seems to be a particularly effective instructional tool.

What’s more, the argument handout alone appears to have been more effective than both the revision and argument handout together. Thus, not only does this study suggest that an argument focus is particularly useful in getting students to revise, it also provides an important reminder that sometimes more can actually end up being less. Again, these researchers took a risk in subjecting their handouts

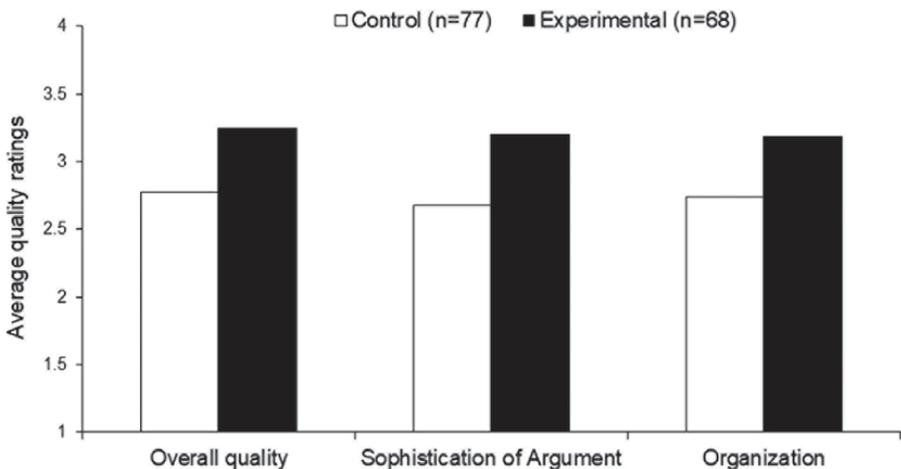


Figure 18.1. Average essay rankings given to final “Writing about Literature” papers in control and experimental classrooms (1 = “poor” and 5 = “excellent”). Based on Wilder & Wolfe, 2009.

Table 18.1. Average Number of Revisions Students Made to Their Arguments and Global Paper Structure by the Type of Handout They Received. Based on Butler &amp; Britt, 2011

Condition	Argument revisions	Global structure revisions
No handout	0.78	0.89
Revision handout only	1.00	1.77
Argument handout only	2.23	1.88
Both handouts	1.61	1.96

to quasi-experimental analysis: they might easily have found their handouts made no difference.

Finally, a third study takes a slightly different quasi-experimental approach. Unlike the earlier two studies, the goal of this project was not to test a teaching intervention but rather to test an assumption my teaching is based upon. One challenge I have always faced in my writing classes is how to respond to errors made by my international students. My practice has long been to hold international students to the same standards of content, logic, and organization as their American-born and raised peers, but to relax my standards for linguistic correctness. However, I have always felt uneasy about this double-standard. Could I be doing international students a disservice if their future employers insist on linguistic perfection?

To determine whether potential employers (a) recognize errors typical of non-native English speakers and (b) judge these writers differently than native speakers, my colleagues and I conducted a survey in which recruiters from our university responded to three different versions of an email request. Table 18.2 shows that these potential employers reported being far less bothered by errors typical of non-native English speakers than they were of errors made by native speakers—and both types of errors were preferable to errors of tone and politeness. Moreover, these results are further supported by open-ended comments in which 30% of participants volunteered (without explicit prompting) that they were more forgiving of errors by non-native speakers.

These findings not only help validate my own teaching practice, but provide data that I can point to when faculty and administrators in other departments across the university wonder why students do not exit our classes error-free. I use this study to help argue that it is unrealistic to expect students from Asian-speaking countries to write perfect English after only a few years in this country and that, moreover, people outside the university recognize and act upon this fact. I explain that our writing classes appropriate focus on teaching students proper rhetorical

Table 18.2. Proportion of Potential Employers Who Ranked Each Email as Most and Least Bothersome. Based on Wolfe, Shanmugaraj, and Sipes, 2016

Email condition	Ranked most bothersome	Ranked least bothersome
Impolite email	74.0%	14.5%
Email with errors typical of a Native English Speaker	18.5%	21.4%
Email with errors typical of a non-Native English speaker	7.5%	64.1%

conventions—such as tone and politeness—since these will have a greater impact on students' success.

Thus, quasi-experimental research provides powerful insights into our teaching practices. It can help us select teaching methods and materials, identify potentially counter-productive practices (such as giving students two handouts instead of one), and justify our pedagogical assumptions—both to ourselves and to stakeholders outside of our departments. This research is practical, useful and applied. It can lead us to challenge old assumptions and generate new insights.

Yet, despite its potential to transform practice, quasi-experimental research is rarely published. In an overview of research published between 1999 and 2004, Juzwik and colleagues (2006) found that, out of 4,739 articles related to writing studies, only 3 percent involved quasi-experimental designs. Likewise, a more recent analysis limited to a single journal (Driscoll & Perdue, 2012) found that only four of the 270 articles published in the *Writing Center Journal* between 1980 and 2009 relied on quasi-experimental research.

Why this dearth of quasi-experimental research? While logistical factors—including lack of training, time and funds—undoubtedly play a role, I want to focus here on ideological resistance. Having performed quasi-experimental research for over 20 years, I frequently encounter critics who suggest that using quantitative data to make arguments about pedagogy is somehow antithetical to the values of writing studies.

As a case in point, a number of years ago I attended the Research Network Forum at the College Composition and Communication Conference. As one of the established researchers at a table, I listened as one graduate student spoke with passion about a new way of teaching students to paraphrase, summarize, and cite correctly. After listening to her talk, I asked if she ultimately wanted to claim that her approach was a more effective teaching technique than the approaches commonly used by other instructors at her institution. She enthusiastically agreed and

seemed pleased that I understood her goals. I then suggested that if she wanted to persuasively claim that one approach was better than another she might consider a quasi-experimental design, and I sketched out several possible methods she might use to collect relevant data.

When I stopped talking, the mood around the table was slightly aghast. After a polite silence, someone else suggested a very different project: one that would involve collecting data but that would not in any way enable her to compare her technique against the status quo. The research question thus became: what do students in a classroom using this technique do—without any reference to a baseline of what students did without her instruction or any attempt to compare her instruction to more common methods. If this student’s goal (as she claimed) was to advocate for a particular approach, the research methods she was gravitating toward would not allow her to do this.

Where does this resistance come from? Why would someone be so opposed to a method that they would be willing to abandon a central—and very useful—research question without a second thought? While I do not have a complete answer to this question, I would like to focus on two forms that this ideological resistance to quasi-experimental research takes in writing studies. I term these two ideologies the evil empire argument and the reductive argument.

## The Evil Empire Argument

The “evil empire” argument equates the tools and aims of quasi-experimental research with externally imposed assessment. In this ideology, quasi-experimental research becomes something that “they” make us do. It is externally imposed and serves an illegitimate agenda that threatens to destroy what “we” most value in the classroom.

As an example of the evil empire viewpoint, I cite several quotes made over the years on the WPA listserv. Although these conversations are archived and publicly available, I have left off the names of the writers, who may feel uncomfortable having what they perceived as informal griping session reproduced in a more formal venue: after all a listserv has different requirements for what “counts” as a contribution than a peer-reviewed publication. Each quote is from a different individual; the emphasis is mine:

I would like to make the suggestion (which will be wildly unpopular, no doubt) that any writing assessment tool or procedure designed to quantify student writing should be seen as a practice that developed in response to unreasonable institutional demand ... It doesn’t matter if an individual teacher designs one for her own purposes. **The**

basic structure of the tool was created in response to the unreasonable institutional demand that writing be quantified. (WPA listserv, Sept 26, 2010)

The pressure ... is to do the kind of research that's valued by the admin culture. Empirical, statistics-driven, quantitative. Too often, such **empirical research becomes a reductive validation for bean counters** to validate programs with funding, or punish them for teaching that the admins view as "inefficient." (WPA listserv, June 5, 2012)

People say "empirical" to conceal truth or privilege certain research methods. It is **utilized to maintain beliefs in the primacy of Western ideology**. Empire-call indeed! ... The word is used to assert supremacy in method. I often hear people say they want "empirical data" to devalue qualitative work, or to ensure that criticism will not be considered as rigorous as a statistical method. (WPA listserv, April 7, 2015)

Although these writers do not necessarily specify the kinds of empirical or quantitative research they are discussing, the quasi-experimental studies I described above would certainly fall under the methodologies they are criticizing. In this "evil empire" critique, quasi-experimental research becomes conflated with the pressures of externally imposed assessment that will, in turn, be used against those of us who teach to best serve our students.

Even those who advocate in *favor* of quasi-experimental research often end up invoking this evil empire perspective by suggesting that the only reason we would do this kind of research is to persuade external stakeholders. Doug Hesse (2009), for instance, has called for empirical research that can help us convince outside audiences to accept our methods and core beliefs. Hesse clarifies that this call for empirical research is on "rhetorical, not epistemological" grounds. The rationale in such justifications is that quasi-experimental research is an unpleasant pill that we swallow only because it is required by external forces that we must keep at bay. The motivation for quasi-experimental research is thus purely external and strategic—divorced from the research we do to advance our own epistemological beliefs or practices.

My position is quite different: we should engage in quasi-experimental research, not because we are forced into it, but because it is instrumental in interrogating our beliefs and advancing our practices. Take, for instance, Table 18.1 above. Butler and Britt's study shows that a two-page argument handout, without any accompanying instruction, led to dramatic changes in writers' revision practices. This is a remarkable finding. I have spent countless hours developing similar classroom materials that seem to have little effect on students. Butler and Britt's handout is different. Moreover, their study shows us that, in some cases, one handout may be better than two (i.e., the argument handout alone led to more revision than when paired with a second, revision handout). Upon reading this study,

I incorporated elements of Butler and Britt’s well-conceived handouts into my own practice and gave myself a needed reminder not to inundate students with too many materials or options at once. It is hard to see how a study like Butler and Britt’s could be used against us.

Likewise, the study of non-native English speaking errors in Table 18.2, while useful for advocating for certain practices, was also instrumental in reassuring me that I was doing the right thing by my international students. If the potential employers in this study had failed to make allowances for non-native speakers’ errors, I would have needed to do some soul-searching.

My point here is that quasi-experimental research is useful—not because we need to appease administrators—but because it has epistemological value in interrogating our own beliefs and practices. We conduct such research because we want to know and learn and improve. Rather than pitting us as pawns in a match against nefarious, bean-counting administrators, quasi-experimental research can invigorate our core practices.

## The Reductive Argument

The second major charge levied against quasi-experimental research is that it is reductive. In this critique, quasi-experimental research is flat and decontextualized. This flatness is opposed to the humanistic, situated knowledge that most compositionists see as core values of our field. I again, turn to listserv comments to illustrate this perspective.

I have absolutely no faith in empiricism in determining the effectiveness of classroom or other instruction ... The variables are entirely too great. Empiricism works in the laboratory, in cages and mazes, often to false result, but in real life? A classroom, any encounter between a teacher and a group of students, **is too wildly organic to ever pin down an empirical truth** anywhere outside the researcher’s already determined mind. (WPA listserv, Jan 6, 2011)

Too often empirical studies take some tiny feature out of context .... Of course they have to do that, because empiricism works in such tiny steps, **but the whole process seems kind of reductionistic**. Plus, the more rigor, the more reductionism (ATTW listserv, Oct 9, 2009)

These criticisms hinge on the belief that real life is too variable, messy, and nuanced to ever be represented by something as seemingly flat or “pinned down” as a series of numbers. To reduce people or their behaviors to quantitative values is a disingenuous or, at best, misguided, endeavor.

The problem with such critiques is that they imply that there is some form of research—some way of talking about our students or classrooms—that is not reductive. But, as critical theory over the past century has taught us, language itself is reductive. Language requires us to reduce the messiness of our lived reality to shared, social constructs. For instance, if I use the word “tree,” I am reducing plant life as varied as a fir tree, a weeping willow, an apple tree, and a palm tree to a common set of characteristics. The word “tree” reduces the differences between these various vegetative forms to a very simplistic set of common denominators—namely, trunks, branches, and leaves. Yet almost no one would criticize a word as useful as “tree” simply because it reduces the considerable nuances among fir trees, weeping willows, and palm trees. In fact, the word “tree” is useful *because* it is so reductive—because it allows us to group a large number of natural phenomenon based on shared characteristics.

Just as language can be useful when it is reductive, so can research. To fully appreciate the power of the reductive, we first need to get beyond the naïve notion that there is some form of research or communication that is *not* in some way reductive. In other words, it is impossible to talk about concepts such as “students,” “gender” or “curriculum”—or any other keyword in writing studies—without reducing differences across (and even within) individuals and contexts. The question, then, is not whether we are reductive—it is impossible not to be so—but whether we are reducing reality in a way that is principled and suited to our purposes.

Of course, I have been using a definition of reductive as “simplified, made less complex.” There is, of course, a second, more pejorative definition of reductive as “oversimplified and naïve.” Quasi-experimental research can definitely become oversimplified and naïve when it is poorly designed or its findings are overgeneralized to make claims that far over-reach the limits of its evidence. But this is not a unique problem to quasi-experimental research. Theoretical projects can likewise be oversimplified and naïve. The fact that something can be done poorly should not be used as a reason for refusing to do it at all.

My goal here is to reclaim the word “reductive.” Researchers simplify and reduce complexity because doing so reveals patterns that might not otherwise be discernable. If such reductivity is done in an ethical manner that tries to reduce bias, it can provide a powerful lens yielding unique insights. I like to think of online maps as a useful analogy. If I am heading to Dartmouth College and want to know what the library looks like or where there might be a shady spot to enjoy my lunch or a cup of coffee, I will want to study the zoomed-in view on the left of Figure 18.2. This view provides useful detail that can help me make important, local decisions. However, if I want to know how to navigate from the library to the

Dartmouth Hanover Inn, I will likely prefer the map on the right (Figure 18.2). This map is a reductive version of its sibling on the left: many features have been flattened or eliminated in order to bring other key features—namely streets—into the foreground.

These two views answer different questions: what does my destination look like vs. how do I get there? We want both views and to say that one view is inherently better than the other is to create a false binary. Just as we want maps that can afford us different views and different levels of detail, so too we should want research that can provide us with different ways of looking at our students and our curriculum. Thus, if we return to Table 18.1, we see information from over 100 students whose identities have been reduced to foreground a key feature: the type of handout they received. This simplification reduces nuance, but also lets us see patterns that might otherwise be obscured—for instance, that the argument handout alone was more effective than when paired with the revision handout.

Good quasi-experimental research is self-conscious and transparent about how it is reducing reality. For instance, good research will take care to check whether or not the groups being compared are, in fact, equivalent on key characteristics such as age, gender, and prior experience. Research that rates products will use multiple raters who are unfamiliar with what the study is testing and will report how consistent those raters are with one another. Good researchers note the limitations of the way that they have reduced reality and encourage others to see if similar results might occur in different contexts. This research is still reductive, but it is reductive in a principled, informed way. Reducing complexity allows us to provisionally

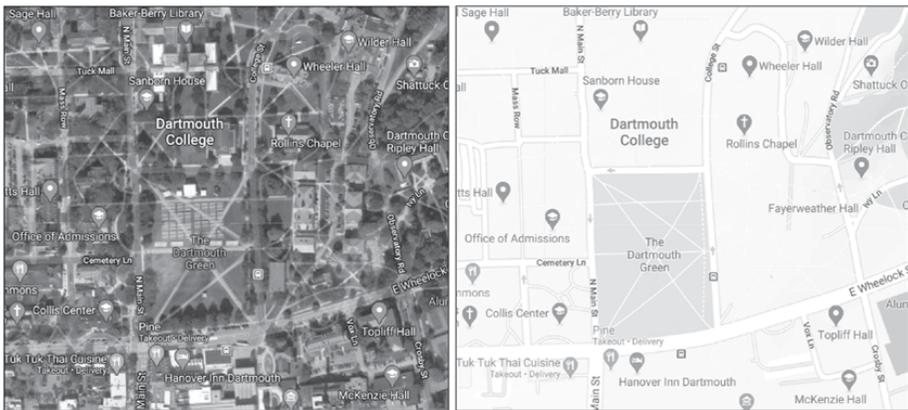


Figure 18.2: Two different views of the terrain surrounding Dartmouth College. (The view on the right is more reductive than the one on the left but not any less useful.) From maps.google.com, retrieved 22 May 2020.

answer questions that cannot be explored if our perspective is always zoomed in to allow for the utmost complexity and nuance.

## In Conclusion

Quasi-experimental research is a powerful tool that can help writing instructors challenge assumptions and generate new insights into their teaching practices. Rather than a research method we use only to appease the evil empire of bean-counting administrators, it is research that we can, and should, conduct to inform our own practices. Like all research, quasi-experimental research is reductive. Its ability to reduce complexity enables us to throw certain classroom features and patterns into relief—to see the forest rather than just the trees. Like all research, quasi-experimental research can be done poorly and can be used to make naïve and exaggerated claims. However, when done well, it allows us a principled and useful lens into classroom practices. Writing studies researchers need to overcome their uncritical rejection of the reductive and instead embrace the alternative perspectives that quasi-experimental research uniquely affords.

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Maintaining the focus on quantitative research, David Galbraith discusses his exploration of the cognitive processes involved in writing, a type of research that might in turn shed light on the results obtained by researchers like Wolfe (Chapter Eighteen). Galbraith proposes a dual-process model of writing that reconciles the external (social, audience, functional) forces at work in writing, with internal (neural, cognitive) aspects. Exploring the tension between problem-solving and previous dual-process models of writing, he outlines an alternative dual-process model consisting of a dynamic interaction between implicit and explicit knowledge, and describes empirically testing this model at the level of neurological processing.

Studying keystroke logging reveals two independent processes—implicitly organized spontaneous sentence production and explicitly organized construction of the global structure of the text, a result that underscores the relationship between each cognitive process and the function of writing as *discovery*. Further, removing visuals during writing offers a neurological distinction between the explicit organizing process and the implicit sentence production process. Galbraith discusses the implications of bridging the cognitive/social divide in writing research, and calls for further research to unite the two perspectives.

In her response, Sandy Tarabochia considers implications of Galbraith's work for writing instructors and academic writers. She examines the finding that at times, a writer's increased understanding can be inversely related to the quality of

text produced. (In relation to Tarabochia's discussion of time, readers may wish to consult June Griffin's response to Deborah Brandt (Chapter Sixteen), and Ann Shivers-McNair's response to Clay Spinuzzi (Chapter Seventeen).) Neurological aspects of writing are further explored in Chapter Twenty by Paula Tallal and Beth Rogowsky, who examine cognitive-development-based interventions.

The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows G, Q, R, and K. Readers are encouraged to seek other connections.

# Writing as Understanding

DAVID GALBRAITH

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This chapter is based on a talk given at “College Writing: from the Dartmouth ‘66 Seminar to Tomorrow” (Dartmouth ‘16 Conference), the conference celebrating the 50<sup>th</sup> anniversary of the 1966 seminar (Dartmouth ‘66 Seminar) that had a foundational impact on the teaching of English and research into the writing process. I want to focus on some of the themes raised by a major contributor to that original symposium—James Britton—whose response to the question of “What is English?” sparked a shift in a new direction, defining writing as “a space where we should encourage students to use language in more complex and expressive ways,” and emphasizing process rather than only product. Along with other contributors, and as developed in later work (Britton et al., 1975), this inaugurated research into the writing process and its functions. For present purposes, I will focus on what Britton called “shaping at the point of utterance,” (1982, p. 142) and its role in discovery through writing.

Britton et al. (1975) distinguished between three main categories of writing—transactional, expressive, and poetic—and saw these as developing out of a basic expressive form of writing. This form of spontaneous expression was a crucial but neglected ingredient of the writing process. It was not just a characteristic of young children’s initial attempts at formulating their thoughts in writing—something to be refined and perhaps abandoned as they came to a more mature understanding of the nature of written text. Rather, he regarded it as a central component

of mature writing: “Successful writers adapt that inventiveness and continue to rely on it rather than switching to some other mode of operating” (Britton, 1982, p. 140). Furthermore, such spontaneous formulation of thoughts in words acts “primarily as a stimulus to *continuing*—to further writing, that is—and not primarily a stimulus to *re-writing*” (Britton, 1982, p.140), and this depends crucially on re-reading previous text, “it is a serious obstacle to further composition not to be able to re-read, to get ‘into the tramlines’ again” (Britton, 1982, p.140). For Britton, this spontaneous shaping of thought in our utterances was the same kind of “moment by moment interpretative process by which we make sense of what is happening around us” (Britton, 1982, p. 141). Britton goes on to suggest that shaping at the point of utterance is based upon our pre-representational experience, which in Gendlin’s (1962) words “is the felt apperceptive mass to which we can inwardly point.” “It is fluid, global, charged with implicit meanings—which we alter when by expressing them we make them explicit” (Britton, 1982, p. 142).

Britton summarizes the processes involved in shaping at the point of utterance as:

First, drawing upon interpreted experience, the results of our moment by moment shaping of the data of the senses and the continued further assimilation of that material in search of coherence and pattern [...] and, secondly, seems to involve by some means getting behind this to a more direct apperception of the felt quality of ‘experiencing’; by which means the act of writing itself becomes a contemplative act revealing further coherence and fresh pattern (Britton, 1982, p. 143).

He concludes by saying that,

To put it simply, I see the developed writing process as one of hearing an inner voice dictating forms of the written language appropriate to the task in hand. [...]. If it is to work this way, we must suppose that there exists some kind of *pre-setting mechanism* which, once set up, continues to affect production throughout a given task. The difficulties many writers feel in [...] “finding one’s own voice” in a particular piece of writing [...] seem to me to supply a little evidence in favor of such a ‘pre-setting mechanism’ (Britton, 1982, p. 145).

