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Rhetoric's Mechanics: Retooling the Equipment of Writing Production

Teaching rhetorical production in a digital age calls for us to rethink our discipline's current distaste for writing mechanics. Yet, the digital mechanics of writing are much broader than grammatical concerns. They include production tools that allow for the invention and circulation of audio, visual, and multigenre writing.

The place to improve the world is first in one's own heart and head and hands, and then work outward from there. Other people can talk about how to expand the destiny of mankind. I just want to talk about how to fix a motorcycle.
—Robert Pirsig, *Zen and the Art of Motorcycle Maintenance*

Several years ago, I attended a conference presentation where I sat quietly with other audience members while we watched the first speaker fumble awkwardly with an overhead projector and laptop. The speaker was preparing to deliver her paper, but no signal seemed to reach the overhead. "Oh well," she chuckled after a few fruitless minutes, "I guess I'm not a mechanical whiz." The audience laughed, unaffected by the few missing images and slides in the speaker's presentation. Stuck in a similar situation myself only a short time later, I found that the audience easily dismissed my technical misfire. After mumbling a joke about Murphy's Law and the "challenges of modern technol-

ogy," I worked my way back to the printed pages in front of me. Luckily for me and the laptop-challenged speaker, mechanical failures during conference presentations hardly ever cause much of a catastrophe, given that the technology is usually meant as more of a presentation aid than a mode of delivery. Besides, those of us in rhetoric and composition are not expected to be "mechanical whizzes." With the advent of IT specialists and other techies, mechanical details seem not to be exactly related to the work that we do.

On the other hand, the realm of the mechanical does bear a close proximity to any sense of rhetorical production and practice. Revisiting popular definitions of rhetoric, we find that they often fall back on some version of "mechanics." For example, Richard McKeon's description of rhetoric as *architectonic* places rhetoric within a realm of mechanics insofar as it frames rhetorical work as primarily an ordering, building, constructing, aligning. However, we often find this proximity a rather uncomfortable one in rhetoric's history. Take the classical discussions of rhetoric as *techne*—and the ensuing questions of whether or not rhetoric is a skill versus an art or a knack. The question Plato raises in *Gorgias* is whether or not practicing rhetoric is "mechanical" in the same way that a baker makes bread mechanically: as a rote habit that anyone could learn with enough practice. If rhetoric is mechanical, then it could not be considered an ethical practice, insofar as it relies upon habit versus true judgment or wisdom. Indeed, we have been fighting Plato on this topic for so long that the "anti-mechanical defense" has become a disciplinary trope.

More recently, in the history of composition studies, the proximity of the term *mechanics* provokes bad pedagogical memories from both sides of the classroom. For nearly a century, the most prominent sense of mechanics has related to grammar (hence that dreaded phrase, "grammar and mechanics"). Of course, recent critiques have problematized this vision of composition as a grammar-centered practice. As one of our favorite disciplinary mantras goes: *We do more than teach mechanics*. However, when technology is added to the mix, the contours of "what we do" are again thrown into question. Even for those of us who enthusiastically embrace Web-based and multimedia writing in the classroom, the demands of mechanical wizardry can often seem beyond the scope of overworked writing instructors, rhetorical theorists, and pedagogy scholars. Knowing how to get a signal from laptop to overhead projector is not exactly the vision of intellectual work most rhetorical scholars have in mind when they promote digital technology.

Yet, if we dismiss this technical work as rote mechanics, we risk calcifying a distinction between the *production work* of texts (including the opera-

tions of buttons, cords, and wires that cut and record texts) and the produced texts themselves. This gap is worth a closer inspection insofar as it affects our work as rhetorical scholars and teachers. Indeed, the distinctions among various points of production expose some important questions. Where exactly does the constructive rhetorical work of production begin or end? How *mechanical* is rhetorical production, and where does that leave those of us who call ourselves rhetorical producers? What role does the *mechanical knowledge* of technology play in rhetoric and composition? With these questions in mind, I want to revisit the more dynamic aspect of the proximity among mechanics, rhetoric, and writing. The following article makes the argument that embracing the role of technology's mechanics is necessary for those of us who want to serve as rhetorical producers and teachers of production in the twenty-first century. Rather than shrinking back or separating our work from the materiality of production means, we have the opportunity to expand our own engagements with the modes of invention and means of circulation. Getting to this point of engagement involves two moves, both of which I discuss below. The first move is to reassess our negative attitudes toward the mechanical sphere where writing is concerned. The second, more challenging move is to reinvigorate our own personal pedagogies with a stronger commitment to engaging the means of production.

Under the Hood: Grammar and Mechanics

In "The Rhetoric of Mechanical Correctness," Robert Connors argues that the nineteenth-century American literary renaissance provoked a revitalized concern for spoken and written gentility. Americans began to see grammatical correctness and elocution as a way to hold off geographic and class crudeness, as well as a tool for genuine self-improvement. This mania for grammatical correctness ushered in major pedagogical changes after 1870, according to Connors, due to the growing cultural pressures to teach the rules of *proper English*. Furthermore, as Connors and other scholars have explored, the pedagogical shift to grammar-based writing courses was even more influenced by the public "crisis" sparked by Harvard's English A examinations of the 1870s. After seeing Harvard students' English examinations filled with formal grammar errors and sloppy handwriting, teachers began to question whether higher-level rhetorical pedagogy was useful for students who were having trouble writing correct sentences. As Connors paraphrases the pedagogical fallout from Harvard's exams: "What good, they asked, did knowledge of tropes or amplifications do a student who couldn't spell or punctuate?" ("Rhetoric" 80). College

textbooks and teaching aids began to emphasize error-free writing as a method to correct these missing basics.

