Writing on the Soul: Technology, Writing, and the Legacy of Plato

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There is some ambivalence over how we should view the idea of the tool in rhetoric and composition. During the last four Conferences on College Composition and Communication (2004-2008) the word "tool" appears, on average, more than 20 times a year in the titles of presentations, workshops, and sessions. Sometimes the word has positive connotations, such as "Blogs as Professional and Pedagogical Tools," and "Inquiry and Argument, Tools for Individual Discovery, Analysis and Growth." Sometimes the connotation is unclear, such as "Computational Linguistics and Composition: A Double Logic of Media and Tools," or the aptly titled "'Writing Is Hard, But Tools I Understand': Activity Theory for Teching Writing to Students in Technical Majors."{1} Other times the word has negative connotations, or at least the sense that a tool is an easily abused objective force, as in "Branded: Student Writing as a Marketing Tool for Colleges" and "Teaching Technology as Concept, Not as Tool."

In some cases the concern over tools goes beyond ambivalence, and scholars mount serious, extended attacks on the status of tools, and of the tool as a metaphor in the context of writing. In *Electric Rhetoric* Kathleen Welch, for example, thinks that there is a movement within US educational institutions to denigrate writing "as if it were a mere skill, craft, or useful tool" (145). She argues:

> The writing-as-tool metaphor, in fact recurs in composition textbooks, in many discussions of writing, and in many generally held assumptions about why writing is "good for you." It occurs even in discussions among some writing specialists in the discipline of English. If writing is a tool, then it is part of the Cartesian dualistic reality in which we all continue to live. A tool is a thing out there in the world, a palpable object that one can store in the garage and retrieve as necessary. A tool can be put aside; language cannot. A tool does not partake of inter-subjectivity, one of the hallmarks of current literacy. The persistence of the tool metaphor reveals a great deal about how language is regarded; it is a metaphor that needs to be examined and replaced. (145)

I would like to examine the metaphor of writing as tool, but I would like to refine it rather than replace it. I am, of course, in agreement with Welch about the need to improve the general reputation of writing instruction, and I'm unhappy with Cartesian dualism, which is itself a derivative of the platonic elevation of the internal, mental world over the external, material world. Welch is also right, I think, in seeing that people want to denigrate writing by associating it with tools, because many people view work with such material instruments "lower" in a way quite similar to the ancient Greeks.{2} But I think it is a mistake to attempt to rehabilitate writing by eliding its materiality as a tool and emphasizing its internal and non-material aspect. Such a move reinforces dualism by embracing the internal and making the material the "other." Writing, as opposed to language, *can* be put aside—that's one of its advantages. Indeed, many cultures never had writing. And writing, I will argue, is fundamentally external and material in its origins and its dependence on technology. What we need, I think, is a more approving attitude toward tools, and a more developed notion of how external technology relates to other aspects of our discipline.

Before I begin my defense of tools, I should say that I do not think that tools are necessarily material (not that there's anything wrong with being material), and part of my goal will be to explore a more flexible way of viewing tools. Because of our Cartesian assumptions it is often held that tools must be material, and the mind must be non-material, and never will the two meet. But it is possible to view the world functionally—or pragmatically—rather than through platonic and Cartesian dualisms. John Dewey, for instance, refers to language as the "tool of tools," a meta device that is continuous with, and directive of, the material world. There are a great many functions that we can perform either materially or mentally. We can, for example, remember something in our heads, or we can write it down on a piece of paper and carry the paper with us. We can multiply numbers using a pencil, or memorize multiplication tables.

In the field of rhetoric and composition, the status of the visual has achieved new prominence in this context of the material/mental distinction. John Trimbur, for example, discusses the ways in which Cartesian dualism, and our emphasis on the internal and mental, has affected our theory of process in writing, which is dominated by a concern for "voice, cognition, and conversation" at the expense of a focus on writing as "a visible language produced and circulated in material forms" (260). Visual elements of communication are often linked with the external, and

contrasted with the oral and the internal, in this manner. Trimbur's comments highlight one distinction that should be made between the terms "external" and "material." Conversation, for example, does involve interaction with "external" minds outside of one's own, but if the conversation is verbal and produces no artifact, the conversation isn't "material." In this sense, the discipline of rhetoric and composition has been very attentive to the external through its interest in the various ways that social interaction mediates writing. But the field has been less attentive to the material, particularly in theoretical contexts. Given the rough definitions of "external," "internal," "mental," and "material" given above, the visual is an unusual case. Though we often use material tools when thinking visually, such as drawing or writing, we can think internally using non-linguistic, visual symbols (e.g. rotating images in our heads) in ways that are different than drawing or swinging a hammer. Despite this internal capability of thinking visually, communicating with visuals does require the use of material artifacts.{3} We can't really speak in pictures, and in this crucial sense visuals are tools distinct from "voice, cognition, and conversation." Perhaps visuals are also viewed more as tools than writing because it seem to involve a wider assortment of material objects—protractors, paints, compasses, overhead transparencies, templates, glue, colors, cameras, videotape, etc.

