Writing in 1841 to a friend who had asked him what his “Songs Without Words” meant, Felix Mendelssohn challenged the idea that words could say as much as he had already said in his music:

People frequently complain that music is too ambiguous; that it is unclear to them what they should be thinking about when they hear it, whereas everyone understands words. For me, it is exactly the reverse . . . The thoughts I find expressed in music that I love are not too indefinite, but on the contrary, too definite to put into words. (Mendelssohn 3)

Mendelssohn’s romantic invention of the song without words resonated with the romantic spirit of the mid-nineteenth century, embodying the idea that passions, faiths, and aesthetic responses, indeed, all that really matters, were too much for words, or at least for prose. The view that the important things in life lie beyond the realm of the analytical echoes in the enigmatic final few pages of Ludwig Wittgenstein’s *Tractatus* (1961), when he tells us that “in [the world] no value exists,” “ethics cannot be put into words,” “death is not an event in life,” “the riddle does not exist,” or “anyone who understands me eventually recognizes [my propositions] as nonsensical.”

It is ironic that Wittgenstein’s circumscription of what words can do, essentially, mathematics and some aspects of the natural sciences, ignited logical positivism in the twenty-century. His “this is all that words can do,” that is, not much, was transformed into “this is all that words can do!,” a paean to the power of logic and operational definitions. It led to the twentieth-century philosopher’s notion of expressibility, that any meaningful thought is ultimately expressible in language, once suitably defined and articulated, a notion that was soon extended far beyond the natural sciences to the social sciences, humanities, arts, and education.

A consequence of this is that many of the things we ought to be talking about fall outside what our institutional strictures encourage or even allow us to talk
about. Then, in order to say what cannot be said, we have to contort ourselves, arguing for positions we never should have considered relinquishing. Thus, Nel Noddings (1984, 1992) appears to adopt a radical position in her call for caring in education, despite the centrality of care in the experience of nearly all good teachers. But caring does not come with the institutional requisites of definability, measurability, replicability, and neutrality that are so conducive to disinterested academic discourse. Central to experience or not, its existence is not in what Wittgenstein means by words, or equivalently, the analyzable world.

**SPEAKING OUTSIDE THE CIRCLE**

What strikes me about the chapters in this section is that while they address what must be central to pedagogy today and in the future, they have to swim against the mainstream of pedagogical discourse to do so. The major currents flow the opposite way, away from asking questions about access, fairness, income disparities, corporate influence over education, disruptions of employment, hierarchies, power, authority, ideology, morality, writing that "dazzles," or even, meaningful communication. It is not that issues such as these are never mentioned in mainstream discourse, but that to the extent they lie outside Wittgenstein's circle, they slip away from the center; they are viewed as ancillary, preparatory, or incidental, not the hard stuff.

That is why Charles Moran can open his chapter with the assertion that "scholarship in composition studies has not addressed the fact that access to emerging technologies ... is a function of wealth and social class." But if new technologies can make a real difference in teaching composition, extreme differentials in the opportunity to make use of them could have devastating consequences for democratic education. These differentials swamp many of the claims we might make about this or that approach to using technology for learning. Moran goes on to explore how the undeniably true and immensely important consequences of wealth and access in the educational experience of students are rarely examined. He shows that neither the dominant discourse of technology nor that of composition studies address the problem, or even, in most cases, acknowledge its existence.

Why should access¹ be a taboo topic, so that in professional discourse it is the forbidden A word? Moran suggests that it is a dangerous topic. He emphasizes our collective, but personal, implication in the taboo, and worries that he might be seen as "trashing [his] colleagues." He also talks about the rhetorical dangers, that writing about access is only academic posturing, and the compositional dangers, that there is too little to say about access. I was pleased to see that he did not dwell too long on these dangers, but went on to talk about the 'A' word, despite the taboo. His stories and data make a compelling case that should not continue to be ignored. And the agenda for research that he advocates could lead to a new kind of academic discourse that both lives within and speaks to the real conditions of schooling,
But I am still left wondering why access is taboo in the first place. The dangers Moran talks about might apply to other areas that do not carry the same taboo feeling. Could it be that we are so ensconced in Wittgenstein’s circle that we cannot see outside it? Wittgenstein himself was so convinced of the circle’s inadequacy for accomplishing humanly useful work that he left academic philosophy to become an elementary-school teacher (Janik and Toulmin, 202-238). He had completed the dirty job of pointing out the circle’s existence, so others would be free to move beyond it.