Since the days of Harvard's English A, *mechanics* has been an appropriate term for what pedagogues believed to be actually taking place in introductory writing courses. For instance, a common trope found in nineteenth- and early twentieth-century writing texts is "improvement," born from the notion that students' writing was like a leaky sink that needed to be fixed. Improvement has long been used as both a personal and departmental measure of success where students are concerned. In 1965, for example, the Division of Rhetoric at the University of Illinois surveyed their first-year composition students in order to assess the effectiveness of their two first-year writing courses. The survey asked students to agree or disagree with statements like "I have continuously tried to improve my writing on the basis of this course," and "The writing techniques that I learned have improved my work, and consequently my grades, in other courses" (Masters 44–45). While grammar may not be the only skill measured in these surveys, the mechanics of grammar are certainly one of the most significant measurements of personal "improvement." The underlying idea seems to be a belief that successful courses in mechanics will not only fix problems but also improve students' overall performance.

For those leaky sinks that just could not be stopped, however, the advent of *writing clinics* provided another means of treatment. Students with poor grammar and mechanical skills were sent to the writing clinics in order to have their errors "fixed."[1] Unfortunately, many academics outside rhetoric and composition still maintain this view of writing centers as repair stations. Compositionists have found themselves repeatedly explaining that these pedagogical spaces are not run by mechanics who "fix" broken student writing. Borrowing Stephen North's phrasing in "The Idea of a Writing Center," many university writing centers have begun to rectify this misnomer by taking the offensive in their promotional materials:

- Since we view writing as a process, we discourage the idea that the Writing Center is a "trauma center" or "fix-it shop" for "bad" writing. (University of Nevada, Las Vegas)[2]
- We are NOT a "fix-it shop" and seek to "produce better writers, not better texts." (Villanova University)[3]
- [T]he Writing Center is not a storehouse of grammar handouts or a fix-it shop where new mufflers can be added to papers while you wait. (St. Joseph's University)[4]

In spite of this educational campaign by writing centers across the country, the idea of a writing center as "fix-it shop," as North puts it, remains popular on many campuses. Because the relationship of composition to grammar has been so ingrained in American universities, this outdated concept is difficult to change.

Negative Weight

Reflected in the writing centers' campaign against the "fix-it shop" image is an interesting strand of anti-mechanic sentiment. Throughout composition history, we find ambivalent attitudes toward mechanics and its proper place in our pedagogies. As Connors recounts in his history, American writing pedagogy was saddled with the "skills burden" through circumstantial events. For many years after this initial grammar mania, writing instructors adopted the mechanical mission rather passionately. Early editions of *College Composition and Communication* paraded student grammatical errors in a section called "Bona Fide Boners," where teachers reprinted their students' mechanical goofs that resulted in slapdash (though apparently laughable) mistakes, such as "The danger had passed, and so I settled back to enjoy the wind and weather, but not my wife" ("Bona Fide" 14). Nevertheless, outspoken figures in composition would eventually challenge the proximity between grammar and composition studies. Pavel Zemliansky's archival research reads decades' worth of conversations in *CCC* that reflect great uncertainty about the place of mechanics and grammar in writing classrooms. Zemliansky identifies two major attitude paradigms toward grammar in *CCC*: pre- and post-1965. According to Zemliansky, 1965 roughly marks the beginning point of a new attitude toward the value of mechanics in composition. Prior to 1965, articles in *CCC* tended to equate mechanics with clear communication, and Standard English conventions were seen as the primary resource of meaning making (Zemliansky 3). However, this presumption was widely questioned in the 1960s, even ridiculed by theorists like S. I. Hayakawa. Such critiques proposed that mechanics and grammar actually shape meaning, rather than merely convey its prior shape. According to Zemliansky, after decades of valuing mechanical correctness, a number of counter-calls in *CCC* began to emerge.

By the 1970s, explicit discussions of mechanical correctness started to dwindle. Zemliansky explains that the mention of mechanics and grammar more commonly appeared in rhetorical contexts, such as the question of problem solving, self-expression, or audience persuasion (10–11). In the pages of

CCC, for example, compositionists such as Walker Gibson promoted the rhetorical effects of slang and other "non-standard" uses of English, reflecting the influence of rhetorical theories that valued persuasiveness over correctness. Likewise, Peter Elbow, Donald Murray, and other expressivists helped to question the "natural value" of focusing the writing classroom on grammatical and mechanical improvement. Elbow's notion of freewriting, for example, is largely based on the premise that focusing on mechanics will block the uninhibited thoughts that might otherwise flow from heart to hand. Whereas grammar and mechanics were once seen as the starting point of sound thinking, they were eventually repositioned as writing's *final touch*. Furthermore, thanks to the shaping influence of social constructivist theory in composition studies, more voices began to question the validity of a "standard" form of English.[5] Linguistic studies like William Labov's research into Black Vernacular English helped compositionists attune to the social and historical complexities of meaning and language.