In academia, at least partly because the visual is associated with the material, the visual has long been viewed as a poor cousin to the linguistic. When I was in graduate school in philosophy, newer textbooks with graphics, sidebars, and other visuals were often derisively referred to as "*U.S.A. Today* textbooks." But recently, the visual is making a comeback. At the 2004 CCCC convention, for example, the keynote address by Kathleen Blake Yancey, "Made Not Only in Words: Composition in a New Key," was largely devoted to the increasing role of non-linguistic, material forms of communication. The word "visual" also appeared 44 times in the titles of sessions and presentations at the 2004 convention, often in the phrase "visual rhetoric."{4} In "Visual Pragmatism for a Virtual World" Barbara Stafford mounts a defense of the visual against this "pervading western neoplatonizing discourse" (215). She defends the visual as an intelligent medium, defends the material tools used to produce visuals, and defends the non academic practices that often produce the best visual thinking. In passing she observes that John Dewey's perceptive critique of such anti-material, neo-platonizing discourse in *Experience and Nature* "molders forgotten" (216). Let me begin my defense of tools, then, by discussing sources of the internalist, anti-material "neoplatonizing discourse" referred to by Stafford. With the help of some recent work by philosophers of technology, I would like to then dust off some moldering Dewey and explore alternative, externalist theories that might help us develop new approaches to the material in composition.

The Attack on the Material and External in Ancient Greece

One very strong source of the material/mental dualism criticized by Trimbur and Stafford can be traced to ancient Greece. For a variety of intertwined political and philosophic reasons, Plato and other Greeks undermined and attacked the importance of external material technology in the history and development of writing and culture. When Plato famously criticizes the newly-invented technology of writing in the *Phaedrus*, one might first think that it is a straightforward political attack. It is not a coincidence, after all, that the manuscript that the wide-eyed youth Phaedrus brings to Socrates contains the speech of Lysias, a sophist known both for his democratic sympathies and for his study under the arch-sophist Protagoras.{5} Plato was no democrat, but did he think that writing was inherently bad because it was democratic? New technologies such as writing certainly have political effects, and recent theorists of technology have forwarded the technologically deterministic claim that certain artifacts lead inevitably to certain political structures. Langdon Winner, for example, argues that nuclear technology is at odds with open, democratic societies, and drives cultures toward centralized, authoritarian governmental structures that can control and protect such technology (32). Our recent concerns with weapons of mass destruction, and the decline of civil liberties those concerns have engendered, certainly strengthen his case. But this connection between politics and particular technologies is not new, of course; scholars have argued that writing contributed to, allowed, or perhaps even caused, the rise of democracy in ancient Greece.

In this light, Plato was very aware of the larger role that technology was playing in Greek society, and he was concerned with harnessing technology to his non-democratic ends. In *Republic*, for example, he argues that the city-state is like a ship with a quarrelling crew that is variously talented with particular technologies. In order to operate, a single captain who knows the true art of navigation must ruled the ship (488-491).{6} Walter Benjamin strengthens the case for writing as a bringer of democracy, arguing that new mechanically reproducible technologies democratize culture by undermining the privileged, fascistic aura that is created by rare, non-reproducible entities. When art can be easily reproduced, it can't be as easily controlled or used as a means of reinforcing privileged ownership and hierarchy. During the time of Chaucer, only the aristocracy heard his poetry. But today, people can read the same books and watch the same movies as our elite class (or they can read and watch better material). Benjamin is particularly interested in the ways in which visual media other than writing are reproducible, but in the time of Plato the same point would seem to hold for the way writing could capture, reproduce, and disseminate speech. Plato likes

the aura of personal conversation, and he resists the reduction and reproduction of speech through writing, despite the opportunities it presents for wider, democratic education.{7}

Despite arguments such as these that highlight the incompatibility of the technology of writing with Plato's politics and philosophy, there is at least one glaring problem. How, given such incompatibility, could Plato have exerted such a lasting influence over Western culture—a culture largely developed and transmitted through manuscript and print writing? The medium can't be the message in this case. After all, Plato wrote, and he reflected his ambivalence about writing in the dialogue form he chose to write in—a curious hybrid of the orality he champions and the literacy he can't escape. But there are aspects of writing that are implicated in the broader, more fundamental concern that Plato has with "externalism," or with philosophies that emphasize the role of the extra-mental world.

When Plato attacks writing in the *Phaedrus*, he has Socrates argue that writing will destroy memory, and that it is inherently inferior because it is "external and depends on signs that belong to others," rather than internal and independent (275 a). Plato's fundamental epistemological and metaphysical assumptions can not be reconciled with the increasingly prominent role of material technology in the Greek culture of his time, and his successful attempt to minimize the influence of material technology goes far beyond his critique of the material technology of writing. It is this broader attack on externalism, and his promotion of internalism, that have had more influence on rhetoric and composition—political and otherwise—than his specific attack on writing. This internalist philosophy was broad enough and flexible enough to accommodate writing, and in various permutations it has influenced rhetoric and composition in everything from the role of grammar in writing pedagogy, to the bias against visuals, to our view of the writing process and the proper role of rhetoric. In order to understand Plato's critique of externalism, I will first consider the cultural attitudes toward technology that shaped Plato's response and then look at John Dewey's characterization and critique of that response.