The second aspect of the Dartmouth ‘66 Seminar that I want to consider is the shift that it initiated towards the process of writing as opposed to the product. One can distinguish two senses of process. One is a focus on the individual cognitive processes involved in writing, as exemplified in Hayes and Flower’s model (Hayes, 2012; Hayes and Flower, 1980). The other is the broader sociocultural forces which determine the functions of writing in society and the influences that individuals are exposed to as their cognitive systems develop within society (Bazerman, 2016; Prior, 2006). These two senses have led to a general social/cognitive divide

within the field. Following an initial focus on the cognitive processes within the individual, in which the social and cognitive processes were combined in socio-cognitive models of writing (Flower, 1994), these two perspectives have tended to be applied independently. Cognitively-inspired research has focused on the mechanisms underlying different elements of the writing process; socio-culturally oriented research has largely taken the cognitive processes involved for granted, and focused instead on the origins of, and participation within, locally situated forms of writing. This divide has also been reflected in the methods used in writing research: cognitively oriented research has tended to use quantitatively analyzed experimental designs; socio-cultural research has tended to use qualitatively analyzed observational methods. I will argue in this chapter that there is a need for a rapprochement between these two perspectives in writing research.

The chapter is structured as follows. First, I will describe a model of writing as a knowledge-constituting process and illustrate how this model accounts for both shaping at the point of utterance as described by Britton and the socio-cultural context of writing. Second, I will describe an experimental study inspired by the dual-process model, illustrating methods and summarizing findings. Finally, I will discuss the implications for writing research and for the reconciliation of the social-cognitive divide.

## Writing as Problem-Solving

In Hayes and Flower's (1980) model of the writing process, writing was characterized as a form of problem-solving, in which a set of basic writing processes were used to satisfy the writer's rhetorical goals. The three basic writing processes were specified as: (1) Planning, in which the writer set goals for writing, and generated and organized ideas in order to satisfy their goals; (2) Text production, in which writers translated their ideas into words; and (3) Reviewing, in which writers read and edited previously produced text. The key feature was that these three processes were characterized as operations that could be applied at any stage during writing, rather than as separate stages of the writing process. Individual differences in how writers combined these processes were captured as different configurations of a monitor, reflecting writers' preferences for different ways of managing cognitive load. These basic cognitive processes operated on the writer's knowledge in long-term memory, and were applied in response to the writer's goals for the writing assignment in the context of the developing text.

The latest version of the model (Hayes, 2012) (see Figure 19.1) retains the spirit of the original model, but includes important modifications. Most importantly,

the basic cognitive processes of planning and revision have disappeared. Instead, the basic writing processes are characterized as: Proposing ideas; Translating ideas into language; Transcribing language into its written form; and, Evaluating ideas, language and text. In addition, these are no longer treated separately from the task environment, which is now incorporated as part of the writing process. Arguably, this makes the writing process more context-dependent than in the original model. Planning and revision are now regarded as combinations of more elementary processes, varying in form depending on the writers' context-dependent goals. Finally, rather than a fixed monitor controlling how operations are combined, the model postulates a control level responsible for selecting operations as they are needed in the task context.

Despite these changes to the original model, one key feature has remained constant. Knowledge is still conceived of as fixed ideas to be retrieved from long-term memory and manipulated in working memory. This underlies the distinction that Bereiter and Scardamalia (1987) make between knowledge-telling and knowledge-transforming approaches to writing. The distinction is designed to reflect the fact that older and more expert writers spend more time elaborating the definition of the rhetorical task, plan more elaborately, and revise more extensively (Bereiter & Scardamalia, 1987; Hayes & Flower, 1986; Rijlaarsdam et al., 2005).

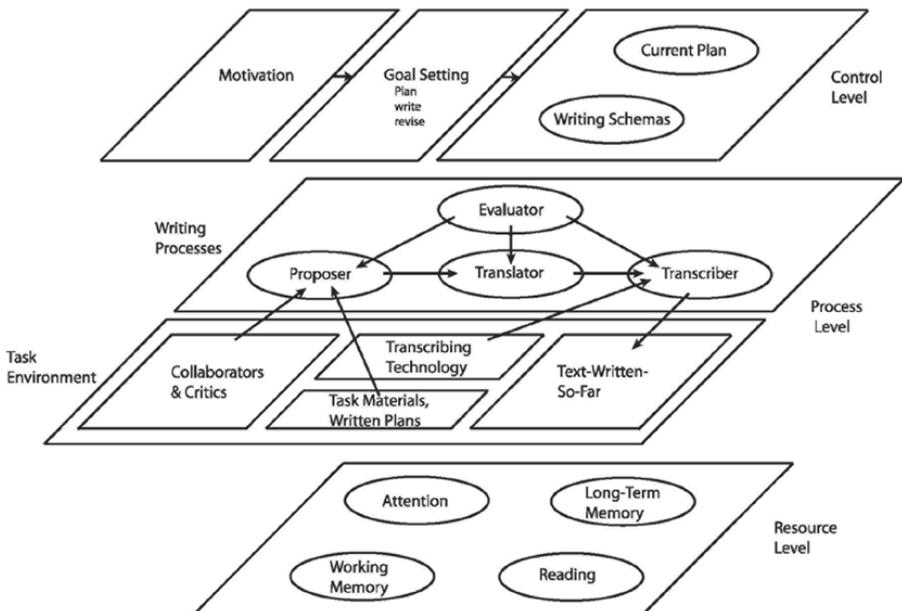


Figure 19.1. Hayes's revised model of the Writing Process. From Hayes, 2012, p. 371. Reproduced by permission of SAGE.

Knowledge-telling involves the retrieval of content with minimal adaption to the rhetorical context; knowledge-transforming is a goal-directed process in which ideas are retrieved in response to, and evaluated in the light of, rhetorical goals. The result of knowledge-transforming is the “joint evolution of the composition and the writer’s understanding of what he or she is trying to say” (Bereiter & Scardamalia, 1987, p. 304). According to this model, “shaping at the point of utterance” depends crucially on how much writers engage in deliberate problem-solving as they formulate text (Flower & Hayes, 1984). If they simply retrieve ideas spontaneously the result should be knowledge-telling.

## Reconceptualizing Knowledge

Galbraith (1999) suggested that the reliance of problem-solving models on fixed internal representations made it difficult to explain how novel content could be produced during writing. At most, writers might select content *differently* through applying rhetorical goals to the retrieval of ideas, but this would involve determining the contextual relevance of their thoughts rather than of creating new thoughts. He suggested instead that knowledge is represented in a distributed network of sub-conceptual units and that content is synthesized rather than retrieved during writing.

This claim derives from connectionist models of knowledge representation, in which information is represented as patterns of activation across interconnected units analogous to neurons (Rumelhart et al., 1986) rather than as separately represented concepts. To illustrate the key features of these networks, consider the simple network represented in Figure 19.2. This consists of three layers of units linked by connections represented as arrows. The input layer represents the pattern of activation from the external environment and varies depending on the nature of the stimulus. This could, for example, be the pattern of activation on the retina in response to a visual stimulus. Each unit passes activation to all the units in the hidden layer, with the amount of activation depending on the strength of the connection with the next unit. Each hidden-layer unit accumulates the activation it receives from the input units, and then passes activation to the units in the output layer according to the strength of the connections it has with them. The pattern of activation at the output layer represents the response of the network to input pattern, determined by the varying strengths of the connections within the network.

Learning in such networks involves modifying the strength of the connections between units so that they produce the appropriate output for a given input. The key feature is that the same connections are used to produce the full range

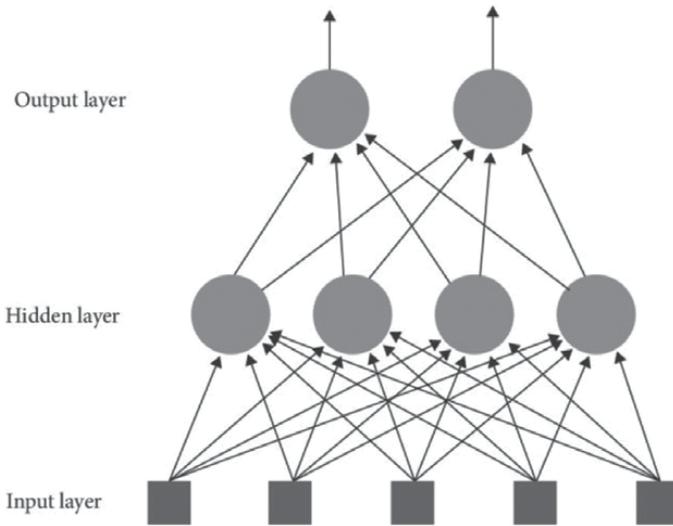


Figure 19.2. A simple feed-forward network. From Galbraith, 2009, p. 14. Reproduced by permission of the author.

of outputs to the network's inputs. In learning to produce the correct outputs for a range of different inputs, the network has to find a single set of connection strengths capable of producing different responses to different inputs. The network's knowledge of a domain is represented implicitly as a fixed set of connection strengths between units, which enable it to produce contextually appropriate outputs in response to varying inputs, rather than as a fixed set of explicit representations which are retrieved from memory in response to external cues. The hidden, conceptual units do not represent anything permanently, but instead take up fleeting patterns of activation in the course of processing information from the environment.

Although such networks provide a mechanism for the rapid production of contextually appropriate content, they suffer from the problem that in assimilating new content to existing knowledge, they can lose track of individual past experiences. According to Complementary Learning Systems (CLS) theory (Kumaran et al., 2016; McClelland et al., 1995), two interacting systems are therefore required to account for learning in the brain. The first is a semantic system, located in the neocortex, and characterized by O'Reilly et al. "as a distributed, overlapping system for gradually integrating across episodes to extract latent semantic structure" (2014, p. 1229). This operates in the manner described above. The second is an episodic system, located in the hippocampus and characterized "as a sparse, pattern-separated system for rapidly learning episodic memories" (O'Reilly et al.,

2014, p. 1229). This provides learners with a record of individual experiences, and ensures that these are not subsumed within our semantic knowledge of the world.

Galbraith (1999) proposed that this sub-conceptual form of representation provided a natural account of how novel ideas could be produced through synthesizing content from semantic memory in different contexts, while at the same time enabling writers to recall, and reflect on, individual ideas stored in episodic memory.

## A Dual-Process Model of Writing

In the dual-process model (Galbraith, 2009; Galbraith & Baaijen, 2018), content-generation is treated as an interaction between an implicitly controlled knowledge-constituting process and an explicitly controlled problem-solving process rather than as a matter of retrieving ideas from long-term memory. Furthermore, the different organizing principles of these processes lead to a fundamental conflict in writing, different in form to the cognitive overload invoked by classical models of writing.

### The Knowledge-Constituting Process

The knowledge-constituting process has the characteristics of a system designed for action (Galbraith & Baaijen, 2015, 2018). It is designed to accumulate past experiences and represent them in a way that enables knowledge to be brought to bear instantly in a new context, without the need for an explicit review of content in long-term memory. Figure 19.3 shows a sketch of this process.

In this model, the writer's knowledge is represented by the fixed set of connections between units within a constraint-satisfaction network, which Galbraith (1999) describes as the writer's *disposition* towards the topic. The first important feature is that the writer's disposition does not explicitly represent a writer's beliefs as "ideas" to be retrieved from memory, but rather synthesizes these, in context, in response to the topic and writing-task specifications. This forms the input to the language production system (A in the diagram). However, because of the limited capacity of the language system, this is not a matter of direct translation but rather a speculative attempt to capture the message represented across the units in the writer's disposition. This results in an initial response (B in the diagram). The second important feature is that this output is fed back to the writer's disposition (C in the diagram), which results in a new synthesis of content. This is output in a new utterance (D in the diagram) responding to the combined effect of the writing

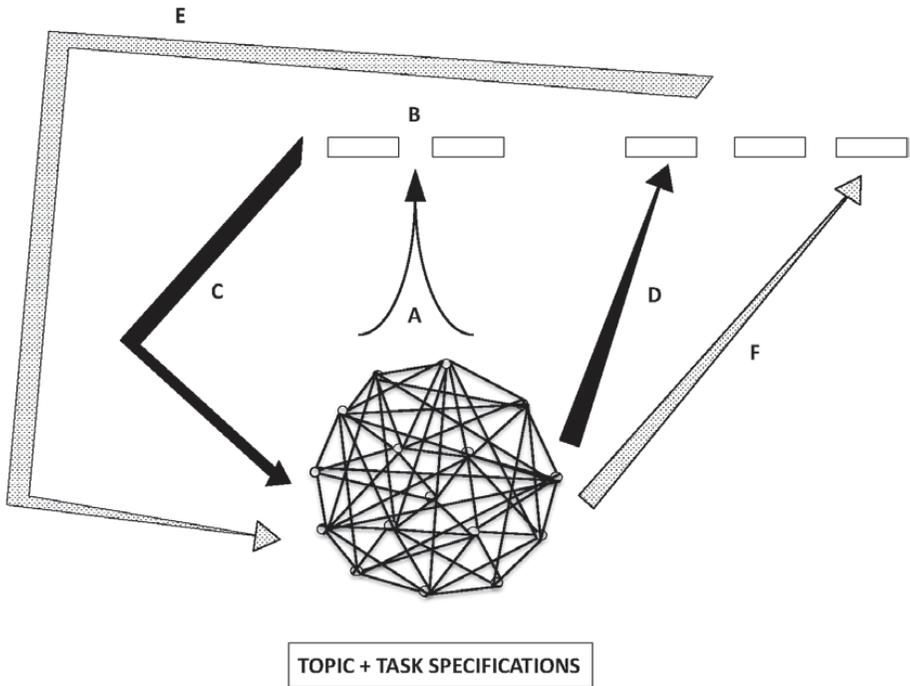


Figure 19.3. Writing as a knowledge-constituting process. From Galbraith & Baaijen, 2018, p. 244. Reproduced by permission of the authors.

prompt and the previously produced text. Further content is produced as successive cycles of feedback (E) and output (F). The result is a self-moving process in which the writer's understanding is gradually constituted in the text.

The knowledge-constituting process is assumed to operate best when writers synthesize their thought in explicit, connected propositions and when successive propositions are produced as dispositional responses to preceding text. The extent to which this leads to a change in the writer's explicit knowledge depends on whether the content it produces corresponds to existing content in episodic memory. When it does, no development of knowledge will occur; when it does not, the writer will experience a development in understanding. Finally, because the structure of the text is dispositionally determined, there will be no necessary relationship with the rhetorical quality of the text.

### The Knowledge-Transforming Process

The knowledge-transforming process involves the retrieval of explicit content stored in episodic memory, which may be manipulated in working memory to

satisfy rhetorical goals. This process requires ideas to be represented in a fixed and abbreviated form (e.g., as notes) so that the limited-capacity, working-memory system can focus on evaluating their compatibility with rhetorical goals. Knowledge-telling occurs when the writer retrieves content without considering how to adapt it to rhetorical constraints, whereas knowledge-transforming involves a more goal-directed search and evaluation of content. Although the knowledge-transforming process does not lead to the formulation of new content, the rhetorically-guided reorganization of ideas contributes to the development of the writer's knowledge by creating a more coherent object in memory. Furthermore, because it is directed toward rhetorical goals, it is related to better-quality text.

### The Two Processes in Combination

Both processes are necessary for effective writing and have complementary functions. The knowledge-transforming process ensures that content is coherently organized to satisfy rhetorical goals and, when content is not explicitly available in episodic memory, can set this as a goal for the knowledge-constituting process. The knowledge-constituting process is required to provide content reflecting the writer's understanding, but then needs to be explicitly organized to satisfy rhetorical goals. However, because of the contrasting principles under which the two systems operate, there is a potential conflict between them. Dispositionally generated content, which is necessary to constitute the writer's understanding, may disrupt the rhetorical organization of the text; explicit organization to maintain rhetorical goals may prevent the writer's understanding from being constituted in the text. Control processes in writing are not just about managing the resource demands of different cognitive processes but are about reconciling these conflicting goals. Successfully managing this conflict enables the writer to create a coherent knowledge object, which satisfies rhetorical goals but also captures the writer's implicit understanding of the topic.

### The Dual-Process Account of Shaping at the Point of Utterance

I want to argue that the knowledge-constituting component of this model provides an account of the mechanisms involved in shaping at the point of utterance (Britton, 1982, Britton et al., 1975). Britton et al. suggest that "A writer draws on the whole store of [their] experience, and [their] whole social being, so that in the act of writing [they] impose their own individuality" (1975, p. 47). The fixed set of connections constituting a writer's disposition is derived precisely from the totality of that writer's unique learning history. Furthermore, insofar as content

is produced through the knowledge-constituting process, the writer's individuality will be reflected in their writing. The writer's disposition also provides a formal specification of Gendlin's "felt apperceptive mass" and Britton's "pre-setting mechanism." In addition, the speculative nature of linguistic formulation and the internal feedback from utterance to disposition explain the role of the spontaneous formulation of thought in providing "a stimulus to continuing." It is the partial nature of the attempt to capture the writer's disposition which necessitates the production of further utterances to fully capture the writer's understanding. It is in this sense that writing is the same kind of "moment by moment interpretative process by which we make sense of that is happening around us" (Britton, 1982, p. 41).

## Testing the Model: Empirical Findings

The claim then is that the knowledge-constituting model provides a theoretical account of "shaping at the point of utterance" as described by Britton. Furthermore, once incorporated in the dual-process model, constraints are specified on the conditions under which discovery through writing occurs, and predictions are made about the relationships between discovery and text quality. Three claims are made. First, the development of understanding during text production is a consequence of a spontaneous process rather than a controlled process. Second, this is only one component of the development of understanding: as described by the knowledge-transforming model (Bereiter & Scardamalia, 1987), explicit revision of proposed content can also lead to developments of thought, and hence two independent processes will contribute to the overall effect. Third, discovery associated with these two processes will have different relationships with text quality: knowledge-constituting, which is driven by the writer's implicit disposition towards the topic, tends to disrupt text quality; knowledge-transforming, which is directed towards rhetorical goals, tends to promote text quality.

Previous research has tended to use the term discovery to refer to how content is produced, and to take for granted the effects on the writer's understanding (Bereiter & Scardamalia, 1987; Flower & Hayes, 1980). It has relied largely on verbal protocols to identify writing processes, and hence has characterized sentence production processes as undifferentiated instances of a general "translation" process, making it impossible to distinguish the effects of different forms of sentence production. Baaijen and Galbraith (2018) addressed these issues by (1) using keystroke-logging to identify writing processes, enabling them to distinguish different forms of sentence production, and (2) asking writers to rate their

understanding of the topic before and after writing, enabling them to assess how these processes were related to developments in understanding.

Keystroke-logging provides a precise record of the text as it is output, measuring the transition times between key presses, editing of text, and the sequence of these operations (Leijten & van Waes, 2013; Lindgren & Sullivan, 2019). By itself, however, it does not provide direct measures of underlying cognitive processes, and considerable preparation is needed to make a keystroke log interpretable in terms of cognitive processes (Baaijen et al., 2012; Galbraith & Baaijen, 2019). The study by Baaijen and Galbraith (2018) used principal components analysis to identify two independent components of the writing process. These represented separately how individual sentences were produced and how these sentences were sequenced. The *sentence production* dimension distinguished between controlled sentence production at one extreme (lengthy pauses between sentences followed by clean bursts of text, with little revision) and spontaneous sentence production at the other extreme (brief pauses between sentences followed by extensively revised bursts of text). The *global linearity* dimension distinguished between linear text production at one extreme (sentences were produced one after the other with little evidence of recursion) and non-linear text production at the other extreme (sentences were produced recursively, with more revisions of previously produced text) (see Baaijen & Galbraith, 2018, pp. 206–209 for details).

In the experiment, which was ethically approved by the University of Groningen, 78 Dutch university students were randomly assigned to either an *outline planning condition*, in which they had to spend five minutes constructing an outline of the text to be written, or a *synthetic planning condition*, in which they had five minutes to write down a single sentence summing up their overall opinion of the topic. Following these different forms of planning, participants were given half an hour to write a well-structured article for the university newspaper discussing whether “our growing dependence on computers and the Internet is a good development or not.” Keystrokes were logged during writing and the relationships between the measures of sentence production and global linearity with text quality and developments of subjective understanding were assessed.

The first important finding was that spontaneous sentence production was associated with increased understanding, as predicted by the knowledge-constituting model, but only when this was preceded by synthetic rather than outline planning. Figure 19.4 shows the relationship between the sentence production measure and increases in subjective understanding, plotted separately for the synthetic planning and outline planning conditions. (The sentence production scores are plotted one standard deviation above and below the mean of the scale).

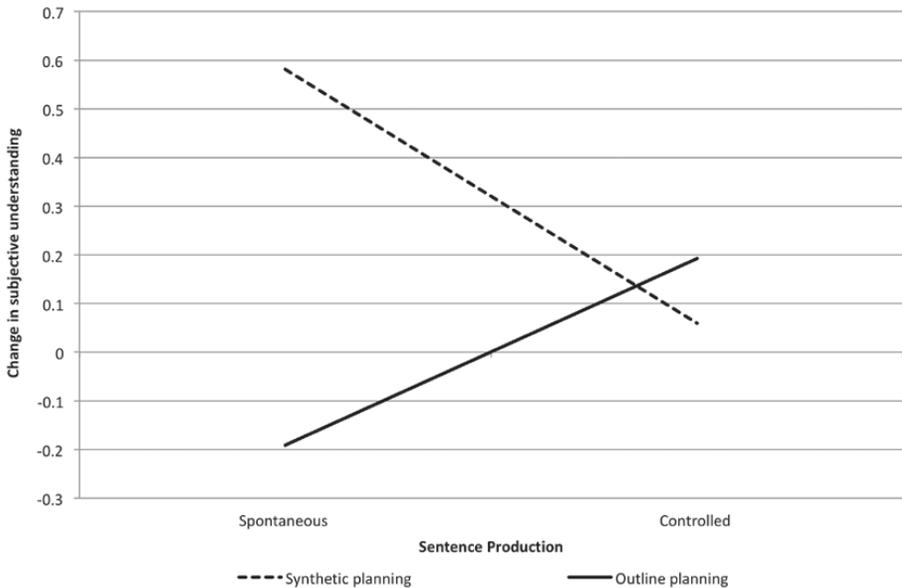


Figure 19.4. Relationship between sentence production and change in understanding as a function of different types of planning. From Baaijen & Galbraith, 2018, p. 212. Reproduced by permission of the authors.