The proximity of composition and mechanics was also seen as a palpable threat to the field's attempts at professionalization. Composition scholarship as an intellectual pursuit would (continue to) be delegitimized if scholars were seen as "mere" grammar and mechanics instructors. Some saw a necessary separation between grammatical mechanics and writing pedagogy in order to facilitate disciplinary growth. Apart from the social and professional objections, furthermore, some anti-mechanics voices were simply outraged that they were asked to teach a "remedial" subject. Even in the midst of the late nineteenth-century mania for grammatical correctness, many rhetoric instructors protested that its object of study was too elementary. Mechanics of writing were "thought to be the domain of pedagogues and pedants; rhetoric . . . didn't degrade itself to the level of mere correctness," Connors writes (79). Of course, this protest never died away. Nearly a century later, writing and rhetoric scholars would again rail against the simplistic nature of a mechanical focus. In 1963, Albert Kitzhaber declared, "It is time that the English departments of reputable four-year colleges and universities announce that elementary instruction in the details of correct grammar, usage, and mechanics is not a proper activity for college classrooms" (138). Instead, he continued, the focus of "freshman English" should be the "principles of rhetoric" (139). The mechanics of rhetoric thus became a popular figure against which to push and carve out our own professional identities.

Reconfiguring Mechanics

In Kitzhaber's passionate call, as well as in the larger swells of anti-mechanic sentiment, I hear a quiet protest against work that seems somewhat *beneath* us. The work of mechanics is too instrumental, too un-intellectual, too simplistic. In short, it is not why most of us become scholars and teachers in the first place. This protest reminds me of words my father often repeated as I started college: "You better stay in school so you don't have to do work like me." My father, who earned a living as a mechanic, came home at night with hands that seemed permanently stained from the grease and oil he swam in every day. He knew that most people see mechanics as people who do things that others do not have time, know-how, or desire to do. Mechanics' work is dirty, unglamorous. It is manual work and not something that many academics have experience performing. However, the mechanic is my figure of choice when thinking about rhetorical invention and enactment. A good mechanic does not simply change your brakes or fix your drywall; she prepares you to enact. Though I pride myself on being able to fix things that crack or leak, my father has a mechanic's ability to imagine and improvise solutions and help others imagine what they will need in order to create, repair, or refit almost anything that has parts. In the face of this negative history of grammatical mechanics in composition studies, therefore, I would like to suggest the mechanic as a figure for thinking about rhetoric and writing. As the brief history above reflects, we are often disinclined to place our work in proximity to "mechanics." Nevertheless, it is important to see this reluctance as a historical reification within the discipline. As a corrective to this disinclination, I propose that we conceptualize rhetorical producers as *logomechanics*, or creators who can imagine, improvise, and enact the material deployments of meaning and its operation.

Although it may not be important to become a "mechanical wiz," it is hard to deny that the digital age has altered the demands and possibilities of rhetorical delivery. Our histories usually begin with the narrative of how rhetorical pedagogy originally served citizens who were called upon to publicly defend themselves in courts or speak in public for civic purposes. In this scenario, the rhetorician is imagined as a lone body speaking before crowds in order to win some kind of persuasive adherence from his audience. George Kennedy's history *The Art of Persuasion in Ancient Greece* recounts the centrality of oratory to the earliest development of rhetorics. Although literate practices were in operation during fourth- and fifth-century Athens, Kennedy

argues that the primary means of communication in civic life was based in orality:

> The political system, for example, operated through the direct speech of the citizens among themselves and to their magistrates. . . . Political agitation was usually accomplished or defeated by word of mouth. The judicial system was similarly oral: verbal complaints were brought before magistrates who held hearings; then the litigants pleaded their own cases in public before a jury of citizens. (4)

The needs of Athenian culture demanded rhetorical practices (and pedagogies) that emphasized these important moments of concentrated arguments: legal proceedings, political reforms, and instances of civic details. A rhetorician's interest may have been most commonly focused on a limited context of a very specific audience with quite specific deliberative processes—the jury, the magistrates, the judges. The technology of delivery was thus necessarily limited. But the "lone rhetor" scenario does not play well in the deployment of everyday contemporary contexts. Tiny engines of material collaboration power our public meanings: billboards, local disk jockey rants, rumors, newspaper stories, and so on. These tiny machines are endlessly configurable across contexts. Even political candidates have ventured into new means of delivery for their messages: Internet commercials, blogs, and social networking sites like Facebook and Myspace.[6] Part of the production and circulation of meaning depends upon a rhetorician's ability to imagine possibilities for those meanings' deployment.