In the eighth century B.C., prior to the time of Plato and Aristotle, technology, crafts, and the work associated with them were viewed highly in Greece, and the Greek term for craftsman—*demiourgos* or *demioergos*—meant literally "one who serves the community" (Humphrey 579). In *Works and Days*, Hesiod affirms such work:

> Both gods and men are angry with one who lives idle, for in nature he is like the stingless drones who waste the labour of the bees, eating without working; but let it be your care to order your work properly, that in the right season your barns may be full of victual. Through work men grow rich in flocks and substance, and working they are much better-loved by the immortal. Work is no disgrace; it is idleness which is a disgrace. (303-311).

In Homer's *Odyssey* we see a similar approval of manual labor:

> For who of his own accord ever approaches and summons a stranger from elsewhere unless it be one of those who practise a craft of public benefit (*demioergoi*): a seer, or a healer of illnesses, or a master at building with timbers, or one inspired by song, who gives pleasure with his singing? For these men are summoned throughout the boundless earth. (17.382-386 in Humphrey 579)

These sources treat art, craft and medicine equally, and give them a common category (*demioergoi*). The Greeks of Homer's time did not distinguish the practical crafts and technology from the arts. Indeed, they considered the *Odyssey* and the *Iliad* to be practical instruction manuals for such things as how to sail a boat and perform a sacrifice.{8} But by the fifth century the prejudice against technology and manual labor of all kinds, including the skilled crafts, was embedded in aristocratic Greek society. Hephaestus, the blacksmith-god, was the only manual worker to ascend to the Olympic pantheon, and he was hardly a prominent figure.{9} The pejorative term used for manual labor in the 5th century was *banausia*, which may have originated from *baunos*, "furnace," which was essential to most crafts (Humphrey 580). Herodotus observes that the

> In Thrace and Scythia and Persia and Lydia and nearly all foreign countries those who learn trades and their descendants are held in less esteem than the rest of the people, and those who have nothing to do with artisans' work, especially men who are free to practice the art of war, are highly honoured. This much is certain, that this opinion, which is held by all Greeks and chiefly the the Lacedaemonians, is of foreign origin. (*Histories* 2.167)

Aristotle associates the technological crafts with slavery:

> But we distinguish several kinds of slave, as their employments are several. One department belongs to the handicraftsmen, who as their name implies are the persons that live by their hands, a class that includes the mechanic artisan. Hence in some states manual labourers were not admitted to office in old times, before the development of extreme democracy. (*Politics* 3.2.8-9)

Plato, of course, disparages particular technologies. He is perhaps most famous for his attack in *Republic* on painters and artists who work with visuals. His attack of writing, of course, is another classic example of the dismissal of a particular technology. But all these attacks are subsumed by his wider theoretical attack on technology and external philosophies. Eric Havelock argues that at the time of Plato there was a general struggle between philosophies that emphasized the role of the external world, and those that emphasized internal, non-material sources such as gods and the forms.{10} *Liberal Temper* 30). Greeks did not confine their interest in the role of the material world to broad abstractions about origins. Both democratic and aristocratic politicians of the time made specific references to aspects of the natural world to justify their politics. F. M. Cornford notes that during the time of Plato controversial writings concerning politics led many to "claim the authority of Nature for the particular form of government they were upholding"(169).{11} Although Plato was a minority voice during his own time, his internalist program, and his suppression of externalism, have been wildly successful in subsequent western thought. Indeed, whether because of Plato or other intellectual forces such as Christianity, critiques of platonic internalism from an externalist perspective didn't make much headway for centuries. The consequence of Plato's influence is not only the suppression of the role of tools and technology in the development of the culture of ancient Greece; the consequence is also that the potential future roles for tools and technology were reduced. It took centuries for technology to develop, and it did so initially without the benefit of an externalist theoretical framework. The first serious externalist frameworks were finally proposed by Darwin and Marx in the 19th century.{12} Darwin provided a biological/historical account for the origins and physical characteristics of humans and animals; Marx provided a material/historical account of the origins and characteristics of class, economic structure, and culture. After these initial successes, externalist theories quickly dominated the sciences and social sciences, and gave unprecedented power to the technological arts. The humanities have never recovered from the loss of prestige that accompanied these developments. People like Thomas Edison and Nikola Tesla became the *de facto* poets of the United States. Everyone knows of Bill Gates, but few can name the current poet laureate. John Dewey, however, was one prominent figure who tried to undermine the strict internal/external distinction, and bridge the divide between the powers of technology and the humanities.

Dewey's Externalist Critique of Plato

John Dewey has had a long and varied influence on rhetoric and composition, and he has probably had more influence on the American educational system than any other person. Susan Jarratt has pointed out the positive aspects that the pragmatist critique initiated by Dewey has had in composition. Jarratt argues that the field of composition suffers from the same characterization applied to the sophists: teachers whose practices are divorced from theory or philosophy (93-94).