As the figure shows, when writing was synthetically planned, increases in understanding depended on the extent to which sentences were spontaneously produced, and these increases were eliminated when sentence production was controlled. Strikingly, this effect was reversed when writing was outline planned, and spontaneous sentence production was associated with decreased understanding. Baaijen and Galbraith (2018) argue that the key difference between these conditions is that sentence production is controlled by the writer's implicit disposition in the synthetic planning condition but by the pre-determined outline in the outline planning condition. This, of course, is speculation, since keystrokes don't provide direct evidence about the underlying processes. However, the dual-process model does suggest how this could be tested. It assumes that dispositionally-guided sentence production primarily involves the synthesis of content through constraint satisfaction within semantic memory. By contrast, outline-planned sentence production is assumed to involve direct retrieval of explicit ideas from episodic memory. The model predicts therefore that the differential effects of these two forms of spontaneous sentence production should be associated with differences in the relative activation of the neo-cortical and hippocampal regions of the brain. A recent study by Silva and Limongi (2019) suggests that this could be tested by using

reaction time measures of learning combined with functional magnetic resonance imaging (fMRI).

The second important finding was that, as predicted by the dual-process model, increased understanding also depended on how non-linearly text was produced. Writers who produced sentences one after the other, with little revision (knowledge telling), experienced little discovery. By contrast, writers who revised the global structure of the text more extensively (knowledge transforming) were more likely to report increased understanding. This component made an independent contribution to increased understanding, indicating that it was a separate process to the spontaneous sentence production effect—writers who produced sentences more spontaneously did not necessarily engage in more revision of the global structure of the text, and vice versa. Overall, these results were consistent with the dual-process model's claim that two independent processes are responsible for discovery through writing.

Finally, there were several interesting findings about the relationships with text quality. The most straightforward was that, within the synthetic planning condition, the highest quality texts were produced by writers who combined controlled sentence production with greater revision of global structure. By contrast, within the outline planned condition, there were no significant relationships with the writing process measures. Baaijen and Galbraith (2018) suggest that this difference could be attributed to whether or not the writers were able to organize their ideas before writing. In the synthetic planning condition, writers had to organize their thoughts during the draft, and it was the writers who adjusted the global structure of the text, and controlled sentence production, the most, who wrote most effectively. Writers who simply wrote spontaneously and linearly wrote worst. In the outline planning condition, where writers were able to organize their ideas before writing, however, variations in writing processes mattered less and the quality of the text was determined by how well writers planned in advance of writing. This explanation is consistent with Kellogg's research investigating how outlining affects the distribution of processes during writing (Kellogg, 1987, 1988, 1994), and with the emphasis on strategic processes in problem-solving approaches to writing.

Given that these results for text quality are generally consistent with problem-solving models, what do they say about the further claim that problem-solving processes are also responsible for discovery through writing? The results discussed so far suggest that this claim is only partially correct. Although the characteristics of the global revision process do indeed seem to be consistent with a knowledge-transforming account of discovery, and as predicted, this is associated with higher text quality, there is also evidence for a more spontaneous knowledge-constituting

process, similar to shaping at the point of utterance, which is associated with the development of the writer's understanding, but which disrupts the quality of the text. Furthermore, Baaijen and Galbraith's (2018) analysis of the relationship between the development of understanding and text quality suggests further ways in which a knowledge-transforming account is inaccurate. Figure 19.5 shows the relationships between text quality and the development of understanding for the global revision process, plotted separately for the outline and synthetic planning conditions. (Text quality scores are plotted one standard deviation above (high) and below (low) the mean).

Consider first the outline planning condition shown on the right-hand side of the figure. Here greater increases in understanding are associated with higher levels of global revision (the dashed line representing less linear writing). However, this gain is negatively correlated with text quality: higher levels of global revision are only associated with higher-quality text when they do not lead to increased understanding. This implies that revision is essentially rhetorical in form: the text is changed, presumably to make it clear for the reader, but the writer's understanding remains the same. When, however, the outline-planning writer does experience increased understanding, they only do so at the expense of the quality of the text.

By contrast, in the synthetic planning condition, higher levels of global revision are associated both with increases in the writer's understanding and higher text quality. It appears that, in this condition, where the knowledge-constituting process is allowed to take place (see Figure 19.4, above), global revision not only further develops the writer's understanding but also enables the writer to create a rhetorically well-formed text. There seem to be two different ways of achieving high-quality text: one is outline planning, in which global revision is restricted to

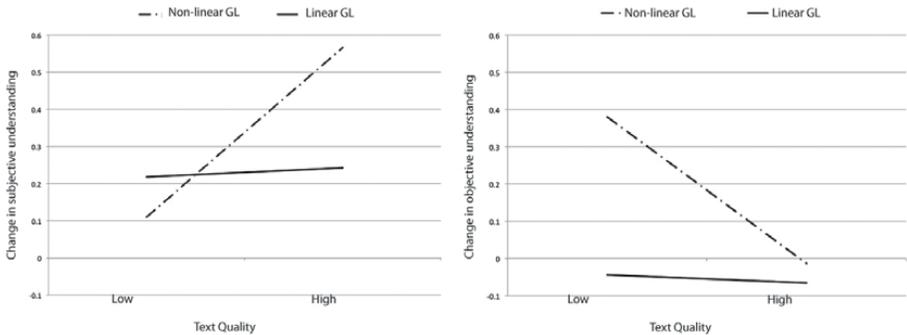


Figure 19.5. Relationship between text quality and change in subjective understanding as a function of global linearity and type of planning. From Baaijen & Galbraith, 2018, p. 214. Reproduced by permission of the authors.

making rhetorical changes; the other is synthetic planning, in which global revision is designed to organize the writer's emerging understanding in a rhetorical form. The key difference is that outline planning suppresses the knowledge-constituting process whereas synthetic planning promotes it.

## Discussion

In this paper, I have argued that the knowledge-constituting model specifies the cognitive mechanisms involved in shaping at the point of utterance. I then located this within a dual-process model of the writing process as whole. This approach equates the “felt apperceptive mass” and “the pre-setting mechanism”—specified by Britton with the *writer's disposition* towards the topic, and formally defines the writer's disposition as the set of fixed connections between units within the semantic system located within neo-cortical regions of the brain. The study by Baaijen and Galbraith (2018) provides evidence for the existence of a process which appears to correspond well with shaping at the point of utterance as described by Britton. This process involves synthetically planned, spontaneous sentence production and, crucially, appears to be suppressed by outline planning.

The main feature that remains ambiguous about this process is the role of visual feedback. Britton (1982) stresses the importance of being able to re-read what one is writing; by contrast, in the dual-process model (Galbraith & Baaijen, 2018), successive propositions are generated as a consequence of inhibitory feedback from previous output to the writer's disposition without necessarily reading the output. The evidence about this is currently rather ambiguous. Although both Galbraith and Baaijen (in preparation) and Silva and Limongi (2019) have found that removing visual feedback reduces the development of understanding, it is unclear which component of the writing process is affected: it may be that these are effects on the knowledge-transforming process rather than the knowledge-constituting process presumed to be involved in shaping at the point of utterance. This aspect of the claim is, therefore, unclear at the moment, and awaits further research. Nevertheless, the most important finding of Baaijen and Galbraith's study (2018) is that outline planning completely eliminates the knowledge-constituting process. This has profound implications, as outline planning is a standard technique taught in schools.

Britton's emphasis on the importance of expressive writing highlights why the apparent suppression of the knowledge-constituting process is important. For him, shaping at the point of utterance was the vehicle by which the writer created *voice* in their writing, and played a vital role in making writing an engaging process

for the writer. It is important to note that emphasizing this is not to deny the social nature of the writing process. The dual-process model claims that the structure implicit in semantic memory—the writer’s disposition—is extracted from the totality of an individual’s learning history, including the social contexts in which learning took place. This structure is profoundly socially determined. Once it has been internalized, however, the immediate process by which a writer’s understanding is constituted in the text is not entirely a social process. Indeed, it is precisely the monologic nature of writing that allows writers to build their own distinctive organization of content. The writer does not have to replace an absent conversational partner with a surrogate in “rhetorical space.” The process is still a struggle between the implicit organization responsible for synthesizing thought and the emerging external organization of the text, but in this struggle the writer has the freedom to find their own individual organization of content. It is the distinctive way in which an individual organizes thought that characterizes a writer’s voice. The definition of the writer’s disposition as the fixed weights in a constraint satisfaction-network, and the account of how, in combination with inhibitory feedback, the disposition controls the synthesis of successive content, explains how a writer can produce text that is both distinctive and internally coherent. Knowledge-constituting is a necessary but not sufficient condition for an individual’s writing to have voice. It follows that, to develop voice in an individual’s writing, one should aim to promote the knowledge-constituting process and the combination of this process with the problem-solving process.

Baaijen and Galbraith’s (2018) findings suggest how this might be achieved. The writers in their experiment had to produce text in a single draft, and hence had to make revisions as they wrote. This meant that they had little time to improve the quality of spontaneously produced text. However, if they were allowed to produce the text over several drafts, focusing initially on exploring their thoughts, and only later on organizing their work into a coherent form, in a manner similar to reverse outlining, they would have greater opportunity to improve the text’s quality. Galbraith and Torrance (2004) found that a crucial ingredient in the success of such a strategy was that, after an outline had been extracted from an initial spontaneous draft, the initial draft should be removed. This enabled writers to write a new draft free from the need to revise a poorly written initial draft and enabled them to produce text of similar quality to that produced by a traditional outlining strategy.

## Conclusion

Classical problem-solving models of the cognitive processes involved in writing do not provide a natural explanation of the more expressive aspects of writing emphasized by James Britton in his contribution to the Dartmouth'66 Seminar. They tend to treat text production as the same kind of deliberate problem-solving process as that involved in reflective thought.

I have argued in this chapter that, although writers can, and often do, engage in the kind of deliberate sentence production processes assumed by classical models of writing, they can also engage in a more spontaneous, knowledge-constituting process (Galbraith, 1999) like that described by Britton in his account of shaping at the point of utterance (Britton, 1982). In particular, connectionist models of cognitive processing (Kumaran et al., 2016; McClelland et al., 1995; Rogers & McClelland, 2014), provide the basis for a theoretical account of the cognitive processes involved in shaping at the point of utterance. When combined with the more explicit problem-solving processes assumed by classical models in a dual-process model of writing (Galbraith & Baaijen, 2018), this approach provides a more complete account of the writing process, capturing both the universal features of the process—the complementary processing systems—and the way in which these combine in particular contexts as a function of individual learning histories.

A key feature of the dual-process model is the claim that discovery is not simply a consequence of adapting thought to the external context, but also depends on the dynamic unfolding of thought through time, driven by the implicit structure of semantic memory. This distinction between the processes involved in reflection and those involved in formulation necessitates developments in methodology designed to go beyond the explicit thinking made available by verbal protocols. The example I have presented here (Baaijen & Galbraith, 2018) emphasizes the importance of explicitly measuring the development of the writer's understanding and illustrates the value of keystroke analysis for capturing the moment-by-moment shaping of thought at the point of utterance. Crucially, it demonstrates that the development of the writer's understanding is not solely dependent on the extent to which thought is deliberately adapted to rhetorical goals, but also depends on the extent to which the writer's disposition is spontaneously constituted in the emerging text. Helping writers to reconcile these goals should be a fundamental aim of writing instruction.

Baaijen and Galbraith's (2018) findings suggest that a revision drafting strategy—involving an alternation between the dispositionally-guided formulation of thought and the organization of text into a rhetorically appropriate

form—should enable the writer to shape their unique but implicit understanding into rhetorically effective text. Helping writers to develop such strategies is the key to enabling them to give voice to their distinctive understandings of the world.

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# A Response to Galbraith’s “Writing as Understanding”: Nonlinear Temporalities for Writing, Teaching, and Slow Scholarship

SANDRA L. TARABOCHIA

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Writing scholars, teachers, and students have long benefitted from cognitive approaches to writing research. The foundational studies D. Galbraith mentions in his chapter, *The Development of Thought in Writing* (Bereiter & Scardamalia, 1987; Hayes & Flower, 1980, 1986), have formatively shaped our understanding of the development of thought in writing. Yet, as Anson and Schwegler (2012) point out, we’ve yet to construct “a complete understanding of the cognitive dimensions of writing” (p. 162). However, Dylan B. Dryer (2015) notes a promising convergence in the field as conceptualizations of writing based on influences “outside the skull” and “composing processes inside the skull” become integrated (p. 71). Galbraith’s Dual Process Model productively forwards this integrative project, challenging long-held assumptions about how to teach and assess writing. In this response, I’ll consider possible implications of Galbraith’s work for writing studies folks not only as writing teachers but as academic writers ourselves.

First, what can writing teachers learn from Galbraith’s study of writers’ distinct, yet related, cognitive processes? Although we might be tempted to draw conclusions about specific teaching practices from Galbraith’s findings—assigning outlines, for example, or making time for focused freewrites—doing so would miss the point. Galbraith’s research does not test outlining or synthesizing as teaching practices per se; rather the writing activities become tools for studying a cognitive phenomenon. Nevertheless, his research does have broader implications for

teaching writing. Findings suggest, for example, that high quality text does *not* always indicate the development of understanding, and that external constraints such as those involved in creating a rhetorically appropriate text can restrict rather than support development of understanding. What does this mean for popular pedagogical frameworks that make writing the content of writing courses?

Take the *Writing about Writing* (WaW) approach described by Doug Downs and Elizabeth Wardle (2007; Wardle & Downs, 2011, 2014), which is built on the notion that students develop a richer, more accurate understanding of writing, rhetoric, and literacy by writing about writing as subject matter. According to this framework, treating writing as a subject and field of study changes students' understanding of writing, which in turn changes how they write (Downs & Wardle, 2007, p. 553). Similarly, in Yancey, Robertson, and Taczak's (2014) "teaching for transfer" (TFT) approach students are introduced to rhetorical terms in a particular sequence and asked to develop their own theory of writing as they compose in different genres and reflect on their work. Galbraith's research raises questions about what cognitive processes are supported or constrained by these approaches to teaching writing. What happens cognitively when writing is both the object of study and vehicle of communication—the material about which understanding is to be developed and the text that will be assessed for quality?

The dual process account proposes two interacting processes: the explicit planning process, which involves "goal-directed manipulation of ... ideas" to satisfy "rhetorical goals," and the implicitly controlled text production process, which must "be allowed to unfold, free from external constraints, and guided only by the implicit organization of the writer's disposition" (Galbraith, 2016, p. 8, 9). According to Galbraith, these processes "operate best under different conditions, and have different relationships with text quality," which "leads to a fundamental conflict in writing" (p. 9). Do WaW and TFT approaches amplify or mediate that conflict? On the one hand, writing-focused writing pedagogies foreground rhetorical constraints in ways that might inhibit spontaneous formulation of thought and development of implicit understanding. When students write about writing—about their understanding of rhetorical constraints—it might be more difficult for spontaneous text production to unfold free from external, rhetorical constraints. Students' efforts to write about their understanding of rhetorical concepts—using that understanding to figure out how to represent knowledge in ways that satisfy rhetorical goals—could very well inhibit the development of that understanding.

On the other hand, the reciprocal role of writing as subject matter and practice could help students capture their understanding. It could create a space for reflection that facilitates the "interaction between the writer's disposition and the emerging text," an interaction Galbraith (2016) claims is essential for "constituting

one's understanding moment by moment in text" (Appendix p. 9). After all, reflection is a central component of WaW and TFT (Wardle & Downs, 2014, p. 799; Yancey, Robertson, & Taczak, 2014, p. 5). The focus on reflection resonates with the writing studies threshold concept connecting cognition and metacognition as essential for writers responding to varied audiences, genre demands, and rhetorical situations (Tinberg, 2015, p. 76).

Considering Galbraith's work in the context of this threshold concept and the pedagogies that embrace it underscores the relationship between cognition and metacognition. Reflection might very well facilitate and deepen the cognitive "interaction between the writer's disposition and the emerging text" that Galbraith (2016) argues goes beyond synthesis to "self-movement of thought" (Appendix p. 9). Perhaps future cognitive writing research will examine how dual processes focused on "spatially organized conceptual potential" and "linearly organized sequence[s] of rhetorical moves" operate in response to pedagogies and curriculum that make writing the subject of writing courses (Galbraith, 2016, Appendix p. 5).

Galbraith's findings not only have implications for writing teachers but for faculty work as academic writers and researchers as well. My current research focuses on learning experiences of early career faculty writers as they transition into faculty positions that demand scholarly publication. Drawing on transformative learning theory (Mezirow, 1991; Heddy & Pugh, 2015) and Robert Kegan's subject-object schema rooted in self-psychology (1982; Kegan et al., 1982), my longitudinal, cross-institutional study uses interviews and surveys to determine if, why, and how faculty undergo transformation to become successful academic writers. Initial findings from my grounded theory analysis of interview transcripts suggest that perceptions of time and material realities of time are a significant factor in faculty members' experience of writing. The issue of time was also a recurring theme of discussion during the institute preceding the 2016 Dartmouth Seminar. Institute participants wrestled with the tension between cultural and institutional structures of time, rooted in temporalities associated with the current global economic order—what Carl Honoré (2004) calls "the cult of speed"—and the need for slow, deep, processes of reading, writing, and data interpretation—or as Cheryl Geisler put it: the tension between doing it fast and doing it right.

For many of us, writing is a method of data analysis; we use writing to develop understanding when we compose codebooks or memos. But even when we compose texts for publication, when we write to communicate our findings to a wider audience, we discover new insights through writing. In other words, we rely on spontaneous text production to modify and expand our cognitive dispositions and develop new ways of knowing. In Galbraith's words: "the driving force behind the progression of a text is the changing state of the writer's understanding, the

groping to articulate a thought, the overall sense of the shape of the object that is being created” (p. 25). For me, Galbraith’s Dual Process Model makes a case for time in cognitive terms and amplifies just what is lost when time is in short supply.

We need empirical evidence for the necessity of time now more than ever. The current climate of higher education—tightening budgets, limited resources, persistent calls to do more with less—creates incessant demands on faculty members that limit time available to linger in writing-as-thinking processes. Galbraith’s research supports efforts to address and resist the acceleration of time, efforts such as the emerging slow scholarship movement, which contends “that good scholarship requires time: to think, write, read, research, analyze, edit, organize, and resist the growing administrative and professional demands that disrupt these crucial processes of intellectual growth and personal freedom” (Mountz et al., 2015, p. 1236).

Importantly, many slow scholarship advocates point out that lack of time is not a neutral phenomenon, but a politically charged force rooted in “structures of power and inequality” that create “elitist exclusions” where too many people are unable to “collectively and collaboratively thrive” (Mountz et al., 2015, p. 1238, 1240). Mountz and fellow members of the Great Lakes Feminist Geography Collective argue that proliferating “temporal regimes” constitute a labor issue with “embodied effects” and implications for social justice (pp. 1236, 1237); while Shahjahan (2015) describes the issue in terms of colonization, pointing out how “neoliberal logics [as hyper extensions of colonial time] operate to measure, splice, and commodify time in ways that is affectively experienced by individuals navigating the academy” (p. 491). As I see it, the slow scholarship movement politicizes the need for time that cognitive writing research highlights by casting Galbraith’s conclusion—that writers need time to experience, experiment with, and combine two distinct, yet related, writing processes—as a matter of intellectual freedom, what Hartman and Darab (2012) call the “freedom to think” (p. 53; qtd in Mountz, et al., 2015, p. 1247).

Galbraith’s work integrating social and cognitive influences on writing underscores questions such as: What happens to disposition when “the stupefying modern obsession with productivity denies the whimsy and the freedom that living fully demands” (p. 1245)? And further, what are the intellectual and epistemological consequences given that dispositions drive cognitive processing, guide development of understanding, and shape text production? If “writing is a fundamental mark we make in the world” and if “what we write literally helps make us who we are” then restrictions on the complex cognitive dual process Galbraith describes have material ramifications beyond text production or even understanding of subject matter (Mountz et al., 2015, p. 1252; Cooper cited in Dryer, 2015, p. 73).

Thus I see value in putting Galbraith's methodological approach, rooted in cognitive psychology, in conversation with emerging research on writing and embodied time from other methodological perspectives—such as Laura Micciche's (2016) exciting new work on "bent chronology" and her subsequent argument for "enacting temporalities in writing classrooms that elude linearity" by "devoting class sessions to [what she calls] writing binges [and] recording screen activity to glimpse what writing looks like in real time." Micciche draws attention to writers' experiences of embodied time in ways that resonate with the challenge to linear composing Galbraith's research levels. Taken together, these lines of research demand new methods for capturing cognitive, metacognitive, and material influences inside and outside the skull.

Ultimately, when I consider what Galbraith's work means for writers and teachers of writing, I return to an essential question: How do we create conditions for writers (students and ourselves) to have meaningful writing experiences and produce meaningful writing (Eodice, Geller, & Lerner, 2016a; 2016b; *Meaningful*)? Through their four-year, mixed methods, cross-institutional study, Eodice, Geller, and Lerner (2016a; 2016b) found that meaningful writing occurred when students were invited to: explore personal connections, immerse themselves in thinking/writing/research, see writing as applicable in the real world, and consider how future selves might benefit from writing and learning. Each of these conditions resonates with Galbraith's findings about the importance of time in embracing writing as understanding and the role of writers' dispositions—tied to individual histories, social contexts, and social organizations—in composing.