Here is where we might revisit our reluctance to define ourselves as mechanical workers in order to embrace a more productive sense of rhetorical deployment. On one hand, an undesirable sense of mechanics reflects a kind of instrumentalism—using tools for a limited purpose without imagining what else is possible. On the other hand, whether we are talking about grammatical mechanics, car mechanics, or the ability to connect your projector to your laptop, we would do well to remember that *mechanics* allow users to operate a wider range of tools in order to imagine and enact what was not possible (or "working") before. More than an instrumental knowledge of technology, rhetorical mechanics is the material practice of enactment. Embracing such productive skills is thus a move away from instrumentalism. Writing instruction limited to the print essay might be called an instrumental mechanics insofar as it limits the productive capabilities of the writer's imagination. As Kathleen Blake Yancey suggests in her CCCC Chair's Address, the future of composition pedagogy cannot continue to remain "chiefly focused on the writer qua writer,

sequestered from the means of production," as it too often is now (309). The alternative is to develop composition models that see writing as an act of imagination and deployment. For example, a productive pedagogy asks whether or not students can "consider the best medium and the best delivery . . . and then create and share those different communication pieces in those different media" (311). We might call this a pedagogy of writing mechanics insofar as it takes production as its primary goal.[7]

Logomechanics at Work: Youth Document Durham

As an example of how equipment and technical mechanics work along with rhetorical production, I want to briefly discuss the Youth Document Durham (YDD) project. The YDD project is an intensive four-week summer workshop held for Durham teenagers (ages ten to sixteen) by the Duke Center for Documentary Studies, where participants learn how to process and develop film, how to edit digital audio, as well as the narrative and interviewing skills necessary to produce documentaries about local subjects. The YDD project chooses participants who have a desire to share ideas with their community, but who might not otherwise have the opportunity to be heard. In many ways, the contents of YDD's workshops might resemble our own composition classrooms: participants learn the rhetorical skills of conducting interviews, writing narrative, making sense of disparate pieces of information and research. However, it is the emphasis on digital equipment and other mechanical tools that separates the YDD classroom from most traditional first-year composition classrooms. The Durham youths spend a significant amount of time learning how to use digital audio recorders and a powerful audio editing program called ProTools. Learning the equipment and software can often take as much time as learning narrative techniques, and the work of editing can often last much longer than the research process itself. If we were to dismiss such technical and editing work as "mere" mechanical details—not as important as the "real" work of writing—then this might seem like a lopsided equation. Yet, I suggest that the difficult work of mechanics leaves the YDD participants with a greater potential set of tools for rhetorical production.

Armed with a digital audio recorder, the teens ask questions of people they meet on the street or in places where they are researching. One past project, "Jobs That Pay," aimed to learn about the social effects of jobs available to Durham residents. As one youth participant describes the group's research:

> [W]e talked about how much salary each person receives by doing certain jobs. We also discussed how people lose closeness with their families just because of jobs. . . . Also, some workers we interviewed said that they don't get that much respect from people, the way they should. A sanitation worker whom we interviewed told us that he always has to pick up stuff from outside the trash cans, and he said, "This means people don't value our hard work." (Kaur)

Once students gather materials from interviews and field research, as well as collecting the ambient sounds that surround their subjects, they return to the computer in order to start editing. Because they have learned to operate a professional (and very challenging) software program like ProTools, the youth documentarians are faced with a vast range of choices about how to edit, what music to add, how to create a rhythm and mood for the piece, and many other decisions. We might recognize all of these choices as typical rhetorical strategies for reaching one's audience through textual design, yet the *deployment* of the rhetorical "text" itself depends upon knowing and practicing that mechanical work.

Documentaries from the YDD summer project address issues that range from community problems of Durham's interracial tensions to the personal struggles of a teen who is originally from another country. Fifteen-year-old Jay Dean's audio documentary, which examines his experience as a gay teenager in Durham, is an example of the YDD audio projects produced each summer.[8] His piece opens with the giggly sounds of high school students laughing into the microphone while trying to state their names and ages. "My name is Molly," says a girl who is obviously standing close to the microphone, "and I'm fifteen and I go to Riverside High School." She laughs nervously. "Yeah, yeah, yeah," Jay's voice floats in from the background, "We don't want to know about *that*. Are you gay or straight?" Molly laughs again, "I am *straight* as an *arrow*." Her laughter is faded as other young voices are introduced. They seem to be answering the same question Jay posed to Molly. "I'm *confused*," we hear a young male say in a slow drawl. There immediately follows a young girl's voice that firmly declares: "*Queer*." Heavy punk guitar chords begin as Jay's voice, sounding warm and present, starts to narrate his own coming-out story. His narrative was recorded in a soundproof booth, making his voice sound incredibly close to the listener. Jay tells us that while he initially believed his mother would be "cool" with his disclosure that he is queer, she told him that he has a "demon" and cannot be trusted to spend time alone with his male friend. Though the narrative could easily be presented in sad overtones, the music Jay has

chosen for the piece is anything but maudlin; vocals scream out a hardcore sound. The juxtaposition of Jay's narration, the unapologetic voices of other teens talking about their sexuality, and the punk music all combine to form a sound of vitality and strength. Because Jay knew how to edit the taped voices he collected, the choice for creating a rebellious, punk piece was available to him.