She claims that viewing the sophists "as teachers whose practice constitutes a 'theory' can give composition teachers a historical perspective from which to reconsider that relationship" (94). The American pragmatic tradition, according to Jarratt, offers an alternative view of the relation to theory and practice that is "antirealist in ontology, antifoundationalist in epistemology, and detranscendentalist in terms of the subject" (94). As she notes, the pragmatic focus on action as the interanimation between theory and practice can help us reconsider the sophistic emphasis on teaching as a defensible practice within the context of a broader social vision, and not merely the Greek equivalent of unscrupulous advertising. In this context,

> Plato's attempt to diminish the sophists' practice merely to a technical process can be seen not only as his distortion of their project through a philosophic lens that divides theory from practice, but also as an effort to invalidate a specifically democratic political content in their educational program. (Jarratt 95)

I would add to Jarratt's point the intimate connection between technology and practice. In the case of the sophists, their use of writing and their views on technology were intimately tied to their intellectual program and to their reception by aristocrats such as Plato. The platonic system not only separates practice off from theory, it separates technology off from theory.{13} Plato did not merely attack the sophistic emphasis on teaching and social involvement; he also attacked the technological innovation of writing. Writing, in the time of Plato, was the Greek equivalent of distance education, and Plato viewed it as haughtily as many academics view distance education today.{14} I would argue, in fact, that the "democratic political content" of the sophistic program, and the need to re-examine the relationship between theory and practice, are inextricably tied to technology. Technology, I will argue, cannot be separated from theory or politics any more than teaching can. One reason that a reconsideration of Greek thought in the 5th century is relevant is that their society was under the influence of a radical new technology, writing, in a manner comparable to the influence of the computer on our own society. In this context, Dewey's critique of Plato is revealing because it analyzes how theory, practice, technology and politics played out in the time

of Plato.

Since Dewey, pragmatist thinkers have been interested in undermining the distinction between what Plato and Aristotle called *techne* and *episteme,* and thereby extending their critique of Plato's view of truth and society to a critique of Plato's view of the technological. J.J. Pollitt notes that *techne* is often translated as 'art', but that it means, "more precisely, the orderly application of knowledge for the purpose of producing a specific, predetermined product" (69). Most Athenian Greeks (and not merely Plato and Aristotle) held that there was a hierarchy of types of human endeavor. At the top were theoretical endeavors such as math. Practical activities such as politics came below theory, and near the bottom (near the labor of slaves) was *techne*, the material, productive work of artisans (Hickman, *Philosophic Tools* 11).

Plato held that *episteme* was antecedent, foundational knowledge that could not be otherwise. *Episteme* is the crowning knowledge for which philosophy strives. *Techne*, for Plato, applied to a body of skills that was stable and inferior to *episteme*. Because pragmatist theories deny this, they have an interest in alternative explanations of the nature of *episteme*. For Dewey and like-minded pragmatists, *techne* (and some technologies that fall within it) is an active method of constructing new skills, as well as reconstructing old ones.{15} Dewey claims that the construction of epistemic theoretical knowledge is a special case of technical production—a position that stands Plato on his head. *Episteme* for Dewey is the product of *techne*, whereas for Plato *techne* is simply the less-than-important application of the higher knowledge of the forms to the material world. The generation of *episteme* operates independently of *techne*. Curiously, for Plato it is not really generation but recollection that produces knowledge, since the forms have always existed independent of human endeavor.{16} Recently, a variety of neo-pragmatists and philosophers of technology have returned to, and developed, Dewey's views on technology. Some use pragmatist theory to guide a particular research program. Mihaly Csikszentmihalyi and Eugene Rochberg-Halton, for example, use Dewey (and other pragmatists) to develop a model to analyze the significance of material possessions in contemporary urban environments.{17} Most cogent in this context is the work of Larry Hickman, who develops a pragmatic theory of technology in response to internalist theories. Hickman rehearses and develops Dewey's analysis of Greek philosophy and culture in the books *John Dewey's Pragmatic Technology* and *Philosophical Tools for Technological Culture: Putting Pragmatism to Work*.

In the field of composition, this development of Dewey's thought has a variety of implications. His view of the relationship between *techne* and *episteme*, for example, is consistent with the writing-to-learn view, which holds that writing does not merely record knowledge that is antecedent to the process of writing. The technological process of writing—of interacting with material artifacts—is integral to the process of knowledge production. Note here that in Dewey's view the category "material artifacts" includes a great many things. It includes pens, paper, and computers, and libraries, but it also includes the phonic aspects of language (rhythm and rhyme).{18} It would also encompass material aspects of collaboration: people who might be visually, physically available for a writer to talk to personally, or who might be made available with material technologies like the internet. Also included are the beakers, Bunsen burners and bromides in a science lab. Dewey's theoretical framework could abet a consideration of how "prewriting" in the sciences doesn't involve pen and paper as much as it involves lab equipment. In other words, in some ways the writing of a lab report in the sciences really *is* a matter of recording knowledge that is antecedent to the writing process. But it isn't the case, as Plato would claim, that the knowledge recorded in the lab report is produced independently of *techne*. Rather, the knowledge recorded is a product of an interaction with a different material medium than the tools of writing, namely, the lab equipment rather than pen and paper. If we teach writing across disciplines we need to be very attentive to the ways in which writing varies with different materials in different disciplinary contexts, particularly when moving between the sciences and the humanities.