In the spirit of the *Meaningful Writing Project*, (Eodice, Geller, & Lerner, 2016a; 2016b; *Meaningful*) my research on the experiences of faculty writers suggests that conditions required for writing to be grounded, fulfilling, and energizing are often at odds with the shifting environment of higher education shaped by neoliberal logics. Moreover, we find that the toll weighs differently on the minds and bodies of minoritized faculty and student writers. Despite this emerging research, the effects of changing workplaces and worktimes on opportunities for students and faculty to produce meaningful writing is rarely discussed (Mountz et al., 2015, p. 1245). In the face of this gap, I hope Galbraith's work inspires researchers to integrate cognitive, social, material, and neurological approaches as we explore what our changing landscape means for the field of writing studies and higher education.

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Maintaining the focus on cognition, Paula Tallal and Beth Rogowsky examine the practice of writing from a cognitive developmental viewpoint. The authors, who have used their research with children with auditory processing and language impairments to develop and implement a successful intervention program, have found that cognitive interventions can be effective with writers of all ages, and they specifically offer lessons from their research in the context of college-level writing instruction. With reference to research using their own intervention system, they trace differences in processing phonological information, as well as speed of auditory processing, directly to differences in writing outcomes as measured in standardized tests. Tallal and Rowgowsky offer auditory training methods as a means of improving student facility not only with spoken language, but with manipulating and producing written language.

This in-depth look at cognitive process and practical individual interventions leads us to Kevin Roozen's exploration, in Chapter Twenty-One, of one individual's inscriptional literacy transfer.

Readers are encouraged to seek other connections. The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows F, G, and R.



# Improving the Reading and Writing Skills of College Students Using a Developmental Neuroplasticity-Based Approach

PAULA TALLAL AND BETH A. ROGOWSKY

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To begin this chapter, I would like you first to get out a piece of paper, a pen and a minute timer. Then read the following prompt taken from a standardized writing test. After you read it, take one minute only to do this writing exercise.

Here is the prompt. “You are writing a guide to visiting space aliens. In one complete sentence, you are to describe a bicycle. Tell what it looks like, how it is ridden, and how it is used. Put as much as you can in one, carefully worded sentence.” Set your timer and give yourself only one minute to complete this prompt. Start now.

What do you think? Did you find this to be easy or difficult? How happy are you with your sentence? Did you use any run-on sentences or fragments? Now, read your sentence aloud to yourself. Did you pick up any grammatical or spelling errors? Did you complete all aspects of the prompt? Personally, we find this seemingly simple prompt to be very challenging. It gives our brain a real workout.

Let me share with you my sentence and the many mental processes that went into writing it. The sentence written in response to this prompt was: “A bicycle, a two-wheeled apparatus used to get an individual from one place to another, has a seat on which to sit, handlebars to steer, and pedals to rotate with your feet to move the wheels.”

In order to respond to this writing prompt, as the writer we first had to tap into long term verbal memory and collect our prior knowledge on bicycles, aliens,

and guides. We could not be successful if we did not know what a bicycle was. This is the content. Assuming we did know what a bicycle is, we had to move on to aliens. The prompt told us to describe a bicycle to a group of people who have no frame of reference. The final instruction in the prompt was to write a guide, an informative piece of writing.

So you start to write. You take one more look at the directions and notice that your response is to be written in one complete sentence. So, you visualize a bicycle and begin to put words on the paper. You start with a capital letter because you remembered all the writing rules that include that sentences must start with capital letters. Then you may have thought either explicitly or implicitly, “I have a lot of information to pack into one sentence, I better make use of an appositive phrase.” You also have to keep these thoughts in your working memory as you sequence the directions that told you to tell what the bicycle looks like, how it is ridden, and how it is used. You had to remember spelling rules and punctuation rules that tell you that you should use commas to separate clauses written in a series. Throughout this writing task you were giving your working memory a workout as you switched between remembering the specific task, organizing your thoughts, remembering your grammatical, spelling and writing rules, and using your fine motor skills as you physically transcribed words from your mind to the page.

Now think back on the minute you spent actually writing your response. In order to complete this task, you had to really focus your attention on the relevant details of the task while actively inhibiting irrelevant stimuli around you and thoughts not related to the task immediately at hand. And because you only had one minute to complete this task a lot of your success depended on your speed of processing.

I can go on and on. The bottom line is that there is nothing easy about writing! It is one of the most complex tasks our brain must learn to perform that requires the real-time integration across multiple brain regions of multiple perceptual, cognitive, motor and linguistic skills.

By the time U.S. students reach high school it is taken for granted that they have learned the fundamentals of reading, the foundation on which writing depends. That is, they have successfully broken the code for reading at the phonological level and they have become phonologically aware that words are made up of small units of sound (phonemes) and it is these sounds that the letters represent. They also understand that this code allows them to access spoken language in a visual form. By this time it is also assumed that students have mastered the fundamentals of writing; they have learned to spell words and use punctuation in standard ways and that the words and syntax they use in writing comply with the rules

of Standard Edited American English (SEAE) grammar (National Commission on Writing, 2003).

But in fact, multiple reports and standardized measures suggest that this mastery is elusive for a majority of students, in grades 8, 12, and pre-college, as assessed by SAT critical reading and writing tasks (National Center for Education Statistics, 2012; Saluhu-Din, D., Persky, H., & Miller, J., 2008). As a result, developmental writing courses are regular offerings at most colleges. This may be especially the case for those colleges that have a high proportion of students with English as a second language (ESL) and/or underrepresented minority students. This chapter is focused on these students.

## The Language to Literacy Developmental Continuum

When thinking about writing in older students, we often forget that proficiency in writing depends on a sound foundation of aural language and reading skills. Nonetheless, we contend that in order to understand the origins of individual differences in writing proficiency in college students, unique insight can be gained by focusing on the factors that influence individual differences in language and reading development, on which writing depends.

Much of our understanding about individual differences in language and reading development comes from studies that have focused on the factors that contribute to developmental language and reading deficits in young children. Over the past 30 years, research has converged in demonstrating that regardless of age, individuals with a history of spoken and/or written language learning impairments (LLI) are characterized by deficits at the phonological level of analysis (Bishop & Adams, 1990; Liberman, Shankweiler, & Liberman, 1989). Furthermore, these phonological deficits have been linked to basic constraints in speed of processing, specifically in the auditory modality. In early studies, Tallal and Piercy (1973, 1974) demonstrated a link between rapid acoustic processing deficits and speech discrimination deficits, specifically for speech syllables that required processing of *intra*-syllabic acoustic cues that occurred within tens of milliseconds. To further demonstrate this link, Tallal and Piercy (1975) showed that speech discrimination significantly improved when speech syllables were computer modified to extend in time the rapidly changing *intra*-syllabic acoustic cues.

This research has led to a better understanding that aural language deficits, reading impairments, and subsequently writing failure, results from underdeveloped perceptual and cognitive skills (memory, attention, processing speed,

sequencing), which can be identified very early in life (Benasich & Tallal, 2002). Specifically, constraints in the speed of auditory processing in the time windows essential for phonological analysis (tens of milliseconds) have been shown to lead to a failure to develop sharp phonological representations (see Tallal, 2004 for review). Phonemes are the building blocks upon which all higher aspects of aural language development (morphology, semantics, syntax) depend. Language development, in turn, is the foundation on which reading, writing and all literacy skills depend (Berninger, Abbott, Swanson, Lovitt, Trivedi, Lin, Gould, Youngstrom, Shimada, & Amtmann, 2010; Berninger & Winn, 2006; Brynes & Wasik, 2009; Eldredge & Baird, 1996; Graham, Harris & Chorzempa, 2002). Weak language and literacy skills lead to struggling students. We call this developmental cascade, from perceptual/cognitive skills, to phonological representations, to language, to reading, spelling and writing skills “The Language to Literacy Continuum.” As individuals get older, they may well compensate for these earlier constraints on development such that they are no longer obvious on testing. Nonetheless, weakness or frank disability at any point along this language to literacy continuum has been shown to have a cascading effect on brain organization and on developing proficiency at all subsequent higher levels along this continuum, culminating in poor writing skills in college students and adults (Tallal, 2004)

Based on this research, we have developed a novel intervention model that aims to “reverse engineer” this developmental cascade, based on the language to literacy continuum. This model suggests that intervention for rapidly improving language and literacy skills at any age should include *both*: (a) strengthening the underlying *perceptual and cognitive building blocks* for learning (memory, attention, processing speed and sequencing) and (b) strengthening the fundamental *linguistic building blocks* on which literacy depends (phonology, semantics, morphology, and syntax).

## The Neuroplasticity Revolution

It is commonly believed that children enter school with differing genetically and/or environmentally endowed brain capacities and that teachers must just make-do with these individual differences in neural capacity. However, breakthroughs in the neuroscience of learning, specifically neuroplasticity, have demonstrated that this view is fundamentally wrong.

Neuroplasticity is the brain’s capacity to physically change the size and response selectivity of cells based on experience. The discovery that the brain can be physically modified at the cellular level, at any age, based on *experience*,

is one of the most important scientific breakthroughs in the field of neuroscience (Jenkins, Merzenich, Ochs, Allard, & Guic, 1990; Merzenich & Jenkins, 1993). Furthermore, decades of training studies with animals and humans, aimed at driving neuroplasticity, have resulted in an understanding of precisely which aspects of experience are most important for driving positive changes in the brain both at the physiological and behavioral level, in the most effective, efficient and enduring manner. These studies provide guidelines for essential factors that should be embedded into novel neuroplasticity-based interventions for students demonstrating weak literacy skills, including writing. These include: (1) intensity and frequency of trials (repetition, repetition, repetition), (2) individually adaptive (easy to hard) trials, (3) focused attention to a task (active attention, not passive input) and (4) timely feedback (immediate rewards and correction of errors to reinforce learning and maintain motivation). These aspects of neuroplasticity-based training are called “scientific learning principles.” Importantly, these “scientific learning principles,” when applied intensely over time, have been shown to be able to drive neuroplasticity at any age for a very wide range of skills (for a comprehensive review see Merzenich, Nahum, & VanVleet, 2013).

Combining our understanding of the foundational skills important for literacy development and the scientific learning principles important for driving neuroplasticity, we developed a hierarchy of computer-based training exercises as a novel intervention for students struggling with language and/or literacy skills. This novel intervention aimed to drive neural processing of and attention to rapidly successive acoustic stimuli (specifically in the tens of millisecond time window) to faster and faster rates. In addition, recall that in an early intervention study Tallal and Piercy (1975) demonstrated that speech perception could be significantly improved by computer modifying (extending in time) the rapidly changing *intra*-syllabic acoustic cues within syllables. As part of our novel neuroplasticity-based intervention, we expanded this approach to extend in time (increase the duration) and amplitude enhance (increase the volume) of the rapidly changing *intra*-syllabic acoustic cues in ongoing speech, across multiple linguistic contexts: phonological, morphological, semantic and syntactic (see Nagarajan et al., 1998 for a detailed description of the speech modification algorithm).

Seven training exercises were developed in the form of computer games. The goal was to move the individual from a reliance on the acoustically modified speech towards the ability to process more highly complex linguistic tasks with rapidly successive, natural speech. Similarly, adaptive training was also undertaken to directly affect auditory temporal integration thresholds for rapidly successive, non-linguistic tone sequences using acoustic sweep tones (tones that moved quickly from lower to higher frequency, or higher to lower frequency). Overall,

the goal of this novel training technique was to drive, through adaptive training, individual progress towards normal acoustic processing rate of tens of milliseconds, while simultaneously increasing the ability to process and learn linguistic structures (from phonological representations to grammatical rules) in their most frequent, naturally occurring, obligatory contexts.

Two controlled laboratory studies were initially conducted with a group of children diagnosed with Language Learning Impairment (LLI). The results demonstrated dramatic success with this new training method (Merzenich et al., 1996; Tallal et al., 1996). The results showed that intensive daily training (approximately two hours a day five days a week for four weeks) resulted in highly significant improvements in temporal integration rates, speech discrimination, language processing and grammatical understanding. These controlled laboratory studies also demonstrated the specificity of this training method. The group of children with LLI who participated in these studies was divided into a training group and comparison group, with equivalent language learning deficits. Both groups received identical language training. However, the comparison group received the linguistic training using natural, unmodified speech. In addition, while the training group played a computer game aimed at speeding up speed of auditory processing the comparison group played a computer games for an equivalent period of time that was visual, and not temporally adaptive. Both groups trained together and received the same amount of training, reinforcement and rewards for performance. The results showed that both groups of children with LLI improved with this form of intensive neuroplasticity-based training, showing the importance of intensity of remediation. However, the children in the training group, who received linguistic training with acoustically modified speech as well as the acoustic rate processing (computer game) training, achieved significantly greater gains than those in the comparison group.

These initial studies have had a profound impact on the field of remediation research for individuals struggling with language-based learning, including reading. In addition, advances in neuroimaging technologies (fMRI, electrophysiological recording) have provided an opportunity to determine how the brain of individuals with language learning deficits differ from those of typical children and, further, the extent to which brain structure and function can be altered with neuroplasticity-based cognitive and linguistic intervention. A comprehensive review of laboratory studies, that explored both the behavioral and neural basis of changes induced by auditory or phonological training in individuals with language and/or literacy deficits has recently been published (Ylinen & Kujala, 2015). The results from the reviewed neuroimaging and neurophysiological studies showed that neuroplasticity-based auditory and phonological training significantly

strengthens previously weak auditory brain responses in individuals with language-based learning disorders. Specifically, for individuals with dyslexia, results consistently showed increased or normalized activation of previously hypoactive inferior frontal and occipito-temporal areas. Ylinen and Kujala (2015) concluded that the combination of results across many studies, showing remedial gains derived from both behavioral and brain measures, not only increases our understanding of the causes of language-related deficits, but also helps target remedial interventions more accurately to the core problem.

Our laboratory-based intervention studies were scaled and shown in a large series of “real-world” studies to be an efficient and effective intervention strategy for clinical and school use (see [scientificlearning.com/research](http://scientificlearning.com/research)). A broad series of language and reading products were subsequently developed and marketed under the brand name Fast ForWord® (see Tallal & Jenkins, 2018 for detailed review).

## **Studies Evaluating Writing Outcomes after Fast ForWord® Training**

The results presented thus far have focused on language and reading skills. However, schoolteachers observed and reported that their students’ writing skills also seemed to be improving, even though Fast ForWord® does not explicitly train writing. We have followed up on these teacher observations with controlled research studies (initially with 6<sup>th</sup> graders, and subsequently with college students) that aimed to assess writing skills empirically both before and after Fast ForWord® product use (Rogowsky, 2010; Rogowsky, Papamichalis, Villa, Heim, & Tallal, 2013). Because the focus of this book is on college student writing we will only present the results from our study with college students. However, the results presented in this section that focus on writing skills of college students, closely replicated Rogowsky’s 2010 findings with 6<sup>th</sup> graders.

The overall purpose of the experiment was to determine whether providing rigorous cognitive, language, and reading training to college students with below average writing skills would transfer to improved writing abilities. To determine the effectiveness of cognitive skills training, provided in a video games format, that reinforced language and literacy skills, we used a quasi-experimental design with two distinct populations of college students: below average and strong writers. In a quasi-experimental research design, participants are not necessarily equivalent on variables of interest, which in this study were reading and writing skills. The training group consisted of two populations of undergraduate students with historically lower literacy abilities ( $n = 25$ ). The first population invited to participate in the

training group included students who were required by the University to take a developmental writing course because they had scored below average in writing skills on college entry. The second population of students invited to participate in the training group consisted of students enrolled in a national program designed to increase the quality and quantity of underrepresented minority students successfully completing a science, technology, engineering, or mathematics (STEM) baccalaureate degree. The comparison group consisted of students from the general population of students at the same university with average to strong writing abilities ( $n = 28$ ). ESL distribution was significantly different between the two groups ( $p < 0.021$ ); the training group consisted of 13 ESL and 12 non-ESL students while the comparison group had 6 ESL and 22 non-ESL students. The entire set of participants included 53 college students enrolled in an urban public university comprising approximately 10,000 undergraduate and graduate students.

At the onset of the study, both groups, the training and the comparison group, completed Institutional Review Board (IRB) approved questionnaires and study forms before taking a standardized reading and writing assessment (pre-test). After the training group completed training, both groups completed the post-test, using the same tests. The training group (but not the comparison group) completed 11 weeks of computerized training between pre-test and post-test using Fast ForWord Literacy® which was developed to enhance the cognitive and linguistic skills for secondary students. In addition to Fast ForWord Literacy®, the students used at least two levels of Fast ForWord Reading® training (for examples of all training exercises see Scientific Learning Corporation 2006a, b; 2008). All of the training exercises within these programs are presented in the form of computer games which individually adapt to increasingly challenge student's memory, attention, processing speed, and sequencing, within the context of increasingly complex spoken and written stimuli. This neuroplasticity-based training provides students with (a) an orienting button that allows the student to focus their attention and control when each trial is presented (b) frequent stimuli that requires sustained attention and a response on each trial, (c) trials that adapt to each student's responses, click-by-click, moving from easy to more difficult items, and (d) timely feedback, correction of errors, and audio and video rewards after each correct response.

Exercises in both the literacy and reading series trainings make use of grammatically correct language, repetition of content, instant feedback, individualized instruction, combined auditory and visual stimulation, and concentrated and continuous practice to enhance and automatize listening and literacy skills--all of which are critical components for improving writing. The overarching goal of the series of exercises was to progressively drive more efficient and consistent neural processing as well as to improve performance in the linguistic domains of

phonology, semantics, morphology, and syntax within both spoken and written English. The language and reading exercises aimed to strengthen student's listening and reading comprehension by having them work with auditory sequences, spoken phonemes, morphemes, words, sentences, paragraphs, and ultimately full stories. Exercises also systematically trained all of the rules of Standard American Edited English within the context of written and spoken text. However, importantly, no explicit practice with writing *per se* was included in the training.

After the students completed the Literacy training, they progressed to the reading training (levels 3–5). The Reading exercises used a similar computer game format as used in the Literacy training, but instead of concentrating on phonemes and morphemes, the focus was on higher levels of written language. These exercises progressed at each student's own pace from simple letter-sound correspondences, to building an understanding of grammatical morphology, training in writing conventions (i.e., spelling, punctuation, and capitalization), and sentence and paragraph construction. As students progressed, the exercises required increasing use of executive functions within the context of increasingly challenging linguistic contexts.

The pre-test and post-test consisted of two assessment measures: Gates MacGinitie reading test (GMRT; MacGinitie et al., 2010) and the Oral and Written Language Scales (OWLS) Written Expression Scale (Carrow-Woolfolk, 1996). The GMRT is a standardized, timed reading comprehension assessment for adults consisting of 11 expository and narrative passages with three to six multiple choice questions following each passage. The GMRT is scored automatically by a computer automated scoring program that was provided by the test developer. The OWLS Written Expression Scale is a standardized assessment of written language skills for students ages 5 - 21 that addresses the elements of writing commonly assessed in high stakes tests including use of content (meaningful content, details, relevance, coherence, supporting ideas, word choice, and unity), linguistics (modifiers, phrases, question forms, verb forms, and complex sentence structure), and conventions (spelling, letter formation, punctuation/capitalization, and conventional structures). Both tests have high levels of internal consistency ( $> = 0.85$ ) and high levels of inter-rater reliability ( $> = 0.95$ ).

The OWLS requires a trained professional experienced in scoring this test to score each item. To increase reliability and reduce potential bias in this study, the training group and comparison group's tests were intermixed so that the scorer was blind to whether they were scoring a participant in the training or comparison group. To increase consistency in scoring, individual student's Time 1 (pre-test) and Time 2 (post-test) tests were scored together. However, the order of scoring Time 1 (pre-test) and Time 2 (post-test) tests was randomized so that the scorer

did not know which test was being scored at any time. To further ensure consistency, the tests were scored methodically, scoring all of question 25 for all subjects, and then all of question 26, and so forth. Thus, during the scoring process the scorer was blind to whether they were scoring a response from a training or comparison participant or from Time 1 (pre-test) or Time 2 (post-test).

To examine the extent to which training affects changes in literacy measures, standard scores of the GMRT and OWLS were analyzed using a 2 X 2 mixed-model analyses of variance (ANOVA) with the between-subjects factor being Group (training vs. comparison) and the within-subjects factor being Time (1 vs. 2).

The results of these analyses showed that students in the training group demonstrated systematic gains in both reading and writing skills following training, while those in the comparison group did not. For reading, the analysis of the GMRT reading assessment showed that although the standardized reading scores were lower for the training group (mean = 109.3) as compared to the comparison group (mean = 113.2), based on the pre-test assessment (Time 1), this difference was not statistically significantly different. At the post-test (Time 2), the results showed that while the comparison group's performance in reading remained much the same (comparison group pre-test mean = 113.2; comparison group post-test mean = 112) that was not the case for the training group. Rather, after 11 weeks of Fast ForWord<sup>®</sup> (FFW) training, the training group showed significant gains in reading. Their reading scores improved significantly (pre-test mean score = 109.3 to post-test mean score = 113.3). Thus, although the students in the training group began the study performing less well in reading than the comparison group, after training the training group performed as well as the comparison group on this standardized reading assessment.

For writing, the analysis of the OWLS Written Expression Scale showed that at pre-test, as expected based on the study design, there was a significant difference between students in the training group (mean = 86.2) as compared to the comparison group (mean = 98.1), with the training group beginning the study with writing skills nearly a full standard deviation below the mean of normal (mean=100; standard deviation=15 on this test), while the comparison group scored at the mean. Furthermore, while the writing scores of the comparison group did not change significantly between pre- and post-test (mean pre-test = 98.1; mean post-test = 95.6), there was a highly significant gain in writing skills for the training group (mean pre-test = 86.2; mean post-test = 111.0). These students, who entered the study with writing scores close to a standard deviation below the mean, who were selected for this study due to recognized weaknesses in writing by their

University, improved their writing skills to nearly a standard deviation above the mean after only 11 weeks of Fast ForWord® training.

We observed that reading and writing skills in the training group were systematically modulated by whether a student was a native English speaker or English was their second language (ESL). Therefore, in a second set of analyses, we explored the effects of ESL on GMRT and OWLS. These analyses were restricted to the members of the training group. The results of this analysis showed that the trained native speakers of English improved significantly on the GMRT reading comprehension test across visits ( $p < 0.002$ ), and also significantly outperformed the trained ESL group after completion of the training ( $p < 0.037$ ).