But as we all know, the dominant currents in twentieth-century thought, including even, I would argue, most of postmodernist writing, have remained dammed by Wittgenstein’s circle. Acceptable academic discourse, Wittgenstein’s speaking, seeks language that is definable, measurable, replicable, and neutral, while avoiding passion, uniqueness, personal commitment, and overt politics. The access issue overflows too easily from the former to the latter. There is pain in the stories of access that Moran relates, and an uncomfortableness begins to develop that says we really ought to do something this time. Moreover, what if access disparities really are as great as all the data say? What does that mean for how we ought to be spending our lives? At the end of the century, we are still enmeshed in the problem Wittgenstein posed: Can we speak about what cannot be spoken?

Lester Faigley’s chapter is an exception to the pattern of silence that Moran describes. He starts with a question many others have posed, “How does education change for a child who begins school with the potential to communicate with millions of other children and adults, to publish globally, and to explore the largest library ever assembled?” But rather than indulging in fantasies about our glorious technological future, he asks two other tightly linked questions, one about “large corporations making decisions about how children will learn” and the other about “massive redistributions of wealth and disruption of patterns of employment.” These, like access, are taboo topics in the educational academy, so it is little surprise that his chapter opens with four news articles and draws heavily from news accounts of the economy, not from academic discourse.

Faigley sees a mismatch between his own teaching experiences and the visions of future education in the public media. This discrepancy persists in part because our academic discourse typically keeps within the safe circle, making it difficult to share personal experiences, especially when they touch on hot topics like distribution of wealth. But as Faigley says, “teachers have to enter policy debates, even when they are not invited” even though they will not be “directly rewarded for doing it.” Once again, there is the challenge to say what cannot be said.

Access, and related economic issues, are not the only ones that strain against our self-imposed circle of silence. Any issue that undermines the authority of the academic institution is taboo as well. A case in point is that to question any fundamental goal of an academic enterprise immediately throws
us outside its circle. We are not to ask about values, or about beauty, or any
goal that cannot be delimited and scrutinized. Thus, Geoffrey Sirc's chapter
must also struggle to maintain what is important outside the circle while try­
ing to be heard within it:

This paper, then, is a plea for composition to be seen as writing-at-large, a delay
in the glass we now describe as our writing medium. Let our default setting be
the document, rich text format—such word processing terms, like text file, illus­
trate technology's ability to neutralize the ideological accrual of discursive gen­
res. (One may become a member of the Teleintertextual Indeps upon filing . . . )
The document differs from the compositional project envisioned by
Bartholomae in the way use-value differs from exchange-value.

Sirc talks of technology and its implications for composition, but his larger
meanings are about the reasons for teaching, judging others and their work,
setting goals for learning, and the nature of art. These topics are too unsettling
for the circle; they are conceptual, where the institution wants technique.
When Sirc says, "Bartholomae and I have different projects. He wants to
entrench, I want to dissolve. He wants the specific, I want the generic. He
teaches making, I prefer choosing" he is not just delineating an agenda for
composition instruction that differs from Bartholomae's; he is also asserting
values that pull us outside the safe zone. If the practice of teaching is to incul­
cate known procedures, we can establish our curricula with confidence. We
define the scope, and then the sequence of learning activities. But if it is to
"start and stop with the readymade," as Sirc says, then how do we speak about
it? Clearly, the institution becomes unsettled. It is no accident then that, "ulti­
mately, the modernist focus—in composition as in art—is institutional rather
than conceptual."

One reason that all these chapters challenge the comfort zone is that they are
aware of possibilities for radical changes, which could undermine everything
about education as we know it. As Marilyn Cooper says, we are talking about
transitions in assumptions "about knowledge, language, and the self, . . . about
power, . . . about responsibility, and . . . about the teacher's role." In the mod­
ernist frame, these are supposed to be givens, not things to speak about, much
less to change. But "if knowledge is not a stable construct of ideas to be passed
from teachers who know to students who learn, the basis for teachers' authority
in the classroom's threatened." This leads to new roles for teachers: " . . . rather
than acting as wizards who enter the conversation only to lay down the law or to
establish democratic decision-making procedures, they should put more trust
in students' moral self-consciousness." But then, technique is not the central issue.
Instead, we must talk about human relations, the exercise of power, moral con­
science—the ethical dimensions of teaching.