For Dewey, then, technology is not different in kind from theory. The two are inextricably linked, and both have as their goals the resolution of practical problems. Dewey claims that the long tradition of dualism with respect to both body/mind, theory/technology and theory/practice can be traced to this mislocation of technology by ancient Greek philosophers. As Hickman notes, from a pragmatist perspective knowing, knowledge, theories, and metaphysical systems are themselves technological artifacts or tools, and much of pragmatism is an attempt to replace such traditional theories of knowledge with theories of inquiry. One can see, then, how much the traditionally-divided histories of thought and theory, on the one hand, and practice and technology, on the other hand, would be collapsed, for on the pragmatist view such things as theories, practices, and printing presses are all of a kind (Hickman, *Dewey's Pragmatic Technology* 18-19).

Dewey gives a broad account of the role material technology played in ancient Greece that anticipates Eric Havelock's arguments in works such as *Preface to Plato*. Dewey's account, however, doesn't focus on orality and literacy; he argues more broadly that the work of all artisans in Greece provided the model from which Plato, Aristotle and other Greek philosophers constructed their theories. Indeed, writing did not fundamentally condition Greek attitudes concerning technology, because writing and literacy were latecomers at the time of Plato. Writing

indeed affected Greek culture dramatically, but the terms and assumptions under which writing would be assessed had already been determined. But if writing hadn't molded the culture of Greece in the time of Plato, how can it be claimed that *techne* played a crucial role in that molding? According to Dewey, techne played a crucial role because artists in Greece worked in a variety of material media, and as a result of this work, this "techne" as Plato would categorize it, they produced objects which were aesthetically pleasing, and, as Dewey would say, finished "ends-in-themselves":

> Greek philosophy as well as Greek art is a memorial of the joy of what is finished, when it is found amid a world of unrest, struggle, and uncertainty in what, since it is ended, does not commit us to the uncertain hazards of what is still going on. Without such experiences as those of Greek art is it hardly conceivable that the craving for the passage of change into rest, of the contingent, mixed and wandering into the composed and total, would have found a model after which to design a universe like the cosmos of Platonic and Aristotelian tradition. Form was the first and last word of philosophy because it had been that of art; form is change arrested in a prerogative object. It conveys a sense of the imperishable and timeless, although the material in which it is exemplified is subject to decay and contingency. It thus conveys an intimation of potentialities completely actualized in a happier realm, where events are not events, but are arrested and brought to a close in an eternal self-sustaining activity. Such a realm is intrinsically one of secure and self-possessed meaning. It consists of objects of immediate enjoyment hypostatized into transcendent reality. Such was the conversion of Greek esthetic contemplation effected by Greek reflection. (Later 1: 78)

And this conversion of the aesthetic to the philosophic was of great importance, for, as Dewey notes, Greek thinkers "were as much dominated by the esthetic characters of experienced objects as modern thinkers are by their scientific and economic (or relational) traits" (Later 1: 75). Dewey's position echoes the oft-heard claim that the newest ideas begin in the arts, where they are least explicit, and are eventually developed and refined in explicit disciplines such as philosophy.

Though Plato and other Greek thinkers were taken with objects of art, they could not identify with the processes that produced such "technological successes." Those processes were inextricably tied to work in material media, to *techne*. As Hickman notes:

> The free Greeks, the Greeks who had the leisure for reflective *thinking*, exhibited an attitude toward such technological successes that was deeply contradictory. On the one hand, they regarded such production as "menial," literally as having to do with domestic affairs rather than those of public men. This was less so in the case of the dramatic arts because of their perceived links with the life of the polis. But for the most part, and when not occupied with the tools and implements of battle, those who engaged in public affairs did not grapple with instruments and materials; they were proud to be "free" of involvement with, and knowledge of, the means of production. On the other hand, aesthetic objects, once they were finished, received honored attention as objects of immediate enjoyment. (Hickman, *Dewey's Pragmatic Technology* 91)

These platonic assumptions and arguments continue to affect the field of composition in several ways. Consider first the broader context of academia in general. There is a related contradiction to that described by Dewey in academia today, although current academics have usually eliminated the Greek inconsistency of excluding the tools of battle from the general denigration of technology. Academia has never quite been able to embrace and teach the production of art in the same way it has embraced and taught the reception and criticism of art. Criticism of art and literature continues to enjoy more prestige in academia than the actual construction of art and literature. Production itself, regardless of the technology involved, is held in lower esteem. Power in English departments is almost always primarily held by critics and not by those in creative writing or composition.{19}

Further, at a curricular level, many schools (especially in the liberal arts) view technology with a dis-ease approaching alarm. The claim is often made that technology is so mutable that it does no good to study it directly, that students only need to learn to think and they will be able to adapt to the vagaries of the technological world (as if knowledge is some epiphenomenon floating independently above technology). Better, it is often said, to study math than study a programming language. It is certainly true that liberal arts schools shouldn't focus on fleeting and ephemeral technological tools, but to avoid the computer in its entirety seems akin to Plato avoiding the book. Plato attacked writing partly because it was impersonal and led to distance education; today academics often attack computers for the same reason. This denigration of the computer persists despite the fact that the book was the greatest tool for impersonal distance education ever devised, and despite the fact that the book has certainly been thoroughly integrated into academia. These prevailing attitudes are the over-reactions of Plato transferred to new communication technologies.