For the OWLS, writing scores at pre-test were higher overall in non-ESL than ESL speakers, and generally higher for both groups at post-test, after training, than at pre-test. These results show that the training led to significant improvement in writing for *both* ESL and non-ESL college students. Furthermore, while native speakers of English tended to exhibit somewhat greater improvement in writing than the ESL group following Fast ForWord® training, both groups improved significantly and the difference between the amount of improvement after training for the ESL vs. non-ESL group did not reach significance.

Overall this study provides evidence that both the reading and writing abilities of college students *can* be rapidly and substantially improved through the use of cognitive/linguistic listening and reading training presented in a format of computer video games. College students who began the study with writing scores approaching a full standard deviation below the mean of average, showed significant improvement in writing after completing 11 weeks of daily training. These students dramatically improved their writing abilities by one and two thirds standard deviations, moving from well below average to well above average writing scores. The comparison group of college students with average writing scores, who did not receive training, showed no significant test-retest change in their writing scores over a comparable period of time (one semester).

The video games used in this study were developed based on neuroplasticity research that has shown that the brain can change both anatomically and physiologically with intense behavioral training. Think of the brain as any other muscle in your body. Just like the muscles you go to the gym to build, the brain can also be improved with intense training. The college students in the training group completed their brain training exercises at least 4 days a week, 50 minutes a session for 11 weeks over one semester. This intensive training led to impressive gains in both reading and writing, as measured by the results on students' GMRT and OWLS assessments. The brain training used in this study focused on strengthening cognitive skills (specifically attention, memory, processing speed, and sequencing) in

a language and literacy rich environment. These cognitive skills are the same skills required to read with understanding and to write coherent, grammatically correct sentences.

## Summary

Individual differences in cognitive skills have been shown to predict individual differences in language development (Heim & Benasich, 2006; Benasich et al., 2002). For example, Benasich and Tallal (2002) have shown that the speed of auditory processing obtained in infancy is highly predictive of subsequent language expression and comprehension in preschool children. Similarly, it has been shown that spoken language development is highly predictive of early reading development and disorders (Flax et al., 2009). There also is a well-established relationship between individual differences in early reading and writing skills (Fitzgerald & Shanahan, 2000). Based on these relationships Tallal and colleagues proposed a continuum between cognitive abilities (particularly auditory processing speed), spoken language development, and written language development (Tallal, 2004).

We developed the Fast ForWord® series of training exercises specifically with this continuum in mind, to help students struggling with language and literacy skills. The exercises are designed to go back to first principles in developing a sound foundation for literacy skills, including language, reading and writing for students at any age. They focus on detecting and individuating sounds within syllables, morphemes, words and sentences as well as *implicitly* training all of the rules of English grammar. These skills are reinforced through exercises that progressively challenge students' linguistic as well as processing and cognitive skills. This is done first within the context of listening skills only. Once the student achieves a high level of mastery over the content across all listening exercises, only then is the student introduced to exercises that include written material. Like the spoken language exercises, the exercises in the reading series have been designed to follow a developmental trajectory. Students are increasingly challenged by all aspects of reading comprehension from simple sentences to complex texts. Across all exercises, neuroplasticity-based learning principles are used to drive individually adaptive increases in performance, mouse-click-by-mouse-click. Neuroplasticity is driven most efficiently by frequent and intense practice, sustained attention, individually adaptive trials (from easy to harder), and highly timed rewards and correction of errors (immediately following each response). Students progress at their own pace along a defined path from easier items with lower cognitive and linguistic load to items that are more challenging both linguistically and cognitively.

When first examining the actual exercises included in the Fast ForWord Literacy® and Reading training programs, which are presented like repetitive video games, most educators would likely consider them far too elementary to help secondary students, much less those who have been admitted to college, but are, nonetheless, struggling with writing. Intervention for students at the college level generally focuses at a much higher level of content analysis and comprehension, organizational skills, and writing strategies for integrating newly learned materials into a well-written essay. It is assumed that by the time students move beyond elementary and middle school, they have sufficient cognitive skills and have acquired proficiency in the basic writing conventions they will need to handle the demands of college level reading and writing. However, based on standardized high stakes tests, this is not the case for an increasing majority (73 percent according to the 2012 NAEP results) of U.S. students. These numbers are even more discouraging for underrepresented minority and ESL students. The results of this study demonstrate the rapid and substantial improvements in both reading and writing that can be achieved for college students with poor writing skills through using novel neuroplasticity-based cognitive and linguistic skills training methods designed based on a developmental language to literacy continuum model.

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Diverging from cognitive-development-based interventions at the curricular level, Kevin Roozen follows an individual student's literate activity across multiple contexts. Through this longitudinal case study, he traces the history of understanding inscriptional literacy in the context of STEM pursuits (engineering in particular). Working with ideas introduced by Paul Prior, Roozen challenges the widespread notion that the literacies valued in science and engineering contexts emerge solely from the inscriptional activities people encounter in these settings. Following the student's historical trajectory, Roozen shows that inscriptional fluency in fact develops across contexts and media. He argues for a more dispersed, complexly mediated, and heterogeneously situated understanding of disciplinary writing, learning, and socialization in order to more fully understand the development of literate practices and persons over lifetimes and across lifeworlds.

Roozen's focus on an individual's development across contexts and through time ushers in Ryan Dippre's examination, in Chapter Twenty-Two, of lifetime writing development.

The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows K, G, L, and N. Readers are encouraged to seek other connections.



# Relocating Literate Development throughout Lifespans and across Lifeworlds: Mapping the Sociohistoric Pathway of an Engineer-in-the-Making

KEVIN ROOZEN

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As a first-year civil engineering major enrolled in *ENGR 1110: Introduction to Engineering*, her very first engineering course, Alexandra Griffith (a pseudonym) found herself immersed in the work of “turning physical reality into convincing written data” (Winsor, 1996, p. 105). Much of that work involved writing the kinds of project proposals, reports, and PowerPoint presentations typically documented in studies of writing and learning for engineering (Artemeva, 2005, 2009; Beaufort, 2007; Winsor, 1996, 2003). More routinely, though, Alexandra’s work for engineering found her navigating the cascade of inscriptions, including tables, lists, charts, and graphs, that animate literate activity in the STEM fields (Goodwin, 1994; Hutchins, 1995; Latour, 1987, 1990, 1999; Latour & Woolgar, 1986; Poe, Lerner, & Craig, 2010; Roth, 2003). Acting with inscriptions, a term for material documents that “covers everything that is used to refer to some thing or phenomenon in the natural world, including photographs, naturalistic drawings, diagrams, graphs, tables, lists, and equations” (Johri, Roth, & Olds, 2013, p. 8), is central to disciplinary work, perhaps especially in the STEM disciplines. Knowing how to create, act with, and transform inscriptions, an ability Johri, Roth, and Olds (2013) refer to as “inscriptional fluency,” is not only necessary to accomplish engineering

work, but also “to develop an identity as an expert within the engineering workforce” (p. 3).

The capstone project for the course, for example, immersed Alexandra in acting with dozens of tables as she and her teammates designed a paper airplane that both performed well and was cost-efficient to mass produce and then presented their results in a written report. The table depicted in Figure 21.1, for example, is one Alexandra created and used to represent the distance of each of the flights for each version of the plane and calculate the mean and standard deviation of those distances. Alexandra and the members of her group would later use these data to determine the flight performance of each version of the plane in terms of distance and consistency, and, ultimately, to select which versions of the plane to manufacture and sell. For Alexandra, the above table is just one among the dozens of material inscriptions and mental representations of tables, charts, and graphs that mediated her efforts.

Although this was Alexandra’s first engineering course, and the first course for which she worked so extensively with data in Excel tables, she displayed considerable competence with designing, interpreting, using, and talking about these tables in ways expected of and valued by engineers. Alexandra’s use of tables in ways valued by engineers situates her in the densely textual landscape of engineering processes and practices. And yet, it also locates her along a historical trajectory of literate action that reaches beyond the assumed borders of engineering and across a number of her other textual engagements (Roozen & Erickson, 2017). In this chapter, I trace Alexandra’s acting with tables as it is semiotically remediated across multiple streams of literate activity. Ultimately, I argue that Alexandra’s facility with tables in ways valued by engineers has developed along a lengthy and

R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
	Experiment #	1	2	3	4	5	6	7	8	9		
Repetition	1	22.0	25.0	28.0	29.0	32.0	19.0	19.0	29.5	29.5	25.89	29.666667
	2	23.0	28.0	21.0	33.0	31.0	25.0	25.5	31.0	23.5	26.78	24.5
	3	26.0	26.0	23.5	21.5	34.5	24.0	23.0	29.5	20.0	25.33	21.722222
	4	35.5	33.0	17.0	29.0	25.0	25.0	27.0	46.5	19.0	28.56	28.444444
	5	25.5	22.5	17.0	27.0	33.0	23.0	26.5	36.5	19.0	25.56	30.777778
	6	39.0	23.0	22.0	32.0	29.0	23.0	26.0	36.0	26.0	28.44	24.111111
	7	26.5	21.5	17.5	28.5	31.0	27.0	24.0	32.0	20.0	25.33	23.222222
	8	39.5	22.5	21.5	29.0	35.5	25.5	18.0	21.0	26.0	26.5	32.333333
	9	30.0	19.0	28.0	27.0	26.0	25.5	20.0	29.0	24.5	25.44	23.055556
	mean distance	29.67	24.50	21.72	28.44	30.78	24.11	23.22	32.33	23.06		26.425926
	standard deviation	6.73	4.13	4.26	3.29	3.57	2.30	3.43	6.97	3.75		
	mean of total					26.43						
	stdev of total					3.89						
	Final quality					0.95						

Figure 21.1. One of the many tables Alexandra and her teammates used for their work on the ENGR 1110 Capstone Project.

dispersed historical trajectory of repurposing across multiple activities, including scheduling her life's activities, writing fan novels, and solving logic puzzles. The densely tangled history that emerges from the analysis argues for a more dispersed, complexly mediated, and heterogeneously situated understanding of disciplinary writing, learning, and socialization.

In keeping with what Beaufort (2007) described as writing studies' dominant metaphor of writing development, "one of writers moving from outsider to insider status in particular discourse communities or activity systems" (p. 24), the dominant stories about disciplinary development that have emerged from the scholarship locate writers and writing tightly within a particular disciplinary world. They configure histories of development in terms of newcomers entering an unfamiliar disciplinary territory and moving from the periphery toward some more central location, mostly through increasingly deeper, fuller participation with a set of core ways of writing, representing, knowing, and being shared by all full members.

The description Winsor (1996) offered in her book *Writing like an engineer: A rhetorical education* provides one example of this perspective. Based on six years of data collection, she wrote that the four engineers-in-becoming she studied,

learned to write like engineers by trying to function within the engineering community. As they operated within this community's boundaries, they were gradually socialized into producing text that was acceptable to its members and thus gradually became members themselves. This socialization was accomplished primarily through interaction with experienced engineers and exposure to the texts those experienced engineers commonly produced. (p. 19)

Framed in the dominant metaphor, Winsor describes newcomers acquiring the knowledge needed to act with texts in ways accepted by established members, and thus developing identities as established members themselves, through histories of interaction within the engineering community with experienced engineers and the texts they produced. From this perspective, development is a fairly straightforward process of taking up the already-established genres and identities available within the well-policed borders of engineering.

These tightly situated accounts of literate development within the assumed borders of engineering seem fairly commonplace, but only if we focus on people's participation in this single social world. Consider, though, how such mappings sever the historical trajectories people trace as their lives play out across expansive lifeworlds and multiple timescales. Lemke (2005), for example, argues that rather than being confined to any single site of engagement, "[w]e make meaning along our lives' traversals: across real and virtual spaces, across multiple institutions, genres, media, and semiotic systems. We do so in real time, across multiple timescales of action and activity, from the blink of an eye to the work of a lifetime"

(p. 110). In truncating the pathways people chart across lifespans and lifeworlds, monocontextual mappings of development leave those traversals blurry, if they bring them into focus at all.

As a means of developing a fuller sense of those histories, I turn to sociohistoric theory, a body of theoretical approaches predicated on the notion that history is carried forward as material and semiotic artifacts produced in the past that are transformatively taken up in the present and projected toward imagined futures. While sociohistoric approaches (Durst, 2019; Holland et al., 1998; Prior, 1998; Scollon, 2001; Vygotsky, 1978; Wertsch, 1991, 1998) understand mediated action to be situated in the emerging present of a particular site of engagement, much in the same way as dominant perspectives of development, they also recognize it as being laminated with, and thus as emerging from, the histories of activity that flow into and emanate from such sites.

Scollon (2001) located the development of social practice along a historical sequence of actions that people enact throughout their lives. He argues that “any view of practice must include a theorization of the origins of social practice in the life of the individual in the material and objective conditions within which actions take place, that it, it must include a theorization of the origins of any particular practice (an ‘ontogenesis’) within the life of the developing [person]” (p. 12). For Scollon (2001), close attention to the concrete history of action makes visible how the re-use of practice across multiple sites of engagement is vital to its production. It especially illuminates how the “movement into new circumstances is always partial and always involves further adjustments and accommodations of the practice in the habitus to these new objective conditions” (p. 141). For Scollon, then, practice emerges not from regular and repeated use within a single site, but rather from the continual “adjustments and accommodations” needed to refashion the practice for use in “new objective conditions” (p. 141). These “adjustments and accommodations” to the practice are not just relevant in continually remaking it for use in present circumstances; they also figure prominently in opening up practice for potential future uses. “Each use,” writes Scollon (2001), “elaborates and complicates” practice as it consolidated in the habitus, and “therefore each use opens up the potential for more complex uses” (p. 135) in the near and distant future. In a similar manner, Prior, Hengst, Roozen, and Shipka (2006; see also Prior & Hengst, 2010) locate the continual development of persons, practices, and social worlds in their lengthy histories of “semiotic remediation,” a term for “the diverse ways that humans’ and non-humans’ semiotic performances (historical or imagined) are re-represented and re-used across modes, media, and chains of activity” (p. 734).

From this perspective, the development of people and practices is not limited to histories within the presumed confines of a single, autonomous social world,

but along what Roozen, Woodard, Kline, and Prior (2015) have come to see as a “laminated trajectory,” a lengthy historical trajectory that extends throughout lifetimes and across lifeworlds, and thus that weaves multiple engagements into situated action; a historical trajectory furrowed with the traces of the various uses to which practice has been put. It is important to note that from a sociohistoric perspective, these histories do not simply trace the movements of persons and practices through the world, but rather serve as the very pathways of their becoming (Prior, 2018).

What might such a perspective reveal about Alexandra’s facility with tables as she completes her engineering project? It would certainly include the brief lab activity that Alexandra did earlier in the semester, which involved using many of the same kinds of tables and activities for data collection and analysis. It would also include the *Computing Applications* class Alexandra took during her junior year of high school, a year and a half before she took the engineering course. Although not an engineering course, *Computing Applications* focused on the basics of using Microsoft Word, Excel, and Powerpoint. Describing the class in relation to what she was doing in *ENGR 1110*, Alexandra stated, “I learned how to do some of this [building and using Excel tables], but it was on the old version of Excel. [...] We did not have to produce our own data, either. We used data that was given to us and we just had to toy with it and make it look pretty.” This acting with tables was certainly a part of Alexandra’s history, even though she employed a different version of Excel and the course wasn’t part of an engineering curriculum.

Prior to the *Computer Applications* course, Alexandra indicated that she “had not done very much with Excel,” but she did mention that tables mediated what she referred to as “little things” with her family. As an example, Alexandra stated, “Like, there was this one time my dad was explaining to us about our budget, to the three kids, and kind of showing us percentages of like what went to the mortgage, what went to savings, and blah, blah, blah. I think he even made it into a pie graph.” Based on her analyses of the developing genre knowledge of two engineers, Artemeva (2009) concluded that “some ingredients of genre knowledge can be taught in a classroom context, [but] for the knowledge to become active and for the individuals to be able to apply this knowledge successfully, it needs to be complemented by other genre knowledge accumulated elsewhere” (p. 173). As Alexandra’s comment about her encounters with tables and graphs to understand the family budget indicates, her knowledge of acting with tables was complemented by interacting with the tables and other inscriptions that animated her family’s interactions. In the sections of this chapter that follow, I partially trace Alexandra’s acting with tables for a variety of those “elsewheres,” including managing her schedule, writing fan novels, and solving puzzles.

Alexandra also acts with tables as she organizes her life's activities. Like many undergraduates balancing a full load of classes, co-curricular activities related to their academic programs, campus jobs, and a full slate of other commitments, Alexandra has an extremely busy schedule. Managing it involves acting with a variety of tables, including the small spiral-bound daily planner she carries in her purse and a large calendar that hangs above her desk in her dorm room. The one that sees the most use, though, is the schedule planner she creates for herself and a few close friends at the beginning of each semester. According to Alexandra, during the first week of classes, "I make myself an Excel schedule planner on the computer. [...] It's my classes, and all the times and the locations. I've been making these for my homeschool classes for years." Once she creates a version of the planner on her computer, she then prints out the pages and takes them to a local Staples store to have them spiral bound.

Alexandra's schedule planner consists of a cover page and a series of weekly pages that indicate her activities for each week of the semester. The weekly pages she created for her spring 2011 planner (see the excerpt from one of those pages in Figure 21.2) offer columns for each of her courses and for her "Other To-Do's." The days of the week, Monday through Sunday, run from top to bottom along the left-hand side of the page. The lines in the cells provide Alexandra with a space to write down the specific information about her commitments for each week.

Explaining how she got started creating these kinds of schedule planners, Alexandra stated,

My mom and I have designed them together. Not the schedule part, because we were so fluid in what we did and when we did our homework, but this sort of thing, with the classes, and the days, and when the homework was all due. Um. [...] For a bunch of the previous years, at least the past four years, we had one for the whole year. All the homeschooling and tutorial. Actually, it was a whole family effort. Because Dad would put it in Excel like I do now, um, and Mom and I would make sure that I had, you know, my column for calculus, my column for Brit[ish] Lit[erature] and all for the different assignments.

In her comments, Alexandra reveals that learning how to make and use these kinds of tables to order her jumble of classes and commitments for each semester was a "family effort." She learned from her mother how to lay out rows for different days of the weeks and columns for different activities, and from her father how to create the table in Excel.

Alexandra also acts with tables as she plans, drafts, and revises the fan novels she has been writing since her childhood. Her fan fiction writing began with a book she wrote at age eight based loosely on a Laura Ingalls Wilder novel she had been reading at the time. Since that initial novel, Alexandra has written seven

Dates:	Calculus II	Honors Sustainability II	Engineering Physics II
Jan 10-16			
Mon. *	Classes cancelled		
Tues. *		* DUE - assignment on housing/transportation. Read ch 1 of Hot, Flat, Crowded	* Class
Wed. *	Syllabus		*Lab 3
Get Day of Classes	Class Overview		
Thurs. *	Do 7.1 pg 453 #1-24 ✓	* Intro & "The Paradox of Efficiency"	* Ch 26 Electrical charges & forces
Fri.		Print Syllabus! Do readings, mark assignments, etc...	Copy assignments from syllabus
Sat.			
Sun.		Read "The Efficiency Dilemma" ✓	Read Ch 26 & Start on problems

Figure 21.2. Excerpt from one of the weekly pages of Alexandra's spring 2011 schedule planner.

others, many of which have undergone multiple rounds of substantial reorganization and revision over the years. The first documents Alexandra creates in her notebook as she begins work on each new novel are a series of handwritten tables offering information about each character, which she refers to as "character profile sheets" or just "character sheets." Talking about the one she created for *Phantom*, Alexandra stated,

I did all the charts by hand. [...] So what I would basically do is I would draw lines down the paper, and then I would just put here, you know, like character name, middle name, last name, hair color, blah, blah, blah. And then I would put the name and then I would I would do it all. What would happen is I would have my notebook, and the first four or five pages or so would be the charts, and the music, and those sorts of things, and then I would actually just start the chapter. Um, and if I had to go, 'well



mothers' and fathers' names, and so on, and then filled in the cells with each character's information. In addition to indicating the ideal celebrity to play each character should the novel get turned into a movie, the Word version of the character sheet also features a number of blank rows for any additional details Alexandra might wish to include as her work on the novel moved forward.

The character sheet table helps Alexandra keep track of the minute details of each character in the novel, providing a means of selecting from, simplifying, and ordering details from almost innumerable possibilities. The table also functions as a memory aid as Alexandra invents, drafts, and revises multiple novels over lengthy periods of time.

Acting with tables is also at the center of the various kinds of "thinking-type" puzzles Alexandra has been doing consistently since her early childhood. Among her favorites are those that involve using a table or multiple tables, which she refers to as "grids," to work toward a solution.

The earliest puzzles Alexandra recalls doing are the logic art puzzles, like the sample version she provided from her book (see Figure 21.4), she has been solving since age seven. As she explained, solving these types of puzzles involves using the numerical clues arrayed along each axis to determine which of the cells to blacken and which to leave blank in each column and row. According to Alexandra, determining exactly which cells to blacken in involves working reflexively from column to row, much like determining the correct words in a crossword puzzle. When correctly solved, the combination of blackened and blank cells form a simple picture (e.g., a dog, a flower, a baseball mitt). The initial versions of these she encountered as a child were briefer, shorter versions of the one offered here.

When all that is visible from the dominant perspective of development is Alexandra's engagement with *ENG 1110*, it seems easy to understand Alexandra's inscriptional fluency with tables as emerging from her interactions with the people, texts, and activities she acted with throughout the course. But if viewing mediated action in light of people's histories of acting with inscriptions is essential for understanding how it has come to be, Alexandra's history with tables points toward a different conclusion. The analysis suggests that Alexandra's facility with tables in ways valued by engineers is partly due to her extensive history of using tables throughout her lifespan, a trajectory that extends over more than a decade and that includes using tables to schedule her life's activities, plan and write fan novels, and solve logic puzzles, and perhaps other engagements as well (Roozen & Erickson, 2017).