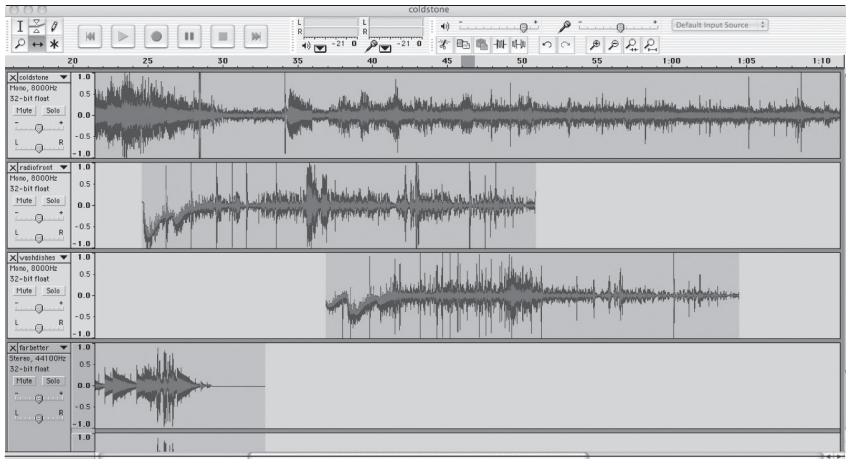

Figure 1

There is nothing new about using technology as an available means of persuasion, of course. The widening availability of production means should not be confused with any "revolution" among users, audience, or students. Lester Faigley's work on visual rhetoric design stresses this important point. Though Faigley initially believed his postmodern, Generation Y students to be more adept with visual images and digital technologies, he came to see this as a misconception. "The majority of students I teach do not enter with notable abilities in design," he writes. "They do, however, display a sensibility in their usage that differs from earlier generations if for no other reason than that the present generation possesses tools for incorporating images that earlier generations did not" (177). As Faigley points out, what is new is the availability of certain tools. From web editing software to inexpensive digital audio recorders, young writers like Jay and other YDD participants now have an opportunity to learn more available means of deploying the texts they imagine. As

mechanics, they can tinker with more tools in order to produce. Consequently, I agree with Faigley when he claims that he "can think of no scenario for the revival of public discourse that does not involve digital media" (179). This is not because of any supposed digital revolution that demands more skills from users, but because the expanding means of production is a key to expanded rhetorical engagement.

The YDD project shows why technology's mechanics are too important to let slip through composition's cracks. Johndan Johnson-Eilola has argued that a program like ProTools, the same audio editing program used by the YDD participants, is exactly the kind of rhetorical means that composition should be pursuing. "One key aspect of ProTools is the way in which it deconstructs the separation between artifact and performance, long a stumbling block for composition," he explains (224). This potential of ProTools lies in its unique ability to layer tracks, alter sound levels, and produce pieces that can be transported to radio or online broadcast sources. In Jay's documentary, for example, the powerful sounds of vitality emerged from his ability to layer music and a number of voices on different tracks. Jay reclaimed the ability to compose his own identity performance through this work, literally re-tooling the disempowering definitions assigned to him by his mother, other students, and a society that largely does not accept gay teens.

Knowing how to engage and deploy the ideas that a writer like Jay imagines is an act of what Glenn Gould calls "transcend[ing] the limitations that performance imposes upon the imagination" (118). In "The Prospects of Recording," Gould writes about the mechanical process of editing his own piano performance of *The Well-Tempered Clavier*. Gould describes a nearly perfect take of the composition, except for one bar that fell short of how he imagined the sound. His remedy was to splice one bar from another take into that nearly perfect recording. Gould's editing decision required a willingness to connect with the mechanics of sound recording, rather than leaving the decision and work to someone else. Gould explains:

> As an interpreter, as a go-between serving both audience and composer, the performer has always been, after all, someone with a specialist's knowledge about the realization or actualization of noted sound symbols. It is, then, perfectly consistent with such experience that he should assume something of an editorial role. . . . [T]he functions of performer and the tape editor begin to overlap. (118)

This deconstruction of a "separation between artifact and performance," as Johnson-Eilola puts it, relies on a simultaneous deconstruction of any remain-

ing mistrust or suspicions about mechanics. Gould saw the potential (a rhetorical potential) in becoming more than a performer by learning the mechanical operation of tape editing. By knowing how splices and loops work, Gould was able to compose a recording with less limitation on his own imagination.

Again, however, acting as rhetorical mechanics means more than simply learning how to use software or equipment. The mechanics of rhetoric's production involves imagination, improvisation, and enactment. Thus, while expanding availability of digital equipment corresponds with an increasing ease in using those resources, we must also keep the *rhetorical* aspect of mechanics in mind. As Faigley writes, the ease of using software and other equipment should not occlude the fact that writers use those tools for generative purposes:

> What concerns me most in the . . . movement of basic composition courses toward multimedia production and the Web is that the tools are becoming so easy to use that we'll simply teach students to do what the tools allow. The rhetorical dimension of putting images together with text is being lost in the interface. (181)

The potential for production lies in the ability for writer-users to imagine what can be done with these tools. This takes two skills: knowing how to imagine rhetorically and knowing how to use the equipment. Yancey reminds us that technology cannot be limited to the templates of managed software, like PowerPoint or Blackboard. Otherwise, she writes:

> students in our classes learn only to *fill up* those templates and *fill in* those electric boxes. . . . Students will not compose and create, making use of all the . . . possible resources thereto; rather, they will complete someone else's software package; they will be the invention of that package. (320)

Writers who work as rhetorical mechanics, on the other hand, are potential *inventors* of actions and ideas, rather than the *invented* products.[9] By learning to use digital recorders, recording equipment, and audio editing programs, the YDD participants/*logomechanics* were able to create their own version of narratives within their city. They were the inventors, rather than the invented.