Near the end of her chapter, Cooper presents an interesting case: Ira Shor's
desocializing history and English course on Columbus. We first see Shor's
description of the teaching practice, which includes really listening to students,
posing complex problems, and examining contradictions, in order to develop greater critical awareness. But she questions the slide from asking students to be conscious of and responsible for their positions to asking them to be critical of their positions (cf. Ellsworth, 1989). These are significant questions, because they get to the essence of the whole teaching and learning enterprise. They make us conscious of and responsible for our pedagogical positions in a way that conventional talk about techniques does not. Accordingly, they do not fall neatly into the discourse of cumulative educational research, but are generative questions that need to be raised again and again in new contexts. They reside outside the circle.

Perhaps the most succinct way to talk about the circle problem is to note that mainstream theorizing operates within a system in which there is a constant pressure to eliminate the idiosyncratic or the personal, and to mute questions about purpose, goodness, equity, and beauty. These are present in practice, yet practice's voice is often silent, and ignored within the circle. James Sosnoski comes to this issue in his chapter. He notes a wide range of issues about hypertext reading, such as,

If style is the hallmark of the writer's personality and a signature the legal bond of identity, then hyper-reading undercuts the personal aspects of authorship. Hypertexts are not given the same authority as printed ones because textual signatures become blurred in the undending surge of intertextuality . . .

This and other issues suggest the need for a new theory about reading and writing in the postmodern, hypertextual world. But Sosnoski sees a "rain-cloud" in ungrounded theorizing. He calls instead for a "praxis of hyper-reading." Praxis means an integration of theory and practice that obviates Wittgenstein's circle. Rather than accepting the dualities of thought and action, theory and practice, speaking and not-speaking, praxis is action informed by reflection along moral, aesthetic, and political dimensions, all of those arenas Wittgenstein said "we cannot speak about."

SEEING TECHNOLOGY AS MORE THAN TECHNIQUE

Technology is not just "technology," if by that we mean only silicon chips in a plastic box or a web browser. It is an expression of the ideologies, the cultural norms, and the value systems of a society. The changes in social practices associated with new technologies then become extensions of our current selves. As we modify practices, we reshape both ourselves and the new technologies. This means that talk about technology and its effects is hopelessly inadequate if it remains entirely in the realm of the technical. That is one reason why it so valuable to step outside the circle as these chapters do.

Perhaps the most important societal process that technology expresses is what Ellul (1973) calls la technique. Technique does not mean machines, or technology in the narrow sense, or even procedures for accomplishing tasks,
although its pervading of society has been fostered by the rapid growth of new technologies. For Ellul, technique is a sociological phenomenon, induced by examination of modern human activity. He defines it as “the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity” (xxv). Technique enters into every area of life and progressively absorbs people. In a subsequent work, Ellul (1980) sees a double effect [of technology] on society and human existence. On the one hand, it disintegrates and tends to eliminate bit by bit anything that is not technicizable (this has been brutally felt on the level of merriment, love, suffering, joy, etc.). And it tends to reconstitute a whole of society and human existence on the basis of technological totalization (203).

The modern realization of Wittgenstein’s circle is not only that we exclude from our discourse any talk of “merriment, love, suffering, joy, etc.” but also that we unquestioningly accept the virtue of absolute efficiency. We do this for many natural reasons: we are uncomfortable talking about deeply-held values where there is a chance for serious conflict; we are frustrated addressing issues knowing in advance that there is no easy solution (Wittgenstein: “the riddle does not exist”); we find it complicated to expand our compass to include the exigencies of daily life; we do not like to abandon familiar methods and rationales.