From a sociohistoric perspective, each of these uses "elaborates and complicates" (Scollon, 2001, p. 135) Alexandra's acting with tables one mediated action at a time, flexibly re-tooling it not only for an increasing variety of purposes, but

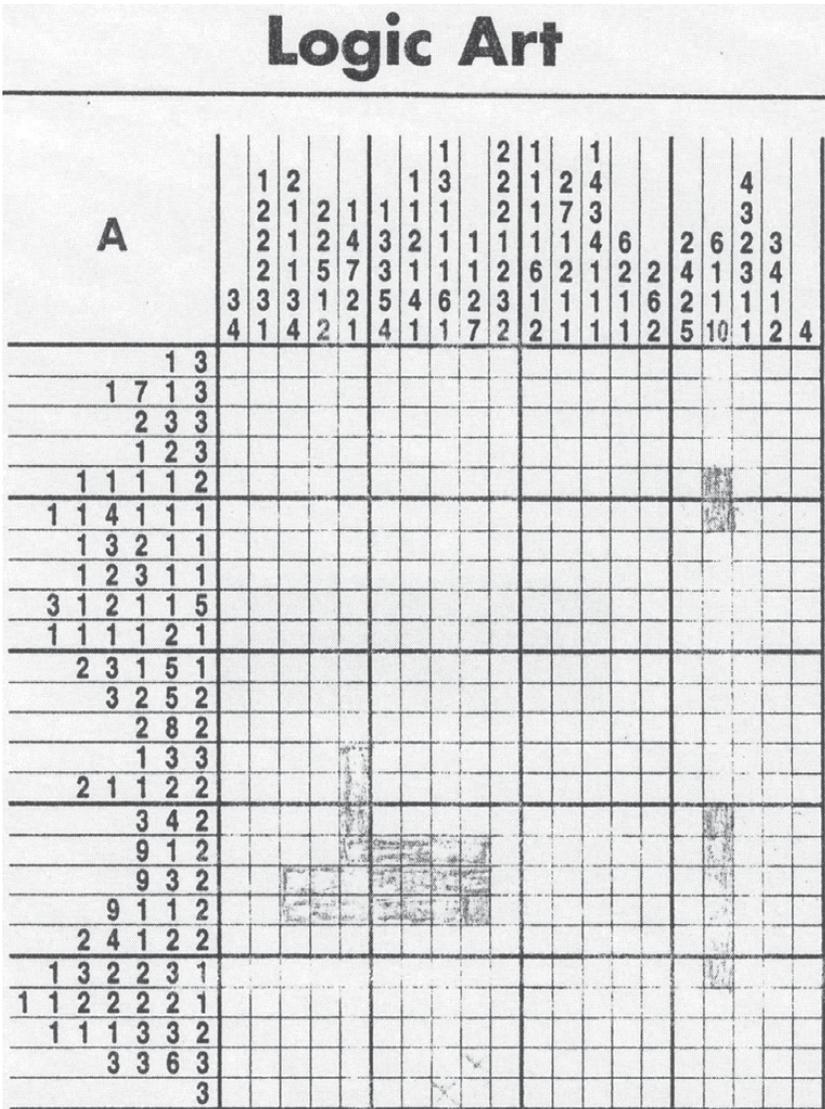


Figure 21.4. A recent example of the type of “logic art” puzzles that Alexandra has been doing since age 7.

for an increasing array of semiotic media as well, and opening it up for more complex uses: Logic puzzles that are visual, numerical, and textual; novels that involve generating pencil and paper charts but also digital versions in Word and Excel; and engineering projects that involve collecting and working with numerical data in a wide range of media, including pencils, textbooks, Excel, PowerPoint, and

so on. What we are seeing, then, when we view Alexandra's acting with tables for the major project for *ENGR 1110* is the product of a laminated trajectory that extends through, and thus is laminated by, an extensive history of acting with tables: her relatively recent encounters with engineering and in the *Computing Applications* community college class she took before attending college, but also for scheduling her activities, writing fan novels, solving logic puzzles, participating in her father's representations of the family budget, and other "little things" as well. When we view Alexandra's facility with tables for the capstone project, we are seeing the most recent face of her history of acting with tables as it extends into that activity. In that engagement, Alexandra's laminated history of tabling is woven together with her histories of acting with a host of other inscriptions, like the many mathematical equations that animate her work on the project, but also with the discourses, texts, artifacts, gestures, and so on that are relevant to engineering, and those histories trace their own laminated trajectories through Alexandra's lifeworld.

This analysis of Alexandra's history with tabling offers one response to calls for richer, more detailed accounts of writing, learning, and socialization (Beaufort, 2004, 2007; Roth & Bowen, 1999; Winsor, 1996), but it offers one quite different, I think, than the ones they imagined. Alexandra's experiences invite us to relocate development beyond people's participation within any single domain to the histories they trace through the world, along laminated trajectories that reach across the timescales and the expansive literate landscapes people traverse, and that weave those histories into situated sites of engagement and propel them toward potential futures.

Ultimately, this analysis of Alexandra's coming to act with tables illuminates all that can remain obscured, or ignored altogether, when we too readily assume that literate action is anchored tightly within the presumed borders of the sites in which we find it, that literate practices and persons emerge solely from within the presumed boundaries of the activities in which we encounter them. Ultimately, adequately addressing questions about the ontogenetic pathways that action, practices, and persons trace though the world demands the kind of "inquiry stance" that Stornaiuolo, Smith, and Phillips (2017) describe, an orientation toward understanding what people do and why and how they do it that allows "the unprecedented, surprising, and meaningful to emerge in observations of human activity without predetermined and text-centric endpoints of explanations" (p. 78).

Lemke (2000) argues that attention to the material trajectories that flow into and emanate from situated engagements is crucial for answering the question he poses at the beginning of his article: "how do moments add up to lives?" His emphasis on trajectories across timescales can help writing researchers address

that same question. We can continue to generate fine-grained accounts of persons' various literate engagements—doing engineering projects, scheduling their lives, writing fan novels, solving logic puzzles—and doing so would certainly move us a long way toward filling in what Grabill (2007) refers to as the “incomplete maps of what people actually do with writing and technologies in their everyday lives” (p. 3). But, without careful analytic attention to the material histories that persons and practices trace through the world, we'll continue to understand those activities as autonomous textual moments, as discrete scenes of acting with texts, without ever glimpsing how persons traverse the assumed boundaries of everyday and disciplinary engagements. Without careful attention to those histories, we will continue to underestimate the role everyday literate activities play as persons fiddle with, co-construct, and continually make and re-make disciplinary worlds, and, likewise, the role institutional activities play in shaping everyday lives. Without careful attention to concrete historical trajectories, is hard to see how we will ever realize the expansive, and ever expanding, literate landscapes people navigate, and ever fully understand how people weave together a lifetime of textual engagements to compose a literate life.

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This chapter continues the focus on individual writers' development through time and across shifting contexts. Here, Ryan Dippre draws on Kevin Roozen's work (Chapter Twenty-One) as well as that of Charles Bazerman (Chapter Twenty-Three). Influenced as well by Paul Prior, Dippre investigates lifetime writing development through a case study of how one writer uses notebooks over a twenty-year span. He finds that the notebook-writer's responses to particular challenges or situations are at times adopted into his ongoing practice, so that the practice itself evolves over time. Challenges range from time, to space, to external rules about what can be physically carried into particular workplaces—and in each instance the writer's practice is transformed by these constraints even as his experience is transformed by the process of writing.

Dippre closes with reflections on both the malleability and durability of writing practices throughout a lifetime. His discussion leads us to the final chapter in this collection, in which Charles Bazerman makes a case for broad and rigorous study of lifetime writing development.

Readers are encouraged to seek other connections. The editors see connections to "A Table of Research Methods," that follows Chapter Two, in at least rows K, M, and Q.



# Haikus, Lists, Submarine Maintenance, and Star Trek: Tracing the Rambling Paths of Writing Development

RYAN J. DIPPRE

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The artifacts of the 1966 Dartmouth seminar suggest many viewpoints about “what is English?” Harris (1991) identified two “camps”: a “cultural heritage” camp and a “growth” camp. What I find remarkable in these artifacts and publications is not so much the split that Harris identified, but a recurring theme in both: the transformative ways that language and writing move across social, cultural, and disciplinary boundaries. Answers to “what is English?” were shaped by this theme, even if those answers led to different teaching approaches.

The boundary-crossing power of writing has been explored since the seminar, and echoes through the driving questions and methods of “A Table of Research Methods,” which Dryer shared in this volume (Dryer, “Tabling the Issues”). Though writing research’s “dominant metaphor” (Roozen & Erickson, 2017, s. 2.08) has been one of “writers moving from outsider to insider status in particular discourse communities or activity systems” (Beaufort, 2007, p. 24), advances in linguistics, sociology, anthropology, cognitive science, and psychology have pushed writing researchers into tracing the “situated, mediated, and dispersed” (Prior, 1998, p. 32) nature of literate action across times, places, people, and activities.

“College Writing”: From the 1966 Dartmouth Seminar to Tomorrow 2016 Institute and associated conference (Dartmouth ‘16 Conference) built upon these advances. In this chapter, I turn to one advance in particular: Charles Bazerman’s suggestion that Writing Studies trace the complex work of literate action by turning

its attention toward the lifespan—namely, exploring writing with an eye toward how writers write from cradle to grave (see Bazerman, this volume). I explore a swath of the lifespan by following a particular practice: notebook writing. I trace the notebook use of one writer, Tom, over a twenty-year period. I ask, “How did Tom’s literate action develop through his notebook practice?” and examine how his notebook practice transformed over time and across constantly-changing tools and situations.

## Framing a Lifespan Perspective on Literate Action

In his working paper talk at the Dartmouth ‘16 Conference, Bazerman argued, “Writing takes a lifetime to learn,” and that it “is a part of life, and accordingly intertwined with [a] way of life at different points in life, including reading and literacy engagement.” He elaborated at his closing address, pointing out that “things really do change across the lifespan,” and that these changes merit further examination. Bazerman indicates here that the production of writing is constituted by the wider production of literate action. In any given act of writing, writers work through multiple dimensions of human activity. As Brandt (1990) argued, the chief concern of an engaged writer “is not “What does that say?” or “What do I make that say?” but more like, “What do I do now?” (p. 38). Writers write by “keeping the entire process itself going” (Brandt, 1990, p. 38). Prior (1998) and Roozen (2008; 2009a; 2009b; 2010) have suggested that the process of writing *keeps going* across social boundaries. Literate action is “situated, mediated, and dispersed” (Prior, 1998, p. 32) across times, places, people, and activities. Treating writing as an action to be traced frames it as a material performance. Writing is, in other words, caught up within the ebb and flow of the lives that we live.

Roozen (2008, 2009a, 2009b, 2010) and Roozen and Erickson (2017) used *literate practices* to trace writing’s vertical and horizontal (Prior, 1998) movement across communities and identities. These practices form a “constellation of linkages” (Scollon, 2001, p. 161) that constitute a *nexus of practice*: an ongoing, unfinalized (re)structuring of orchestrated practices in-the-making in situated sites of engagement. Roozen and Erickson (2017) traced “continuities” (s. 2.08) of writing across multiple nexus of practice. These continuities indicate the “dispersed, complexly mediated, and heterogeneously situated” development of a practice (s. 5.01), and ground development in specific instances of use. Each literate practice emerges in sites of engagement as writers “develop and stay oriented to a particular, here-and-now, action-centered context” (Brandt, 1990, p. 57). In the following

sections, I trace the material work of Tom as he develops his notebook writing practices across times, places, and events over two decades.

## Tom, Notebooks, and Literate Practices

I met Tom as he was finishing an MA in Creative Writing at a local university. Tom attended a public talk by Kevin Roozen. After Kevin's talk, Tom and Kevin discussed the notebooks they each kept. Tom mentioned that he kept small notebooks when serving on a submarine in the U.S. Navy. Kevin was intrigued, and suggested that I speak with Tom about it. Tom and I met three times to discuss his notebook practices, and I developed a qualitative methodology to analyze the records that emerged from them.

As a young man, Tom often saw his father, a pastor, writing, and decided that he would also become a writer. Feeling that he had to be "older" and "more knowledgeable" to be "taken seriously" as a writer, however, Tom's initial career moves (i.e., the U.S. Navy, a hydropower company) did not focus on writing in particular, though he regularly wrote, doodled, and drew in notebooks. He "never thought of [himself] as a writer until much later." When we spoke, Tom had been writing in a notebook for over twenty years.

Tom's notebook writing offers *strategic research materials* (Merton, 1987, p. 11): fragments of social action that make aspects of social order available for closer inspection. Through notebook writing, Tom constructed a *practice*—a socially-recognized activity with consequences (Miller & Goodnow, 1995). Tom's long history, detailed records, and the range of situations within which Tom's history of notebook writing emerged made his interviews ideal for examining how his notebook writing and identity changed over time.

## Methodology

### Record Collection

Record collection and data construction were influenced by sociohistoric approaches (Prior, 1998; Roozen & Erickson, 2017), and grounded theory methods (Charmaz, 2006; Saldaña, 2009; Glaser & Strauss, 1968) that were shaped by Brandt (2001, 2015). My interviews with Tom focused on writings that Tom selected after I asked him to share texts that he found interesting. Tom shared over thirty texts of various length with me throughout the interviews. The following

concerns, influenced by recent work on interactional ethnography (Green, Baker, & Skukauskaite, 2012), informed my interview questions:

- What counts as notebook writing for Tom?
- When?
- Where?
- Under what circumstances?
- With what materials?
- Drawing on what social and historical antecedents?
- Constructing what social, physical, and psychological consequences?

We closed interviews by identifying topics to discuss in later interviews. Tom reviewed all transcripts. Allowing Tom to engage meaningfully with the steps of record collection enabled his own sense of his literate development to guide my emerging understanding of his notebook practice over time.

### Data Construction

I examined transcripts for *mentions* of notebook writing, or “discrete verbal references to events, processes, actions, facts, presumptions that pertain to the phenomena of interest” (Brandt, 2016, p. 14). The phenomenon of interest was notebook writing. I identified 124 mentions of writing in the transcripts. These mentions covered, on average, 67.6% of each interview transcript. Following Roozen and Erickson’s (2017) description of their data construction, I “arranged data inscriptions ... chronologically in the order in which [Tom] engaged with them” (s. 2.08) for my analysis.

### Data Analysis

The isolating of mentions offered by grounded theory-based methods enabled a focus both on the practices that Tom deployed and how the mundane action of those practices were *accomplishments*, the result of Tom performing the practice “for another first time” (Garfinkel, 1967, p. 9). This isolation enabled me to see each instantiation of practice as a developmental opportunity. Isolating mentions through grounded theory paired well with the chronologic, narratively-framed analytical tradition of sociohistoric analysis. Together, they show each mention as a somewhat-novel response to somewhat-novel situations. I could then observe Tom’s ongoing work to establish seemingly-stable literate practices and the development that emerges as a result of that work.

For instance, one of Tom's notebooks contains a haiku about neon lights, written during a navy training exercise. Written "one day when we were sitting in training," Tom's haiku does several things for him. It passes the time, allows him to engage in what he would later call "subversive" work, and develops Tom's vision of the notebook's affordances. The historical moment of the training and Tom's developing "subversive" identity coincide with the emerging practice of notebook writing that I capture with the codes of *adapting* and *adopting*, which I present below. These focused codes were verified with three additional coders, who tested 15% of the mentions.

## Results

Tom's literate action developed through the *adapting* and *adopting* activity that occurred as he enacted his notebook writing practice. Tom co-constructed situations through his notebook writing, encountering new challenges and circumstances each time. When encountering these challenges, Tom *adapted* past practices to overcome them. For example, when Tom took a position with a private company after his time in the U.S. Navy, he began using his notebook to keep a running log of his everyday tasks at work to document his productivity. Eventually, some adaptations were *adopted* by Tom, and became enduring components of his practice. The running log, for instance, did not endure either at Tom's workplace or in his subsequent graduate work. But the practice of haiku writing that emerged early in his notebook writing work carried through the military, the workforce, and creative writing—it became an enduring way of engaging with his notebook. This ongoing process of *adapting* and *adopting* characterize a literate practice that, though identifiable as the same practice, has actually endured extensive change during Tom's long transformation into a creative writer. *Adapting* averaged 28.57% coverage in the mentions, and *adopting* averaged 6.97% coverage, for a total of 35.54% coverage of mentions in each interview.

### Tom's Literate Action Development: the Navy, the Writing Group, Twitter, and Graduate School

In this section, I trace Tom's adapting and adopting through four uses of notebook writing. I focus on how Tom *adapted* his notebook writing to limitations in time, space, and attention, and *adopted* the responses to those limitations into his future applications of notebook writing—adoptions that shaped his writing and

his growing sense of himself as a writer through graduate school. Widely separated in time and social structure, these instances reveal the malleable, durable nature of Tom's notebook writing.

## U.S. Navy

Tom joined the U.S. Navy “as a sort of job training. I was assuming that ... whatever I did in the Navy would be the equivalent of a college degree.” Before enlisting, Tom began using a notebook. Though unable to take it to basic training, Tom returned to it in “Electrician A School,” where notebooks were required for learning his post-boot camp specialty. Tom discussed four “A school” notebooks, one each for electrical equipment, batteries, DC motors, and generators.

This notebook writing was, in Tom's words, “professional.” Except for writing “Buckaroo Banzai” and “the cosmic neutron” on the covers (references to a movie and an idea he had, respectively), his writing was entirely academic (Figure 22.1). The “A school” notebooks' organization surprised Tom during his interviews (Figure 22.2). “Seriously,” remarked Tom, “I think this is the most professional thing I've ever done.”

Tom's take-up of his pre-boot camp notebook serves as the “origins of [this] social practice” (Scollon, 2001, p. 12). Through it, Tom engaged with the consequences of what he learned in “A school.” Figure 22.3 shows Tom's working out of a connection between an understanding of electricity that he learned about in “A



Figure 22.1. Tom's “A School” notebooks.

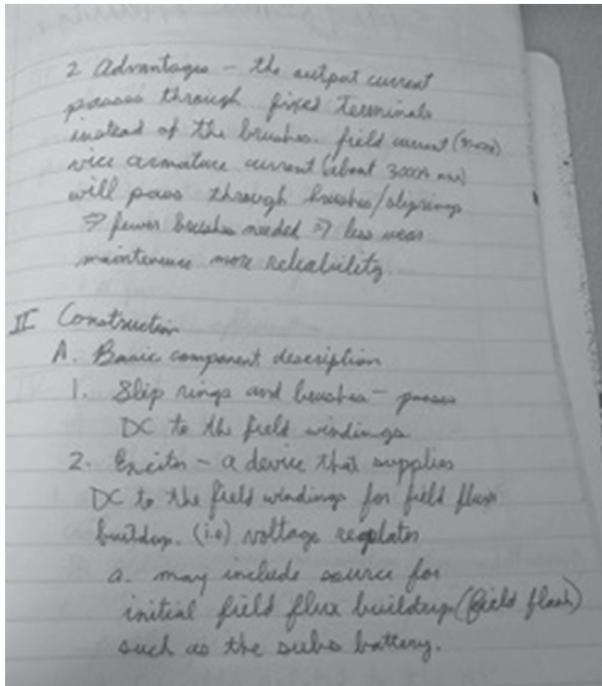


Figure 22.2. Tom's "A School" notebook organized writing.

school" and how electricity shapes human consciousness. Tom notes, "I was thinking of the electricity in your brain ... but obviously I am learning about electricity here ... the first thing I learned was electricity and I'm trying to like work out what it means in my journal." Tom made a connection among electricity, the electricity of the human body, and his own experiences with sleeping:

I had this idea that ... when you wake up and you're really, you can't, you wake up in the middle of the night, sometimes you're immediately awake but sometimes you know you're going to be able to get back to sleep right away? Like it always had that feeling to me of like a blanket smothering my brain, so I thought maybe the neural net was an actual net, or maybe there was a way to get your neurons to activate quicker. It was ... written without any of the understanding of the science behind it. It was just based on how I felt when I was waking up or sleeping.

Tom's work on synapses and the "neural net" expose his deeply laminated (Prior, 1998) activity of notebook writing. The page is a converging of notes and drawings from his experiences sleeping, the new knowledge of electricity that he has drawn from his "A school" classes, and a future research idea. Tom's notebook writing orchestrates the activity of several lifeworlds into new lines of thought—here, thoughts about electricity and the operations of the mind. The lamination of



Figure 22.3. The neural net.

“A school” subject matter and other experiences within the pages of a notebook begins a trend that intensifies in Tom’s later writing—it is the start of an *adapting* activity that continues through the work that Tom does with his notebooks during submarine tours. After Tom finished “A school” and began his tours, he continued notebook writing for work and personal purposes. Sailors often carry green “Memorandum” notebooks with them (Figure 22.4). These notebooks fit in a pocket and can be easily used aboard ship. In Memorandum books, Tom brought his work notes and his own musings into a single space. Tom *adapted* the work of his notebooks to construct, side by side, the demands of his shift in a submarine and his own thoughts, ideas, and personal conversations.

In Figure 22.5, for instance, Tom’s thoughts about a practical joke are in the same space as an order to replace all light covers. This is indicative of a regular movement from work to personal and back again. It is responsive to the issues of life on a submarine: terse notes in response to minimal time and space, punctuated by shipboard work and life. For this reason, lists (see Figure 22.6) became useful to Tom—they could be written quickly, required little space, and could be added to over time. Through the use of lists, as well as the integration of personal writing with work demands, Tom was able to *adapt* to those constraints and use them as affordances to think through.



Figure 22.4. The memorandum notebook.

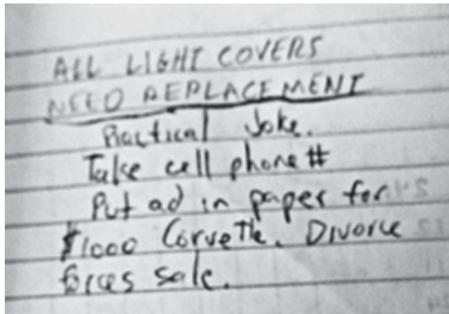


Figure 22.5. The memorandum notebook at work.