Equipping Ourselves: Working with Hearts and Hands

In Robert Pirsig's *Zen and the Art of Motorcycle Maintenance*, the mechanically oriented narrator recalls the time he left his motorcycle with a garage of mechanics who accidentally sheared off an important pin while trying to fix another part. Although the narrator looks back on this as a careless mistake,

the situation still presents a rather puzzling question: "The question why comes back again and again. . . . Why did they butcher it so? These were not people running away from technology. . . . These were the technologists themselves" (34). That is, why would mechanics not be able to see that they were shearing off an important pin? Such a simple mistake was not caused by a lack of understanding, since these are the people we call experts; they are the ones who fix simple mistakes made by amateurs. But the problem was not a lack of understanding, continues Pirsig's narrator, as much as the mechanics' lack of connection between the equipment and a means of engaging the world:

> There was no identification with the job. No saying, "I am a mechanic." At 5 p.m. or whenever their eight hours were in, you knew they would cut it off and not have another thought about their work. They were already trying not to have any thoughts about their work on the job. *In their own way they were . . . living with technology without really having anything to do with it. Or rather, they had something to do with it, but their own selves were outside of it, detached, removed. They were involved in it but not in such a way as to car*e. (35, emphasis added)

Pirsig's classic novel, with its familiar wrench and lotus flower gracing the cover, is not about living with technology, but about caring for the world that is itself an operation of technology. The fact that those careless garage mechanics were able to use technology did not mean that they were engaged with the world in a different way because of that work. Pirsig's image of the sheared motorcycle pin serves as a parable for composition. Though most of us work with technology in some way, and though many of us teach some form of digital writing, we may still be living (or teaching) with it without actually having anything to do with it. One of the reasons why the skills of equipment usage fuse with what we might call "social engagement" is found in Pirsig's imagery: learning ProTools or audio recording does not merely teach technology; it provides another way of caring for the world.

This brings me to our own situations as rhetorical producers and teachers. In order to teach rhetorical mechanics, we ourselves must be able to imagine, improvise, and enact texts in different media. Unfortunately, the disparity between our desires to teach engaged rhetoric falls short in the face of our limited technical knowledge. Composition pedagogy too often is limited in its own knowledge resources. As Faigley has written, while we may want to expand composition to include something like "design," it is questionable whether or not writing instructors are qualified to do so. "Only a tiny percentage of writing teachers have had any training in graphic design," he writes (179). Of

course, time is a serious issue where training and knowledge is concerned. As my father could tell you, a mechanic is never completely off the clock. Even after a shift ends, the mechanic comes home to fix cracked windows, broken televisions, and (in my family's case) our own collection of broken-down cars. Similarly, a composition teacher is never really off the clock, which means that learning new technology can be just one more thing to squeeze into an overcrowded day.

Yet, I hear a possible answer to this problem in Pirsig's mediation. Becoming a rhetorical mechanic does not call for us to be more efficient "on the clock," but to figure out ways of caring about the world *with* the available means of technology. Living with technology, as Pirsig suggests, calls for a retooling of our own means of rhetorical production. One way to accomplish this is through the exploration and experimentation of *personal pedagogies*. M. A. Syverson describes an example of personal pedagogy in her article "Thinking through Worlds Fair: Evolutionary Rhetoric," where she explains how she learned to use and incorporate visual rhetoric into multimedia texts. Though Syverson read tutorials and texts on design programs, she still lacked the experience or practical knowledge of how to get started. She could not absorb the knowledge quick enough, either for herself or for potential class projects. Around this same time, and on a seemingly unrelated wavelength, she had started developing a short story of utopian science fiction. As Syverson sketched out her story ideas here and there—with "odd notes written before I went to sleep or while waiting at the dentist's office" (165)—she soon realized that the narrative needed to be deployed in a visual-multimedia form. Her short story idea thus became an impetus for finally sitting down and using the visual programs she had been reading about and wishing to learn. Her own project, the "Worlds Fair," slowly took shape as she added to it, using a range of software programs that she might not have otherwise used. "Worlds Fair started as a text-based story idea I meant to work out for myself," writes Syverson, "rather than a graphical or pedagogical project, but it evolved into an extended exercise in rhetorical design and exploratory pedagogy" (164). Her "exploratory pedagogy" was thus a learning-by-doing, worked out through a project of personal interest (in this case, science fiction writing) while exploring new media.