But Dewey's point also resonates in the more specific assumptions and attitudes within the field of composition. The more obvious examples are the bias against visuals and tools, but the effect runs very deep, into areas less obvious. Consider the issue of grammar. The March 2004 Council Chronicle has a front page story that begins: "Grammar is the skunk in the garden party of the liberal arts, declare members of the NCTE Assembly for the Teaching of English Grammar."[20] Recent books attempt to make grammar prominent again in the teaching of writing.[21] Plato, of course, didn't advocate grammar, because literacy at that time was too nascent for an explicit development of linguistics. The sophists, however, were attempting to build a set of written guidelines for speaking. Nevertheless, the general sophistic stance was that speaking and persuasion are context-specific and not reducible to any universal, foundational sets of rules. But if Plato had had grammar, perhaps he would have embraced writing. Consider rereading the above quotation from Dewey about Greek attitudes toward *techne*, but with a few minor modifications:

> Grammar is a memorial of the joy of what is finished, when it is found amid a world of unrest, struggle, and uncertainty in what, since it is ended, does not commit us to the uncertain hazards of what is still going on. Without such experiences as those of grammar is it hardly conceivable that the craving for the passage of change into rest, of the contingent, mixed and wandering into the composed and total, would have found a model after which to design a universe like the cosmos of the composition tradition. Form was the first and last word of composition because it had been that of grammar; form is change arrested in a prerogative object. It conveys a sense of the imperishable and timeless, although the material in which it is exemplified is subject to decay and contingency. It thus conveys an intimation of potentialities completely actualized in a happier realm, where events are not events and mistakes are not made, but are arrested and brought to a close in an eternal self-sustaining activity. Such a realm is intrinsically one of secure and self-possessed meaning. It consists of objects of immediate enjoyment hypostatized into transcendent reality. Such was the conversion of composition effected by grammar.

Formal grammar, of course, is viewed by many as "imperishable and timeless," although its use by students (and cultures) is "subject to decay and contingency." Despite the fact that formal grammar is a description of the actual use of the material medium of language, it is often viewed as prior to language and experience—an immutable, perfect form.[22] Grammar has been hypostasized by many in academia in the same way that theory was hypostasized by Plato. The platonic approach became most extreme when grammar instruction was almost completely decontextualized and studied as a series of rules completely divorced from the context of actual writing, despite the fact that studies consistently demonstrated that such approaches weren't effective.[23] The emphasis early in the history of composition on the paper—the product as opposed to the process of writing—is also consistent with platonic assumptions. The paper is like a potential platonic form: correcting it almost has to be done for its own sake—almost as if we as educators have to foster and ensure its correctness for all time, regardless of how helpful such a concern might be for the student. One can't also help wondering if the emphasis placed on grammar is a result of the perception of grammar as internal, objective and form-like.[24] But just because something is more objective than something else doesn't mean we should pay more attention to it. In writing it usually means that it's just easier to grade. An emphasis on formal grammar results in students who write boring papers of error-free prose, since actually trying to say something interesting would require an examination of the external world and a syntactic complexity that leads to grammatical errors.

The approach to grammar is also foundational in the platonic sense because it is thought that students should master grammar first (or at least that grammar is the most important part of a grade). Patrick Hartwell notes that an emphasis on grammar itself displaces rhetorical concerns such as style, syntactic sophistication, and audience. The issue of grammar is of great import in the field of composition, he notes, because of the structure of writing courses that are typically built upon it: "first grammar, then usage, then some absolute model of organization all controlled by the teacher at the center of the learning process" (Hartwell 109). It is a *Republic* of Writing. Grammar, it seems, not only resonates with Plato's forms, it has also taken up his battle against rhetoric and the sophists. It would be difficult to imagine an approach to writing instruction other than grammar that would do a better job of displacing or deferring the rhetorical concerns of the sophists.

When, in composition, the battle against the sophists is won, it leads to the curricular view that a single writing course that stresses grammar will allow students (or at least best prepare students) to write in any field. Such a view is very convenient, because it allows other disciplines to outsource writing instruction to composition. Current theory in composition has largely rejected such assumptions, but they are still prevalent in academia, as the Assembly for the Teaching of English Grammar demonstrates. It is not surprising that academics with platonic, internal epistemological assumptions favor grammar instruction. What is surprising is the number of people who espouse non-platonic, externalist theories of knowledge but who, in their teaching of writing, still emphasize an internalist model of acontextual grammar instruction. Somehow the connection between broader epistemological theories and

grammar is overlooked or denied.