The consequences of this reluctance to step outside are that we reveal the operation of Ellul’s technique in our most mainstream professional practices. Recently, professional education organizations have proposed a set of standards for all teachers seeking certification in the U.S. The standards include items such as,

- operate a multimedia computer system with related peripheral devices to successfully install and use a variety of software packages
- use productivity tools for word processing, database management, and spreadsheet applications
- explore, evaluate, and use computer/technology resources including applications, tools, educational software and associated documentation
  (from ISTE Recommended Foundations in Technology for all Teachers)

Knowing how to operate a multimedia computer system is a useful skill; a teacher who does not know this has one fewer option for supporting learning. But a list of skills such as this remains (intentionally?) neutral about the underlying pedagogical values—those which might inform decisions about whether this option is appropriate for particular students in a given context, how it should be used, and how one might judge its success. On what basis do we judge educational software, or even verify that it is educational? What kind of instruction do we want to support? What do we want our productivity tools to help us produce? The standards carefully avoid these non-circle questions. Even when they use words such as “evaluate” they do not engage with the considerations that would enable meaningful evaluation. Safe in the circle of technique,
carefully avoiding the judgments that might offend, they fail to connect with
the most fundamental issues about teaching and learning.

Techniques are important, but beyond any set of techniques, teachers need
to develop critical awareness. They are faced again and again with immediate,
practical situations in which they have to decide whether to use a particular
technology, and if so, how, and with whom. If it is to be used, how does it fit
with all the other aspects of learning—oral discussions, reading, solitary reflec­
tion, hands-on activities, and with a larger conception of teaching and learn­
ing? Answering these questions is a central part of everyday teaching. They
remind us that teachers must develop their own pedagogical philosophy—to
think primarily about learning and secondarily about the technologies that
support it.

ASKING IMPROPER QUESTIONS

Writing to Ludwig Ficker, Wittgenstein became his most explicit about the
purpose of his enigmatic *Tractatus*:

The book's point is an ethical one. I once meant to include in the preface a sen­
tence which is not in fact there now, but which I will write out for you here,
because it will perhaps be a key to the work for you. What I meant to write,
then, was this: My work consists of two parts: the one presented here plus all
that I have not written. And it is precisely this second part that is the important
one. My book draws limits to the sphere of the ethical form the inside as it were,
and I am convinced that this if the ONLY rigorous way of drawing those limits.

(280x278)

Through his equation: speakable = unimportant, Wittgenstein did not con­
vince many to abandon speaking (in the technical sense he had defined).
Instead, the legacy for most of his readers was a perverse admonition against
trying to speak in any way about what was most important. That conceptual
constriction was bolstered by the practices of academic disciplines and profes­
sional organizations, the marginalization of intellectual life, and the difficulty
of engaging with our deepest concerns, such that most of our discourse
remains inescapably locked with Ellul's technique.

The articles in this section are not content to remain in the realm of tech­
nique. This, despite the fact that I suspect none of the authors would easily
dismiss Ellul's assertion that it is vain to pretend that “the monolithic techni­
cal world that is coming to be . . . can be checked or guided” (1973, 428). But
they shift the issues from technical to ethical. They ask different questions,
such as . . . What do we want students to learn? How can we use new tech­
nologies? How should we? Why should we? What will change when we do? Do
we want those changes? What do they mean for us, our students, society?
What is fair? What kind of society do we want to live in? And, perhaps ulti­
mately, who do we want to become?
NOTES

1. It would be useful to theorize access more fully, but for the purpose here, I want to treat it as Moran generally does, as a process whereby social goods, such as technology, are inequitably distributed. We might explore more deeply how technology not only reflects inequities, but also establishes and maintains them. Yet at the same time, access is far from an unalloyed good, meaning as it often does, social disconnection, deskillling of work for many people, cyber-crime, corporate surveillance, loss of personal privacy, and even the recently named “Internet Addiction Disorder” (Hodder 1997).

2. The National Council for Accreditation of Teacher Education (NCATE) is the official body for accrediting teacher preparation programs in the U.S. The International Society for Technology in Education (ISTE) is a professional education organization responsible for recommending guidelines for accreditation to NCATE. NCATE adopted the new Curriculum Guidelines for Accreditation of Educational Computing and Technology Programs from ISTE in October 1996. Programs seeking accreditation must develop a folio that addresses the performance-based standards. The guidelines document is available from ISTE <http://www.iste.org/standards/resources/projects/techstandards/, (800-336-5191), or <cust_svc@ccmail.uoregon.edu>.