As Syverson explains, "The title of this [article], 'Thinking Through Worlds Fair,' refers both to the process by which I thought about how to design the project, and also the way I used the project itself to think *with*" (164). Likewise, what makes the YDD project so important is the way that participants use

equipment as a means of making sense of the world they already live *with*. The YDD youth audio documentaries, as well as Syverson's projects, serve as examples of exploratory pedagogies for learning digital technologies and other rhetorical mechanics. Although there are a number of scholars who are also attempting such project-based explorations,[10] I would like to echo Syverson's personal pedagogy experience with two examples of my own projects that helped me learn some rhetorical mechanics of audio technology.

In 2006, I was able to work with the Duke Center for Documentary Studies in the creation of a short audio documentary on Durham life. This project was an opportunity for me to pursue a personal interest I have in oral history, southern culture, and documentary. Although I have great affection for each of these topics, my professional and pedagogical energies are spent elsewhere. None of these subjects are my areas of research, and I usually call myself more of a dabbler than a legitimate scholar in oral history and southern cultures. Neither had I wracked up much experience with audio recording and multitrack editing. In spite of my ignorance, I devoted seven days to this project, sure that I would feel like the slowest student in class. Armed with a minidisc audio recorder with which I was not very familiar, my research partner and I set out to get as many interviews as possible. We began by interviewing two longtime Durham activists in the city's south central community. I nervously sat between both women and tried to remember how to hold the microphone in order to get the best sound recordings. My partner and I asked all kinds of questions about their work and lives in Durham. At one point, one of the women told us about her deceased husband's affiliation with something called Malcolm X Liberation University. Intrigued, I asked her to speak more about this place—what was it, where was it, how long had it been in Durham? She told us that Malcolm X Liberation University was a short-lived, community-based educational facility begun by black activists in 1968, after Duke refused to facilitate better black access to the university. Excited by the subject, we ended the interview by agreeing to follow up on this little-known part of Durham's history. When I listened to my tape that night, however, I discovered why proper microphone placement is crucial. The two interviewees sounded like they were a mile away from the microphone, and the room noise almost overpowered the women's quiet voices. Although the story they told of Malcolm X Liberation University had been so real and dramatic to me and my partner, the recording delivered a cold, distant sound that undercut the story's power. From that day forward, I never failed to hold the microphone much closer to speakers.

The rest of our research was smoother and quite fruitful. We heard about the founding of southwest central Durham's mosque where Malcolm X Liberation University once stood. Although the men we interviewed at the mosque had not heard of the university, they told us a rich history of the mosque's role in the community during the 1980s and 1990s. Other interviewees told us about their own histories in Durham, some of which included a suspicion of the mosque and its radical history. After gathering a number of interviews with Durham residents about Malcolm X Liberation University, my partner and I were ready for the editing work. We had been briefly tutored in ProTools, but neither of us had much experience with sound editing software. We spent many hours over several days sitting in front of the computer, editing down the long interviews we had collected. Once all the editing was completed, we toyed with adding music and narration on top of the basic interview track. It was hard for us to believe that a week's worth of intensive work yielded our small final product: a five-minute audio documentary that had some obvious kinks. We recorded the documentary to take home, and we also made a copy for the Durham Civil Rights History Project. Although the finished piece was far from professional quality, it falls into what Syverson might call "exploratory pedagogy," or a process using personal projects to *think with*. Although the story of Malcolm X Liberation University did not necessarily need my digital minidisc recorder (insofar as the oral history can be written textually, a process with which I am much more familiar and comfortable), I saw this as an opportunity to retool my own means of rhetorical production. Neither does this kind of exploratory pedagogy need such heady pretenses as a lost piece of community history; projects can come at us, as Syverson puts it, while waiting for the dentist or trying to fall asleep. Without the burden of reallocating professional time and resources for learning new technologies, therefore, we can begin by devoting our personal projects to small works of retooling those aspects of our lives we are already *living with*.

In another gesture toward retooling how we live with technology, I would also like to consider the professional conference sphere as a space for engagement. Instead of the type of scene that began this piece, with the mechanics of digital technology being little more than an (often inconvenient) aid, imagine how different modes of production can revitalize this familiar professional space. As an example, I briefly discuss an unusual panel presentation in which I participated at the 2006 CCCC.[12] With twelve presenters in all, each panelist's presentation was created in a digital format. When the panel session began, the panelists placed laptops, iPods, and other machines on top of the room's

many tables. Audience members were free to walk from table to table in order to watch, listen, and experience the different pieces. Many of the presenters created short digital film presentations, complete with soundtracks and narration. One presenter created an interactive piece that allowed users to change the sound and appearance of the digital text by touching the screen. I offered audience members the chance to walk around with a pair of headphones attached to an iPod in order to listen to a podcast piece that I had edited over the course of several weeks. Although each panelist's content was diverse—from composition history and inventional practices to the Torah's rhetoric—we all attempted to produce these texts in new ways. I chose podcasting because I had no prior experience with it. Likewise, other panelists described similar experiences with learning iMovie or ProTools in order to create their presentations.