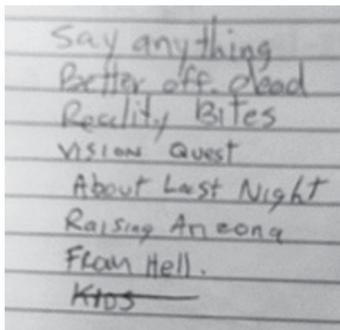


Figure 22.6. Lists in Tom's notebook.

Tom's Memorandum notebook is both an artifact of the situations that he found himself in and a tool in *adapting* to those situations. Through notebook writing, Tom was able to orchestrate his personal and professional lifeworlds to complete the tasks required by his position, maintain personal relationships with his fellow crewmembers, and explore topics of interest. Consider Tom's description of life on watch:

So you're one watch on, then you're off doing maintenance, then you sleep for six hours ... So during that six hours you're stuck ... my watch station was in maneuvering, which is like where we control the reactor, the electric plant, and the propulsion. So there's four guys stuck in this room for six hours, and so you just start talking.

The conversations Tom and his comrades had led to and was shaped by much of the writing that he included in his notebooks—practical jokes, word games, etc. However, the limitations of time, space, and materials maneuvering offers, as well as certain cognitive and psychological demands, led him to *adapt* his notebook practice via particular kinds of writing, such as the haiku:

It's one of those things that came up out of one of those six-hour conversations, where we're bored and so haiku came up sometime during one of those conversations and that's when we just started writing it. [...] You couldn't bring anything that wasn't propulsion-plant related into the engine room. So all we had to entertain ourselves was besides our actual job was stuff we made up. And haikus seemed like right about the right speed to be able to make it up in a minute without having to think too much about it because it's supposed to be entertaining. And it also felt sort of fun. You get tired enough and feeling subversive enough that haikus seem [...] I kind of remember that feeling of when we were sort of co-opting the haiku for our own purposes it sort of felt like we were doing something kind of weird and cool. I know it's sort of strange to talk about now but the idea that it's such an intricate art form that has very specific rules and we were sort of taking it as our own, being like we're going to write about—I have a couple I wrote about Data from Star Trek or whatever so the fact that we can take a very precise poetry and turn it to our needs just felt really cool.

Through this “weird and cool” activity, Tom constructed a social space laminated with streams of activity in his creative writing, his interest in science fiction, and his own desires to be slightly “subversive” as he also responds to the limited time, space, and attention that he can devote to his composing amidst his onboard duties. On the submarine, Tom thought through the limited spaces of the notebook and the maneuvering station to shape his notebook practice. This *adaptation* to the demands of shipboard life endured for Tom, shaping his later work with a writing group.

## Writing Group

After leaving the Navy and joining the private sector, Tom returned to school. While completing his degree, Tom joined a writing group. Tom considered the writing group a “pretty instrumental sponsor” for his eventual graduate school writing. In weekly writing group meetings, Tom used a notebook that he repurposed from its original, workplace-oriented intentions (Figure 22.7) for his writing group.

Like the Memorandum notebooks, the space in his writing group notebook integrated multiple writing activities in a single page. Tom also thought through the space of this notebook and his activities with his writing group, at least in part, through lists and haiku use. Tom has *adopted* the lists, the haikus, and the other short bursts of writing that permeated his early notebook writing as one way to make sense of himself, the space on the page, and his emerging ideas.

In the writing seen in Figures 22.8 and 22.9, Tom used the form of the haiku, the content of science fiction, and the experiences of his life to construct participation—through writing, reading, and discussing—in these writing group meetings. Figures 22.8 and 22.9 contain the work of haiku writing and the ongoing demands and events of meetings. Note the Natalie Goldberg reference in Figure 22.9, and the thoughts on improved toilets and Christmas music at the bottom of Figure 22.8: Tom is engaged haiku writing within the ebb and flow of work in the writing group. He encountered the time to write and the space on the page through haiku writing.

Tom’s writing group notebook was not simply a rehashing of his haiku and list writing—it is a space that allowed Tom, through writing, to begin constructing an image of himself as a writer. Tom noted that “the writing group is why I decided to



Figure 22.7. Tom’s writing group notebook.

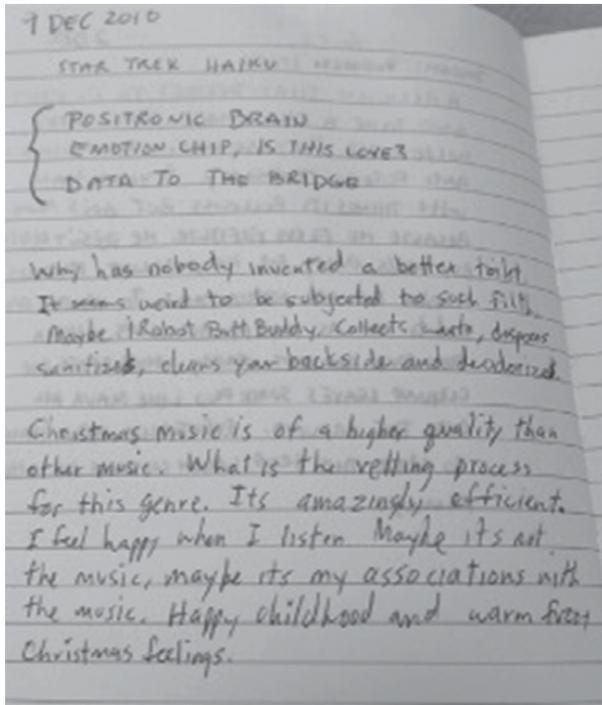


Figure 22.8. Star Trek Haiku.

go back to school for English.” Tom’s engagements with the writing group motivated him to focus on writing, and *adopting* haikus and lists served as a start to re-orchestrating the laminated lifeworlds in his notebook practice toward that end.

## Twitter

While with the writing group, Tom began tweeting. Tom noted, in his first tweet, that Twitter is a “huge responsibility” he “intend[s] to use wisely” (Figure 22.10). These tweets and others—such as communications with followers, which are not shown for confidentiality reasons—show attention toward an audience of Twitter users.

As Tom continued to tweet, his focus changed. Tom began using Twitter to communicate with himself, listing books that he wanted to read, tasks that he had before him, and ideas that came to him (Figure 22.11). Tom has once again made sense of a writing space by *adopting* the approaches to notebook writing that began as *adaptations* to his circumstances in the Navy and continued into the writing group.

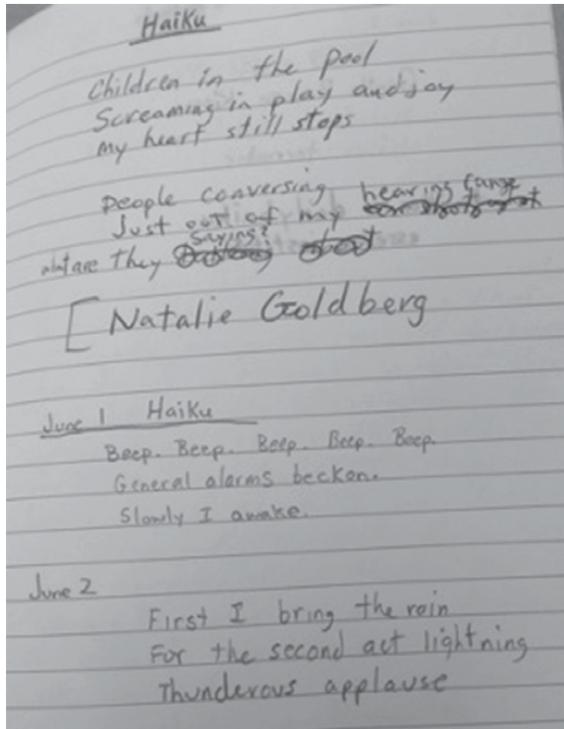


Figure 22.9. A collection of Haiku writing.



Figure 22.10. Tom's early tweets.

Tom's notebook writing (Figure 22.11) continued to blend his lifeworlds in ways that he was able to in the Memorandum books and the writing group. When reflecting on this continuation of his notebook writing, Tom remarked "it's just this list of things," and that he "didn't quite have it figured out yet, it was my first trial at trying to move to a digital device with these random thoughts." Tom's notebook practice shaped his Twitter use: his tweets were laminated with the experiences, memories, and intentions of multiple lifeworlds, much like his Navy writing and his writing group notebook. Tom's electronic notebook writing

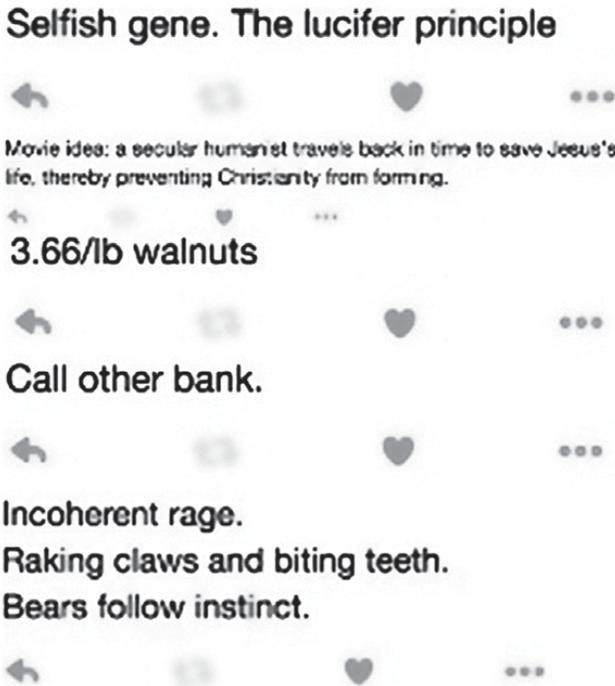


Figure 22.11. Tom's tweets-as-notebook-writing.

was expanded through the Notes feature of Mac products as he entered graduate school (Figure 22.12). Tom drew upon his notebook writing practices to continue organizing his activity in an electronic space.

The impact of this practice became most visible as Tom discussed his Masters thesis. Tom's thesis consisted of thirteen stories. Due to summer classes, comprehensive exams, and construction he helped his family with, Tom only had time to write during the spring semester. To meet his deadlines, Tom drew on the lists in his Notes application. Since the process of writing his thesis "ended up being about a story a week," Tom used the list to keep up a fast-paced production. "I would just read down the list until something struck me," Tom recounted. The ongoing lists, the short bursts of ideas, the times when "something popped out" and he would "write it down" became generative tools for writing his thesis on a tight schedule.

The continuities of his practice across media surprised Tom: "Now I've got Notes on the computer, and I didn't even think about that until you said it, but that's actually the same exact thing I used to do, but I'm just doing it online now, I just never connected the two." Tom has used various notebooks—both paper and electronic—and, throughout, maintained a writing practice that was flexible

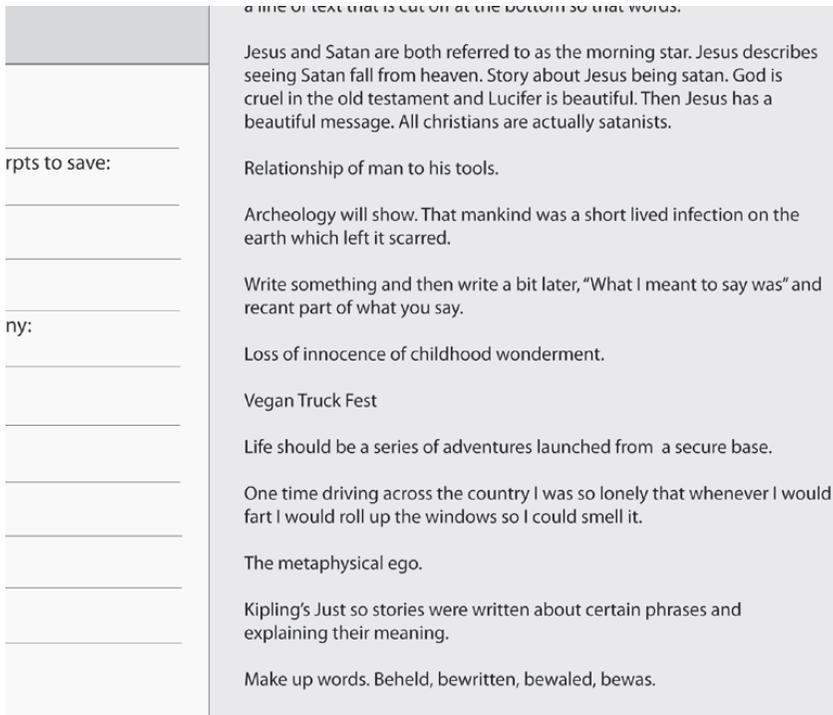


Figure 22.12. Tom's electronic notebook writing.

enough to *adapt* to changing needs but stable enough to be considered “the exact same thing.”

Tom's Notes use highlights tight relationships among his notebook writing in the Navy, the writing group, and Twitter. He moved, in just one tab of his electronic notes, from ideas, to religious stories, to vegan truck fests, to making up words. Tom, now engaged heavily in graduate-level creative writing, identifies several ideas for stories among lists of other ideas and experiences that are briefly noted. Tom's Notes use shifts away from handwritten notebooks, but the practice itself—the way in which space on a page, thoughts, and activity are organized in the unfolding situations of which they are part—remains consistent as he crafts his thesis.

## Conclusion

The *adopting* and *adapting* activity highlighted above demonstrates both the tactical adjustments made during each instantiation of a practice and the work of

recognizing that practice as a stable social artifact. Tom has a notebook practice that serves as a social fact in sites of engagement—one that enables him to orchestrate laminated lifeworlds anew within those sites. Tom’s work to keep writing going across media, locations, events, and purposes provides multiple opportunities for literate action by Tom that both revises existing literate practices and deepens his own understanding of his writing. Understanding the malleability of a practice for particular circumstances, the durability of it across situations, and the developmental opportunities that arise where malleability and durability meet will be valuable for tracing how writers make sense of writing throughout their lives, amidst a sea of seemingly-constant change and across dimensions of human activity.

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Continuing the focus on development of an individual writer over decades, Charles Bazerman reflects in this chapter on the process of conducting research on the lifetime of individual writers as a pressing methodological puzzle in writing studies. Bazerman makes the case that a deeper understanding of lifetime writing development has a direct bearing on pedagogy—in how teachers of writing meet students where they are in order to effectively help their growth as writers. Bazerman explores obstacles to lifetime writing research, methodological problems, and strategies for carrying out such research. His own engagement with this question has spanned decades, and he shares a first-hand perspective on seeking and defining effective methodologies, including eight principles for lifetime writing research articulated through three years of discussions among a collective of researchers, the Lifespan Writing Development Group.

Bazerman addresses research challenges such as the difficulty of finding a middle ground between gross, anonymized measures on one end of the spectrum and completely individualized case studies on the other, while underscoring the benefits of comparable studies. He suggests that scholastic portfolios, personal collections, and retrospective literacy narratives all hold some promise. Bazerman gives us a thought-provoking “state of the puzzle” essay, which offers glimpses of

multiple ways to address this compelling problem, and a sense that the eventual solution will be multi-layered.

Readers are encouraged to seek other connections. The editors see connections to “A Table of Research Methods,” that follows Chapter Two, in at least rows K, R, and Q.

# The Puzzle of Conducting Research on Lifespan Development of Writing

CHARLES BAZERMAN

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This essay considers an open methodological puzzle facing writing studies. The puzzle stands in the way of our developing a grounded empirical understanding of one of the core issues, if not the core issue, of writing education: how do writers develop over their lifetime of experiences and education to be able to address the writing challenges of their lives and societies. This essay will present some of the complexities and challenges of this methodological puzzle and provide a few resources. Although the path forward is not clear, I hope the discussion will move writing studies towards some viable lines of research.

Ever since I began teaching first and third grade literacy over fifty years ago in the inner city, I have wondered about how people learn to write over the course of their lives in different circumstances and what the effect of their writing development is on their personal, social, and intellectual development. In reflecting on my own path and the paths of those around me—friends, colleagues, students, as well as passing acquaintances—I have become aware how different the paths to writing are, as are the consequences. All paths, though, are long, motivated, and supported and constrained by the times and places people find themselves in from early childhood through their mature years.

What mature adults write, how they do it, and the situations for which they do it are far from their early experiences writing in school. These long paths may be more direct or more circuitous with disruptions, stall-outs, or fresh starts and

new directions. Learning to write never ends, unless one stops writing. Nor is the path predictable. How people come to be individual writers, each with different resources, skills, standpoints, engagements, and voices, is tied to what kind of person each becomes and the roles they take in life, whether as bureaucratic report writer, political blogger, or television script-writer. Understanding long-term writing developmental processes also helps us understand what our students bring with them from earlier experiences, what writing development opportunities are currently available to them, and what future identities motivate their current activity.

Examining lifespan development also makes more apparent how writing has become a hidden infrastructure of contemporary life and how it gives people voice and the ability to take action in the built symbolic environment. Writing gives social, economic, and civic advantage to those who have developed a wide and flexible array of skills to meet the exigencies and possibilities of their lives. Opportunities for writing development are not equally distributed; understanding the differences of pathways tells us about the reproduction of advantage and disadvantage, and offers possibilities for distributing the advantages of writing more equitably.

Writing teachers are cast into these puzzles in a practical way as they try to understand who their students are and how to assist them. Informally noticing and reflecting on the pathways of writing development with the effect on each person's life and the society they live in, however, could gain from systematic investigation into the facts, processes, and mechanisms of writing development across the lifespan. In this essay I want to review some of the obstacles to this research, methodological problems, and strategies for carrying research forward.

## First Steps

Twenty years ago, the systematic study of lifespan writing development came more into focus for me as I began teaching a seminar on the topic. I initially conceived the project as one of synthesis, examining what had been found about writing at different ages, from different research perspectives. What I found were many studies that told about writing activities, processes, texts, and classrooms at different ages and moments in development, but few that looked at change over time that extended beyond a single assignment, unit, or at most term or course. The research literatures were fragmented with little discussion across age epochs or across disciplinary and methodological perspectives. I also found that studies often entangled school curriculum and pedagogy with development, as development was seen as

progress in meeting the implied goals of curriculum. A few studies, nonetheless, examined developments not fully determined by curriculum, such as identity formation or affective social issues in adolescent writing (e.g., Smagorinsky, 1997) or students' non-curricular personal writing (e.g., Finders, 1996).

Only at the earliest ages of emergent literacy or the later years as people entered the workplace after education was writing development studied independent of the priorities of schooling (e.g., Dias et al., 1999; Beaufort, 1999; Winsor, 1996). Further I found little theory that considered the long sweep of writing development beyond Moffett's 1968 chapter on "The Kinds and Orders of Discourse" (pp. 14–59) in *Teaching the Universe of Discourse*. This admittedly speculative chapter focusing only on primary and secondary education was not based on research, but it did consider curriculum in interaction with personal and social development of students. Moffett saw social development as tied to engagement with a sequence of genres that moves the child from an egocentric point of view to greater social engagement and reflective social understanding. This sequence moves from recording interior and social dialogue to reporting what happened, then generalizing about what happens, and ultimately theorizing about what may happen. In this process the child moves from implicit ideas to explicitly formulated ideas; from contemplating the immediately present to considering past, future, and patterns; from immediate audiences to distant ones; from stereotype to originality and individuality.

Britton et al.'s 1975 study, *The Development of Writing Abilities (11–18)*, in examining a large corpus of student writing in all subject areas, similarly considered the students as having distinctive developmental needs that were in part at odds with the *de facto* curriculum of the assignments and assessment procedures. In the course of secondary education, school assignments move away from personal expression, supportive relationships, and learning dialogues and more toward representations of knowledge and skill within relations of assessment, with little sign of personal engagement. Since the time of these two pioneering texts there has been little attempt to understand the sweep of writing development or even the developmental logic of writing curriculum over the primary and secondary years. A few longitudinal studies, however, examined development across higher education over the undergraduate years (see Rogers, 2010 for an overview). Few studies went across schooling epochs (see, however, Tremain, 2015) and only a few followed students into the workplace, as cited above.

## The Lifespan Writing Development Group

The appearance of handbooks (such as MacArthur et al., 2006, 2015; Bazerman, 2008; Beard et al., 2009) did bring together the research on the teaching and learning of writing at each age and level of schooling, but the research in separate chapters remained fragmented. These volumes offered little overt discussion of the sweep of development over different life epochs. Even the name of one of the volumes, *Handbook of Writing Development* (Beard et al., 2009) or the device of parallel but separate chapters on schooling and development (Bazerman, 2008), did little to reorient the discussion. But at least we could see the research examining different ages collected under the same covers.

In the wake of these collections, in an attempt to make the issue of lifespan development more visible as a research question, I published an essay “Understanding the Lifelong Journey of Writing Development” (Bazerman, 2013). Further, to foster discussion across the divides, with the aid of the Spencer foundation, I brought together some writing researchers who study different ages (early childhood, early and middle grades, secondary, university, adult) from different perspectives (psychological, applied linguistic, sociocultural, biographical, and curriculum and assessment). The discussions over three years elaborated the complexity, contingency, and diversity of writing development and resulted in a collaborative statement that articulated principles about how lifespan development of writing should be studied and understood:

1. Writing can develop across the lifespan as part of changing contexts.
2. Writing development is complex because writing is complex.
3. Writing development is variable; there is no single path and no single endpoint.
4. Writers develop in relation to the changing social needs, opportunities, resources, and technologies of their time and place.
5. The development of writing depends on the development, redirection, and specialized reconfiguring of general functions, processes, and tools.
6. Writing and other forms of development have a reciprocal relation and mutual supporting relationships.
7. To understand how writing develops across the lifespan, educators need to recognize the different ways language resources can be used to present meaning in written text.
8. Curriculum plays a significant formative role in writing development. (Bazerman et al., 2017)

The complexity of the problem and the individuality of processes and outcomes led the team members to be cautious about overgeneralizing on the basis of current knowledge; they felt it was premature to formulate any synthetic model of writing development.