In addition to grammar, the platonic legacy affects the new styles of delivery associated with computer technology. There is, for example, the desire of academic departments to have fabulous web pages that can be "honored as objects of immediate enjoyment," but also a desire to have menial, technical people make them. This desire is less defensible in language arts such as English than in other disciplines, and the desire is perhaps least defensible in areas like rhetoric and composition, where it is our job to study and teach such innovation. But the common reaction that technology should be handled by an underclass in academia (whether secretaries or information technologists) raises other issues addressed by Dewey. Dewey argued that a rift in the social structure in Greece made it impossible for the strengths of the upper and lower classes to complement one another:

> the Greek community was marked by a sharp separation of servile workers and free men of leisure, which meant a division between acquaintance with matters of fact and contemplative appreciation, between unintelligent practice and unpractical intelligence, between affairs of change and efficiency—or instrumentality—and of rest and enclosure—finality. Experience afforded therefore no model for a conception of experimental inquiry and of reflection efficacious in action. (Later 1: 80)

For Dewey, it is precisely this interanimation between means and ends, or practice and theory, that is the proper goal of a society. His educational theory, for instance, foregrounds the need to connect academic curriculum to social exigency. Curricula and the structure of disciplines are themselves theoretical constructs subject to revision. Though Plato forwarded a meritocracy—and even granted the right of women to rule if they were found capable—he was committed to the unilateral priority of *episteme* over *techne* rather than mutual interanimation of the two forwarded by Dewey. Greek artisans, notes Dewey, did not live in a world in which they could contemplate form (or, indeed, "the forms") at their leisure— instead, they labored with the material. Plato was

> so troubled by the consequences of this ignorance of form on the part of all who live in the world of practice … that he elaborated a plan by which their activities might be regulated by those who, above labor and intanglement in change and practice, provide in laws forms to shape the habits of those who work. (Later 1: 78-79)

Dewey asserts that it was thus primarily a classist and patriarchal bias that led to this "misplacement" of technology and the splitting of means and end, theory and practice, processes and products, and mind and body. The political ramifications are, of course, manifold. One immediate consequence, as Dewey recognizes, is that the misplacement of technology becomes a rationalization for existing class divisions, or, in the case of current academia, a rationalization for existing disciplinary and curricular hierarchies:

> The conception that contemplative thought is *the* end it itself was at once a compensation for inability to make reason effective in practice, and a means for perpetuating a division of social classes. A local and temporal polity of historical nature became a metaphysics of everlasting being. (Later 1: 98)

The platonic system, then, assesses epistemology, metaphysics, and ethics within an internalist theory. The forms do not exist in the physical world and are not subject to it. What is best to know is truth as it exists in the forms. Thus, for Plato, you do not look to the actual world to learn how, for instance, to construct a just society. You look to the forms. You introspect; you appeal to *a priori* experience. And the bias has continued to this day, in the sense that internalist approaches often place reason (or a curriculum) beyond the material and social world. But contemplative thought and rationality, Dewey argues, is always a means as well as an end:

> The doctrine of the universality and necessity of rational ends can be validated only when those in whom the good is actualized employ it as a means to modify conditions so that others may also participate in it, *and its universality exist* in the course of affairs. The more it is asserted that thought and understanding are "ends in themselves," the more imperative is it that thought should discover why they are realized only in a small and exclusive class…The ultimate contradiction in the classic and genteel tradition is that while it made thought universal and necessary and the culminating good of nature, it was content to leave its distribution among men a thing of accident, dependent upon birth, economic, and civil status. Consistent as well as humane thought will be aware of the hateful irony of a philosophy which is indifferent to the conditions that determine the occurrence of reason while it asserts the ultimacy and universality of reason. (Later 1: 99)

We have come full circle, then, from a discussion of tools to theoretical claims about reason, politics, and education. In a pragmatist framework, they are all crucially related. In the particular context of rhetoric and composition, a pragmatic theory of technology is in an excellent tool to extend our concern with the relationship of writing to social and material contexts. In many ways the history of theory in composition has been a movement from internalist to

externalist models. First, there was an internalist concern with the text as an incarnation of universal patterns of grammar and organization—patterns very much like Plato's forms. Then the focus shifted to another internal subject: the writer and cognitive models of how people write. Although these cognitive models introduced the variable of time through their focus on process, there was a persistent desire to find a universal, form-like, internal (cognitive) pattern that governed that process.

More recently, composition theory has engaged a variety of more external aspects of writing, reading, and thinking. The field has taken up the ways in which external factors such as social, disciplinary, political, and cultural contexts affect the formation of "universal" norms and "laws." We have gradually moved toward the incorporation of the material in our thinking, but I would argue that we haven't gone far enough. We certainly don't want fall into technological determinism, but I think that our field has a burgeoning interest in material aspects of literacy, and our theoretical base isn't adequate to guide that interest. By developing externalist theory that lets us focus on the material aspects of literacy, we should be able to think better about the role that tools like computers should play in our field.