Figure 2

Although our experimental panel did not perfectly replicate the dynamic of a traditional conference presentation, the questions that audience members asked were indicative of how generative this type of project can be, both

Figure 3

for the creators and the users. Audience members asked questions about the content of each presentation, but they also asked many more questions about the means of production. *How did you make that sound? How did you create this film? How can I make something like this?* These questions are not merely spawned by the novelty of a nontraditional media presentation. Rather, they indicate an exigency for increased awareness of digital media and mechanics. For us as rhetorical producers (and, more importantly, as teachers of future rhetorical producers), the material assemblages of those productions fall within the sphere of our work. Digital technology is certainly among the resources that are important for us to learn, but the bigger realm of mechanics and production equipment as a whole are also just as crucial. Syverson suggests that we engage this realm through a kind of personal exploratory pedagogy—what my mechanic father might have called "tinkering around." Both personal and professional spaces can serve as exponents—not drawbacks—to becoming *logomechanics* in our own rhetorical situations.

Lest I seem to overlook the limitations and constraints on technology, however, I should point out the numerous challenges of composing in any medium. For example, audio recordings can often give the illusion of being "truer" than printed words, since we can hear the evidence for ourselves. We can easily forget the rhetorical decisions made in the processes of recording, editing, and tinkering with sound. The same can be said of images and film. I therefore share what Cynthia and Richard Selfe call an "understanding of technology and technological systems as both a possible vector for enacting productive change, and a powerful force for resisting such change" (204). It is not that learning the mechanical aspects of technologies will create better public discourses or texts. Rather, learning the mechanics of production simply opens up new means of writing and circulation. As music composer and editor Brian Eno remarks, knowing how to mix and record "doesn't suddenly mean the world is open, and we're going to do much *better* music, because we're not constrained in certain ways. We're going to do *different* music because we're not constrained in certain ways—we operate under a different set of constraints" (130). Knowing how to operate a digital recorder, work with editing software like ProTools, or create a film using a camera and iMovie will not lead to better or more effective rhetorical productions. But, as Eno says, it does change the limitations and constraints within which we work and communicate. This is the scope of rhetorical production that we ought to pursue. Learning the mechanical dynamics of textual creation not only diminishes the gap between producer and

production, but it bridges the tensions between theory and practice that continue to pull us in different directions. Mechanics is where all texts—architectonic constructions that they are—must begin.

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Notes

1. As Albert Kitzhaber points out, however, first-year writing as a whole was sustained by an early assumption that the course "exists to provide immediate therapy for students whose academic future is clouded by their inability to manage the written form of English with reasonable ease, precision, and correctness" (2). Therapy for the troubled limbs of student writing once again recalls the extent to which *mechanics* has a quite fitting connotation for this history.

2. Writing Center, U of Nevada, Las Vegas. 27 Aug. 2008 <http://writingcenter.unlv.edu/faq/instructors.html>.

3. Writing Center, Villanova U. 27 Aug. 2008 <http://www.villanova.edu/artsci/vcle/writingcenter/faq.htm>.

4. Writing Center, St. Joseph's U. 4 Sept. 2008 <http://www.sju.edu/academics/cas/english/writingcenter/directing.html>.

5. Negative sentiments against emphasizing grammar and mechanics were especially palpable during the students' rights debates in the 1970s.

6. During the 2008 presidential election, Obama used Facebook groups to mobilize a record number of young voters.

7. Echoing Yancey's call for a "new composition" that broadens students' ability to engage available modes of production, the Partnership for 21st Century Skills recently developed standards for information and media literacy. These standards include the development of "21st century tools for thinking and problem-solving skills," which are meant to encourage students in "[d]eveloping, implementing and communicating new ideas to others, staying open and responsive to new and diverse perspectives" (Casner-Lotto and Barrington 6). The partnership's recommendations for fourth graders include learning multimedia production tools, such as digital and video production, while twelfth graders are asked to learn audio and video production editing and equipment usage. What is remarkable about these

standards is the explicit connection made between the stated outcomes goal—developing new ideas and becoming responsive to diverse perspectives—and one of the main means of achieving that goal: multimedia production and equipment usage.

8. Excerpts of this documentary, along with other YDD projects, were broadcast on WUNC's "The State of Things." Archives of the YDD episode were previously available at WUNC's website: <http://wunc.org/tsot/archive/sot072106b.mp3/>.

9. I certainly do not want to create a straw technology in the guise of Blackboard or PowerPoint. It does not get us very far to pretend that one technology is a liberating force while another is an oppressive one. As one reviewer astutely pointed out, any software program has the potential to invent us, just as we can use any program for invention. At the same time, the different limitations and possibilities of technology deserve attention. In the case of template-driven software like Blackboard, there are enough rhetorical limitations that Yancey's argument retains great validity.

10. A number of academics have used personal projects as exploratory pedagogy where technology and digital media is concerned. Academic bloggers, for instance, have made a terrific contribution to rhetoric and composition by not only sharing knowledge of various kinds but also by willingly creating spaces for multimedia experimentation. See Daniel Anderson's blog for examples of small audio projects he has created: <http://www.thoughtpress.org/daniel/>.

11. "From Panel to Gallery: Twelve Digital Writings, One Installation." Bonnie Kyburz documented the panel's events in her short film *Bones*.

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