## The Individuality of Writing Development

The book resulting from the project (Bazerman et al., 2018) consists of several collaborative chapters elaborating these principles and consequent discussions along with individual chapters by the team members. My individual chapter draws on lessons from lifespan research in other domains to propose a full-scale longitudinal study over the lifespan with many contrasts of populations, languages, cultures, schooling, and socioeconomic situations. This project is admittedly unrealistic, and is at best a heuristic thought experiment to foster more realistic inquiries. In addition to the normal logistical challenges of any lifespan longitudinal study (large and continuous funding, institutional structure, leadership, long-term personnel commitments over multiple academic generations, and subject-tracking and loyalty), specific challenges come from the complexity of writing (the multiple potentially consequential variables; the many possible data sources; the sensitivity to changing situations, opportunities, and technologies across the lifespan of the subjects; and the larger social, political, and economic changes affecting the environment within which writing development occurs). Further, the individuality of outcomes (that is, each individual writes different things in different ways to different audiences) means that the phenomena of interest are not easily or validly reducible to readily comparable measures.

Because of the diversity of experiences, situations, motivations, and resources encountered by each developing writer, writing development is saturated with individuality and individuation. Writing development depends not only on which of the many domains of writing one engages with in the different writing systems, but also on the individuality of one's experiences and path into that domain. Each transition to a new domain brings an idiosyncrasy of prior resources, stances, identities and commitments from previous experiences in other domains. A child collaborating in telling stories or discussing nature outings in the family can influence how the child approaches writing tasks in the early grades. Even the small difference of whether journalists move to feature stories from sports or city politics may inflect their new work.

The further one develops as a writer, the more variation is likely to appear in one's accumulated prior experiences, resources, strategies, and understandings of

writing. Perhaps some clustered patterns of writing development in demographically similar younger children may arise from commonalities of family life and early childhood experiences filtered through standard curricular approaches, but these, nonetheless, will then be further conditioned by personal, personality, and experiential variables, including encounters with inspiring or dispiriting teachers or engagement with particular extracurricular or community activities. Then as the developing writer enters into the individuality of identity formulations and curricular options of secondary and higher education, along with the wider range of other writing activities available to late adolescents, pathways will proliferate in ways hard to capture in any aggregated way. This individuation then further proliferates as the adult enters the complexities and variety of career and community life. Researchers will be able to say increasingly little about groups of people who share increasingly less. Even though some people may at some point share in the practices of a single activity system, how they got there and what they bring will be varied. That is, people employed in the same job title within a single organization with responsibility for producing certain kinds of reports may each likely bring different background, resources, attitudes, and strategies to the tasks and will learn different things from the tasks to influence their future writing engagements.

Even beyond this, the expectation of many writing situations, including the most advanced and demanding, is that people will bring unique skills, perspectives, information, imagination, and critical acuity to each task, so as to accomplish that task in a uniquely effective way. Even within highly regulated tasks, scaffolded by expected structures and informational content (such as might appear in a court probation report), each writer must provide locally relevant material fitting the situation, and make judgments of how states of affairs should be most accurately and usefully represented. Many writing tasks go far beyond these representational judgments in calling on the writer's goals, perceptions, critical and analytical thought, judgments, imagination, creativity and strategy. The writer's development may be seen in how effectively the writer can create a text that meets the contingencies of unfolding situations by influencing specific audiences

Even within highly defined domains each writer can learn new and different skills and orientations by each new text written, further increasing differentiation and individuation. Consider for example the individuality of voice, meaning, and reasoning of Supreme Court Justices—even within the narrow role of adjudicating cases in the context of law and the Constitution within the deliberative procedures of the court. Now consider how judicial roles shape different paths than other roles in the same courtroom, such as pleading lawyers or legal journalists. Each sphere of activity has a variety of roles and differentiation of viewpoints. Individuality and distinctive effectiveness within specialized forms of writing are indeed important

qualifications for advanced positions. What the most developed writers create are surprises, adding new thought, wisdom, aptness, or creativity that goes beyond what has been written before.

Large long-period longitudinal studies are usually facilitated by comparability that provides quantitative metrics of variables and outcomes, but with such individuation of processes and outcomes, lifespan writing development is a real challenge to study in any aggregate way. When attempts to understand change over time of large groups of writers go beyond the grossest of measures that erase the individuality of writers and the individuality of the things they write, they tend to break down into case studies. This reliance on case studies occurs even in modest sized corpus and interview studies that track students across the four undergraduate years at a single university, such as the Stanford or Harvard studies (see Rogers 2010 for a review and analysis of this problem).

## Retrospective Studies

The greatest success in tracking developmental themes across life epochs among diverse populations has been by retrospective interviews. These can highlight individuality of paths and perceptions of the meaning, motives, situations, and opportunities of writing within lives. Further, the researcher may be able to extract qualitative patterns with the similarities or differences among writing lives. Deborah Brandt's work (2001, 2014) is the strongest exemplar of this line of research, using intentionally chosen contrast cases to highlight themes. Through such methods Brandt has been able to identify the importance of such issues as sponsorship, community organization, cultural attitudes, available technology and technological practices, and economic conditions in structuring the opportunities for writing development. Using similar methods Scenters-Zapico (2010) has reconstructed processes of literacy development among inhabitants of the U.S.-Mexico border, identifying especially micro-opportunities and micro-responses that influence development. However, as fruitful as such memorial testimonies have been, they are after-the-fact reconstructions. The granularity of texts and text construction, the specificity of situations and detailed-problem solving, the perspectives and situation definition of others, and many other elements are lost, or filtered through the subject's long-term memory, as organized by the self. Also, because texts from the past may be inaccessible and because the researcher may desire to maintain phenomenological integrity with the writers' perspectives, the researcher may not systematically compare accounts with actual productions.

Retrospective studies based on existing records (as often in medical studies) may have some value, but most writing records are tied to school success measures related to curriculum, indicating the subjects' integration into schooling. They will likely exclude out of school experiences, before, during, and after the school years. They thus leave development conflated with curriculum. Similar limitations constrain textual studies of corpora collected from institutional assessments, as the prompts and communicative situations are specifically designed to elicit responses relevant to curricular goals. Nonetheless, these may be useful in understanding that part of development that is specifically tied to curriculum and meeting institutional expectations. Further, stratified samples of school populations may measure school success, but cannot inform us about the development of individuals.

Somewhat more promising are portfolios that may be collected over years in school settings. While the texts may be prompted by school assignments and activities and the selection and presentation of texts will be regulated by institutional purposes and procedures, the portfolios may reveal individual students' approaches to a variety of tasks; the specifics of presentation, content, and strategies of individual texts; comparisons of individuals across years; and perhaps changes in reflective understanding of the texts and the processes that produced them. In such portfolios and the comparison among them we can see students developing as writers in the context of addressing curricular tasks. We can see how curriculum provides opportunities for individual development and how students respond similarly or differently to those opportunities.

Personal collections some individuals and their families may have kept from earliest years onward may provide another possible source for retrospective records. These personal archives may be combined with interviews to add context, personal meaning, and how these writing events fit within a larger narrative of writing development. Of course, such collections come from self-selected people with writing identities in families that value maintaining these documents. Locating such personal portfolios or collections involves serendipity, and the files will likely be idiosyncratic in their content. Nonetheless, appropriately interpreted within their limitations and supplemented by prompted retrospective interviews, these personal archives promise important windows into writing development, and may also support comparison across multiple cases.

Retrospectively composed literacy narratives also have some promise, when interpreted cautiously. These narratives appear both in published autobiographical accounts and are now assigned with some frequency in writing classes and analyzed in several research studies (Young, 2004; Robbins, 2004; Dunbar-Odom, 2007, 2010). The school and university examples of course are typically limited to

early years. Such narratives may also be elicited from adults whether in adult and retirement education settings or directly as part of research studies.

## Published Literary Autobiographies

Published literacy narratives, such as embedded in writers' autobiographies, are limited by the conventions of the kinds of story told, the limitations of memory, and the selectivity of self-accounting. These narratives are usually produced by a specialized group of celebrity creative writers whose publishers believe will have a market for their accounts, but not by lawyers or other professionals who rely on writing, but are not conventionally thought of as writers. In these literary accounts, the focus typically is on people, events, states of mind, and the sort of narrative that might appear in novels, rather than comments on the specific craft of writing or its learning. Even comments on writing process that often appear in interviews do not appear so frequently in literary autobiographies. In examining a number of writers' published autobiographies, I found regular mention of reading enjoyed from early childhood onward but little mention of learning or development of writing prior to a moment of awakening of a writer's identity, except for a fascination with handwriting and spelling.

While these literary writers do not discuss their school assignments or development of other writing skills, they are often attracted to the physical means of writing. Nabokov tells of his fascination as a young child with a four-foot pencil he first saw in a store display, which his mother bought for him (1966, pp. 38–39), then with a drawing master's elegant use of his pencil and a “special eraser he kept in his waistcoat pocket” (p. 91), and with a box of colored pencils (pp. 100–101). Evelyn Waugh spends some time on his high school fascination with calligraphy fostered by a mentor (1964, pp. 145–156). Most schooling and contact with other mentors are treated more as incidents in life than as opportunities for learning. Where school writing activities are mentioned they are often in the context of the young writer being reprimanded for expressing unorthodox opinions or showing off knowledge (for example, Waugh, p. 160), using foreign languages (Nabokov, 1966, p. 185) or other violations of expectations. However, Waugh does report on the value of learning classic languages to advance his appreciation of grammar (p. 139).

This veil of aversive conventionality placed over earlier school writing obscures how the writer later draws on resources that may have been learned within schooling. On the other hand, recognizing the power of creative writing and adopting an identity as a writer loom large in almost every story. These moments are reported

in adolescence or beyond and are often associated with first publication. These moments seem to change the writer's stance toward writing and the identification of writing tasks that are worthwhile and motivating. Welty (1983, pp. 79–82) in a chapter entitled “Finding a Voice” and Greene (1971, pp. 110–113) both mention publication in school magazine as an identity-forming moment; similarly, Waugh (pp. 94–95) refers to his editing his school magazine in his primary school (p. 96) and the approval of his father when he won the Prize Poem in his last year at secondary school (p. 137).

Nabokov, more extravagantly, offers a twelve-page rapturous, luxuriant description of writing his first poem when he was fifteen. His narrative includes descriptions of his languid postures about the house and the responses of the various adults to his work in progress (1966, pp. 215–227). Nabokov, however, does not repeat this kind of detail about writing later, so it appears more a story of an emergent identity and a passion to continue throughout his life. In character length, and detail, it is similar to his accounts of butterfly collecting (pp. 119–139), and of chess playing and problem construction (pp. 288–293).

Others awoke as writers later. Greene says he only later took up a career in writing as other alternatives for making a living failed. Bulosan reports his writer's identity coming only later as part of his awakening political consciousness as a young immigrant itinerant worker (1973, pp. 305–6). For the most part, after the moment of awakening as a creative writer, the composing and publications of books are treated mostly as incidents in the authors' lives worthy of anecdotes or descriptions of the situation surrounding publication, but not as opportunities to report on craft or processes. There is little discussion of the struggle with writing, the techniques learned, or the writer's problems addressed (one exception is Greene's discussion of the technical weaknesses of his early novels (1971, pp. 200–203)).

Notably, however, two non-fiction writers—Oliver Sacks and Gay Talese—offer more detailed accounts of development as writers. Oliver Sacks in *On the Move* (2015) tells of his writing both before and after he becomes a popular public writer of neurological case narratives. Sacks presents himself as increasingly engaged in a world of writing, with even his clinical practice becoming the fodder for articles and books. The representations of these cases in his books enter into the texture of his life and provide the mirror through which we see his life, including his several books about his own experiences with broken legs, hallucinations, and migraines. His life as a writer is less hidden than in the autobiographies of novelists, which separate the particulars of their life from the content of their fictions. Nonetheless, similar to the literary writers, he does not detail his writing at school prior to university, and only begins his writer's story when he discovers his passion

and engagement as a scientific writer. Although his passion for science goes back early to his childhood, the first incident of writing he gives an account of was his weekly tutorial essays at Oxford that brought him into the library to read scientific articles.

The journalist Gay Talese's essay "The Formation of a Nonfiction Writer" (2003), just as the literary writers, gives central place to the formation of a writer's identity from a sports writer for a local newspaper when in high school to his working his way up from copyboy to feature writer for the *New York Times*. He defines his journalistic apprenticeship as distinct from his schooling, and reports his high school and college performance as mediocre. Portraying himself as an academic outsider he specifies his approach to stories as different from those taught by his journalism professors at the University of Alabama. He devotes much the essay to describing how his human interest approach, focus on marginal character and outsiders, ability to listen to people, and interviewing style grew out of his early childhood experience eavesdropping at his mother's dress shop.

Talese's book-length autobiography, *A Writer's Life* (2006), is mostly devoted to anecdotes from his life and previously unpublished stories, but he does describe his writing processes, interviewing techniques, and struggles with his various projects including details of problems of stance, focus and structure (for examples, pp. 74–79, 93–94, 342–347, 361–2). Comments on writing conditions in newsrooms (p. 239), the impact of TV on the kinds of stories journalists wrote (pp. 181–2), and his encounter with computers also give some insight into how changing conditions require new learning. He also elaborates the conflicts with his high school English teacher (pp. 54–56) and how overheard conversations in his father's tailor shop formed the seed of a book years later (pp. 52–53).

Though the non-fiction writers are less shy about their practices and strategies of writing and the role of writing in their lives, they share with the literary writers the importance of developing identities as writers, and engagement with the material, ideas, and people one writes about. The engagement with writing outside the bounds of schooling was matched with a distaste for school learning, exercises and assessments, seen as unexciting, stultifying, or misguided. How much such attitudes are tied to their creative identities and whether this is characteristic of other kinds of writers is yet to be seen. Further the casting of identity and engagement outside schooling leaves open the question of what actually was learned, if anything, through the curriculum, and how that learning may have prepared the writers for that moment of personal revelation and dedication.

In the various methods and sources I have recounted in this essay we have a variety of partial glimpses into the complexity and diversity of writing development. Even if each of these methods were to be mined for all their potential,

we would still have limited glimpses into our understanding of ourselves as writers and our roles as writing educators. Each method has its flaws, obstacles, and limitations, and none provides a comprehensive and deep understanding of the development of writers and their writing abilities. Full-scale, data-rich longitudinal studies over many subjects over many years hold the greatest promise, but also have the most obstacles. Nonetheless, short of that, other methods help fill out parts of the picture. With more pieces, over time, perhaps the puzzle will start to make more sense and we will find more effective ways to pursue the investigation.

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# Conclusion

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The essays collected here show we are learning that writing is vaster and more complex than our predecessors in Dartmouth's Sanford Library dreamt—though perhaps not as mysterious as they assumed. Writing research is demonstrating that environment, education, and other factors, from the psychological to the physiological, shape writing in ways not well explained by anachronistic constructs like thought, mind, creativity, and/or individuality. But how shall we approach studying how writing shapes and is shaped by these variables? When we were more innocent of writing's complexity, we could focus our attention on a few methods and analytical schemes and be confident they would identify effects and explain their causes. But we are now in a moment of expanding methodological diversity, as Anson and Dryer document in their opening chapters. The remaining chapters provide cases in point: we are now confronting the complexity of writing with research designs attuned to the diverse situations where writing occurs, and accounting for the diversity of forms we must now consider "writing."

Many of the questions and methodological possibilities that preoccupy today's writing scholars have implications for the teaching and learning of writing, but they are by no means constrained to those efforts. After fifty years of inquiry, the central concerns discussed at Dartmouth 1966 remain, though complicated by multiple factors: the emergence and implementation of new technologies in education; substantial changes in student populations, especially those for whom

English is a second, tertiary, or parallel language; and sociopolitical forces that affect the administration, organization, curriculum, instructional working conditions, and goals of education. Fifty years of inquiry might suggest we know more now about how best to teach writing, in both schools and other contexts, and under what conditions writers best develop. But the essays in this collection remind us that old certainties and principles must now be revisited with attention to these changes.

As a result, neither the Dartmouth 1966 conference, nor the 2016 conference, nor this collection offers closure. But which of the branching alternatives identified by our contributors will take us forward most effectively and rapidly? Perhaps in five more decades, we can look back and say which research designs, methods, and interdisciplinary approaches were the most productive and revealing.

For now, these chapters offer advice from different corners of the field. As Anson notes, “scholars continue to invoke a single field populated by like-minded groups of researchers,” despite the “striking diversification of questions, contexts, and methods for research” that has created an “increasingly fragmented community” in the 55 years since 1966. And defining ourselves as “Writing Studies” or saying that we “research writing” may rhetorically collapse our object of inquiry. That is, the impossibility of answering questions about “writing” in a broad-based and contextually diverse way is mirrored by the limitations of asking questions about “writing” as if it were one thing. We thus underscore how this collection asks researchers to cross comfortable boundaries, mix methods, help each other lift epistemological blinders, interrogate assumptions, acknowledge debts, and relinquish inherited positions. To conclude, we review some of the key issues contributors articulate, then identify questions raised by the collection as a whole.

Contributors ask us to consider if material constraints and non-optimal working conditions suggest methods that, if not ideal, are good enough for principled assessment (Barton et al.) or pedagogical hypothesis-testing (Wolfe). That is, should we interrogate long-accepted best practices rather than simply disavow methods contrary to them? Others model diversifying from the “contextualist” approach of studying texts and their social contexts towards analyses that examine patterns of discourse at larger scales (Aull) or demonstrate how these patterns can empirically confront otherwise unseen misconceptions (Poe; Conrad). Multiple writers value linguistic approaches to studying writing, whether engaged independently or with other methods. Galbraith surprisingly suggests that “the writing process” might really be a “dual process” of both knowledge generation and problem solving—and that these different processes can interfere with each other under conditions long prescribed for the benefit of students. Tallal & Rogowsky present a gamified intervention that leverages neuroplasticity to help reduce aural

processing demands by disambiguating phonemes. These chapters put the “cognitive” squarely back in the “sociocognitive,” showing concrete ways research in psychology has much to offer the study of writing.

Contributors underscore that ethical complexities increase in concert with our methods. Our data is co-produced by our informants (Webb-Sunderhaus), and when we surface tacit practitioner-knowledge, we should make those insights serve those practitioners and the organizations they represent, as well as the field (Perrin). The complexities of researcher positionality and methodological sensitivity to vulnerable populations are exemplified in chapters by both Early and Stewart. Other chapters pressure operating assumptions about U.S.-centric teaching and research priorities (Stone), the boundaries of research sites (Roozen), the stability of practices we might identify as objects of inquiry (Dippre), or the feasibility of timeworn distinctions between curricular and pedagogical spaces (Lerner).

The challenges made here include several at the top levels of abstraction: questioning, as Geertz (1980) might have said, “the way we think about the way we think” (p. 166). Spinuzzi draws our attention to a problem hiding in plain sight: third-generation activity theory, long a default analytic scheme for the activity of writing, has become potentially compromised by problems of scale and responsiveness in dynamic research sites—suggesting the need for a fourth generation better attuned to contemporary writing. Brandt wonders how much of the field’s “accumulated wisdom” will have to be reconsidered given the shift she documented in *The Rise of Writing* (2015): the emergence of writing, not reading, as “the dominant form of daily literate experience.” And we are invited to participate in epistemological changes from the level of the inscribed utterance (Cushman) to the interactions of economies, languages, and the formation of expertise (Makoni).

In the near future, the readers and writers of this collection will identify participants, objects of study, methodologies, and research methods. Will we imagine this work as discrete, or will we realize the connections suggested here? Blewett et al. model one way to enact Bazerman’s request to piece together “parts of the picture” by reminding us that methodological generosity can begin at home if we read each others’ work as vital pieces of the whole. This collection represents the efforts of scholars inspired by the potential of inquiry into writing behaviors, environments, purposes, tools, genres, and media, but also rewarded by an institutionalized system of credit and credibility that demands that inquiry. Such demands were less the driving force of knowledge production at the 1966 conference, when the focus was exploring how reading and writing were defined, represented, and taught in classrooms (Harris, 1991, p. 631). Expanding our scope of study beyond improving the methods through which young people could acquire and practice the astonishing technology of writing will include thinking about these and other questions:

1. What will writing look like in *another* fifty years? How will the concept of “text” differ, and what will be the nature of “composing” as low-cost, networked, increasingly mobile computing drives writing and communication?
2. How will researchers confront blurred boundaries between human- and machine-generated writing and discourse? How will these blurred boundaries be afforded, embraced, and/or resisted by the public?
3. Writing researchers have made strides in developing interdisciplinary approaches to research. How will researchers engage fields both close in intellectual proximity to rhetoric and composition (e.g. linguistics, second language studies, TESOL, communication) and those more distant (e.g. psychology, computer science)? How will interdisciplinary research shape and be shaped by institutional and material pressures?
4. There is much academic enthusiasm for “data science” and “big data,” and writing studies is no exception, with scholars using the term “writing analytics” to describe such work. How will writing researchers balance more qualitative, context-rich methods with “big data?” Will writing researchers be able to influence data-driven research about writing conducted by researchers in the more distant fields identified above?
5. Though English in its many varieties dominates global academic and non-academic exchange, how will writing and writing education in other languages and multilingual contexts adapt and thrive?
6. How does our knowledge of writing for work, civic engagement, social participation, personal needs, and a host of other extracurricular genres and purposes challenge the understanding of writing developed in the context of schooling for young people?

We hope these essays can open up a period of investigation, understanding, and practice, as did Dartmouth 1966. Perhaps those assembled at Dartmouth 2066 will see a steadier continuum of progress from Dartmouth 1966 than was visible to us in 2016. Will they struggle with the same issues, or see our research as quaint and unfortunate detours? That unwritten future is for you to begin drafting.

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