Notes

1. "Teching" is the original spelling; I assume it's not a typo. ([Return to text.](#))
2. In music this denigration is less apparent. It is widely affirmed that people usually become musicians by working with some external technology-whether that be a saxophone, drums, or voice (which is a non-mental tool, although it is part of our body). And the work with that external tool is generally affirmed. However, when the discipline is writing the importance of the tool is diminished, as though people wish to deny that writing could not occur without external technologies like pens, papers, and computers. Without them, we would not have writing, and we would have oral and not literate culture. The training that most of us receive to work with these tools is long and arduous, as any elementary school child will point out. ([Return to text.](#))
3. There are some exceptions, such as charades, but these are limited. ([Return to text.](#))
4. It is perhaps worth noting that the very reason that I can make such a claim is a result of an advance in external, material technology: online access to the complete CCCC convention program allows one to search easily for the occurrence of any word (but not, I might add, any visual). Our tools for manipulating visuals might not be as developed as our tools for manipulating language, but the increasing role of visuals is clearly linked to developing technologies, from wood cuts in the past to PowerPoint and video today. Try it yourself. Go to http://www.ncte.org/cccc/review , download the .pdf versions of the programs, and use the search function. ([Return to text.](#))
5. Lysias, Polemarchus, and Euthydemus were the sons of Cephalus, all of whom were known for their democratic sympathies. See, for example, the note by Nehamas and Woodruff in their translation of the Phaedrus in *Plato: Complete Works,* edited by John M. Cooper, p. 506. ([Return to text.](#))
6. All reference to Platonic dialogues are from *Plato: Complete Works,* John M. Cooper, ed., Hackett Publishing: Indianapolis, 1997. ([Return to text.](#))
7. See Benjamin's "The Work of Art in the Age of Mechanical Reproduction" for his full argument that the concern to preserve aura is fascistic. ([Return to text.](#))
8. See, for example, Havelock's *Preface to Plato,* especially Chapter 4. ([Return to text.](#))
9. Compare the Olympic pantheon to the Nordic gods, for example, whose central figure, Thor, wields a blacksmith hammer. ([Return to text.](#))
10. See Liberal Temper Chapter 1. ([Return to text.](#))
11. Cornford says that such writers base "… the rule of justice, or equality, among men on the equality observed in Nature's course. Thus, Jocastain the Phoenissae argues with Eteocles: 'Equality is what is naturally lawful for mankind: the more and the less are in eternal enmity, and herald the day of hatred … Equal, on their yearly course, move the rayless eye of night and light of the sun, and neither of them grudges the victory of the other. So the sunlight and the night are the servants of men; and can you not bear to hold an equal place with your brother, and allow him an equal share?'" (169-170). ([Return to text.](#))
12. The externalist theories of Darwin and Marx were more related than many realize. Marx asked Darwin if he could dedicate *Das Kapital* to him, but Darwin demurred because it was too atheistic. ([Return to text.](#))
13. This separation is perhaps most apparent in the sciences, where technology has always been considered the handmaiden of theory, despite the fact that all major advances in the sciences were enabled, if not primarily caused, by technological inventions. Consider, for example, the role of the microscope in biology and the telescope in astronomy. More recently, consider the role of the computer. ([Return to text.](#))
14. It remains curious to me how many academics attack the computer as a negative influence on education because it depersonalizes the process of teaching-it brings distance education. But surely the most powerful and influential technology in the history of distance education is the book (or its earlier form, the manuscript).

Plato was right in that regard. Indeed, computers can be much more interpersonal than books. Yet, we've thoroughly integrated books into the curriculum, and few academics argue that books should be banished because they depersonalize education. (Return to text.)

15. For example, Cole notes that Plato attacked the rhetorical technical manuals of the sophists because they were insufficiently adaptable to new situations, which was a result of their lack of abstraction: A pedagogy that proceeds exclusively or primarily by examples lacks the analytical metalanguage characteristic of later rhetoric, and with the ability, either to formulate general principles governing the use of discourse, or relate them to particular instances. It can only illustrate—not explain or justify—the construction of discourses that are long or short or pathetic or rousing or put together out of reusable components in a given manner. (92) (Return to text.)

16. In this sense Plato is like Shirley MacLaine: he believes that we recall knowledge of the forms from previous lives. (Return to text.)

17. See especially the first chapter in their *The Meaning of Things: Domestic Symbols and the Self.* New York: Cambridge UP, 1981. (Return to text.)

18. Rhythm and rhyme are ultimately products of the material attributes of the body: the alphabet and pronunciation are all, after all, shaped by how our lungs, mouths and vocal cords can produce sound. (Return to text.)

19. See in this vein Robert Scholes's arguments in *Textual Power: literary theory and the teaching of English.* Yale University Press, 1985. (Return to text.)

20. "NCTE Authors Weigh In on Teaching Grammar and Writing." *Council Chronicle* 13.3 (2004): 1. (Return to text.)

21. See, for example, David Mulroy's 2003 book, *The War Against Grammar,* published by Boynton/Cook. (Return to text.)

22. Note here that even if Chomsky is right in his claim that human brains are hardwired with certain deep grammatical structures that are independent of particular cultural variation, such structures would be consistent with Dewey's externalist claim. In other words, the hardwired structures in our brain are themselves the result of an evolutionary process in previous humans. And that evolutionary process was itself affected by the experiences and actions of humans in the material world. (Return to text.)

23. See Patrick Hartwell's "Grammar, Grammars, and the Teaching of Grammar." *College English,* 47.2 (1985): 105-127. (Return to text.)

24. An envy of the success of science, and a desire to emulate it, was also an influence. By appealing to "objective" criteria for grading composition became more like science. (Return to text.)

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