CHAPTER	1
TITLE	Political Economy and Sustaining the Unstable: New Faculty and Research in English Studies
AUTHORS	Ryan (Rylish) M. Moeller Cheryl E. Ball Kelli Cargile Cook
OVERVIEW	In this chapter, we present political economy analysis (PEA) as a methodology for understanding and working within the often-shifting techno-ecologies of an academic department. As a case study, we document the shift in an English department at a Carnegie Research University (High Research Activity) in the western United States brought about by the hiring of two junior faculty members with specializations in new media and technology. PEA methods allow us to focus on the material conditions that prompted the new hires (i.e., a new Ph.D. program in the Theory and Practice of Professional Communication) and those brought about by their arrival (e.g., changes in new faculty startup packages, the necessity of funded research to the sustainability of the entire department, and renewed pedagogical and economic attention paid to the department's computer labs). After we discuss PEA, we present a series of interwoven narratives that analyze and consider our experiences through the PEA lens. We conclude with a list of recommendations—for job candidates, hiring committees, faculty, and administrators—that will help departments, we hope, better anticipate, support, and sustain the work of new technology specialist hires.
TAGS	agency, budget, change, Cheryl Ball, commodification, computers, consciousness, contradictions, culture, ecology, English Department, equipment, faculty, funding, hire, hiring committee, institutional critique, job candidate, Kelli Cargile Cook, lab, mediation, mediator, negotiation, PEA, Phil Graham, political economy analysis, professional writing, Richard Ohmann, Ryan Moeller, shaper, shifts, start-up, startup, support, sustain*, student, technolog*, Utah State University, value, writing instruction
AUTHOR BIOGRAPHIES	Ryan M. (Rylish) Moeller is an assistant professor in the Department of English at Utah State University. He teaches courses in professional writing, rhetorical theory, and the rhetorics of technology. Moeller's research focuses on the effects of technical discourse on human agency, especially within the consumer electronics industry. His work has appeared in *Technical Communication Quarterly*; *Kairos: A Journal of Rhetoric, Technology, and Pedagogy*; *Fibreculture*; *Computers and Composition Online*; *Works and Days*; and in edited collections. He is currently working on a book manuscript that examines the rhetoric of play in professional, consumer-oriented discourse. Cheryl E. Ball teaches and studies new media reading, composing, and evaluation strategies, especially as they relate to digital scholarship. She has a PhD in Rhetoric and Technical Communication from Michigan Tech and an MFA in Poetry from Virginia Commonwealth University. Ball has published in *Computers and Composition*, *Composition Studies*, *Convergence*, *Fibreculture*, and *Computers and Composition Online*. She is editor of *Kairos: A Journal of Rhetoric, Technology, and Pedagogy*. Her online portfolio can be found at http://www.ceball.com. Kelli Cargile Cook is an associate professor in the professional and technical writing program at Utah State University. Her research focuses on technical communication pedagogy, online writing pedagogy, Web-based training, and technical communication program development and assessment. She co-edited *Online Education: Global Questions, Local Answers*, which received NCTE Award for Excellence for Best Collection in Technical and Scientific Communication in 2006. Cook has recently authored a Web-based training program, *Hiring with Excellence*, as part of an NSF ADVANCE grant, and has revised the third edition of *The Elements of Technical Writing*. She has directed both the undergraduate and doctoral programs in

	professional and technical communication at Utah State. Cook served as the president of the Council for Programs in Technical and Scientific Communication from 2006–2008 and is currently serving as vice president of the Association of Teachers of Technical Writing.
COPYRIGHT AND REPRODUCTION	
PRESS URL	http://ccdigitalpress.org
BOOK URL	http://ccdigitalpress.org/tes

Computers and Composition Digital Press
AN IMPRINT OF UTAH STATE UNIVERSITY PRESS

Technological Ecologies & Sustainability

Political Economy and Sustaining the Unstable: New Faculty and Research in English Studies

Ryan (Rylish) M. Moeller
Cheryl E. Ball
Kelli Cargile Cook

The technological ecologies of English departments are changing rapidly. Like Bonnie Nardi and Vicki O'Day (1999), we see these changes primarily as the result of human activity. Over the past 10 years, English departments have hired an increasing number of new faculty from sub-fields like professional and technical communication and computers and writing; these new hires often have research needs different from the typical needs of other English hires. Traditionally, English hires have required little more than a basic computer, a budget for travel and book purchases, and an office for planning classes and meeting with students. These new hires are a different species, however, and often have vastly different kinds of material needs. Some of these needs involve significant technology purchases. These needs, in fact, are more comparable in scope and sometimes cost to the laboratories provided for scientists and engineers, and often push the limits of an English department's technological ecology.

Meeting the needs of these new species has required us to draw upon our best practices as rhetoricians, making arguments for significant investments in our new faculty beyond the typical start-up package. At the same time, these new faculty have required us to accept the burdens of significant investment—if we require more research investment, then our research must return more to the university, as a whole, through grants and other funding sources. This process of continual investment, recoupment, and renegotiation requires new models of sustainability in which communication and negotiation are constant. New faculty with more and different needs must be frank and honest about those needs, and hiring committees, senior faculty, and administrators need to anticipate the ecological changes these new faculty bring to departments.

When hires are made based on combined technological and pedagogical need (e.g., a professional and technical writing or computers and writing specialist), an ecology is often pushed beyond what the hiring department may have even thought necessary. In the instance when specialists are asked to teach multimedia composition—as is happening in more universities (see Anderson, Atkins, Ball, Homicz Millar, Selfe, & Selfe, 2006)—then the computer labs, the location of much teaching and learning, becomes a crucial factor in the department's political and monetary economy within the university. The "when" of new media (see DeVoss, Grabill, & Cushman, 2005)—that is, the at-the-moment infrastructural and technological set-ups and breakdowns that happen within a department or university lab setting—always impacts how new media specialists can teach what they were hired to teach. When new media breakdowns happen, as Dànielle DeVoss, Jeff Grabill, and Ellen Cushman put it, the infrastructure supporting new media work affects not only the pedagogy, but the impact of individual job stability and tenurability and, thus, the department's sustainability as a whole. One solution to this issue is to look at new English faculty as agents who manipulate certain pressure points at various times within a complex, political economic ecology—a social system demonstrated through material, measurable effects and affectations. These pressure points become more visible with the introduction of new agents and new technologies, both of which push the boundaries of a department's constraints.

In this chapter, we present political economy analysis (PEA) as a methodology for understanding and working within such shifts in department ecologies. We share two new faculty hire examples from an English department in a Carnegie Research University (High Research Activity) in the western United States. Specifically, we focus on the following ecological changes: those that prompted their hires (i.e., a new Ph.D. program in the Theory and Practice of Professional Communication) and those brought about by their arrival (e.g., changes in new faculty startup packages, the necessity of funded research to the sustainability of the entire department, and renewed pedagogical and economic attention paid to the department's computer labs). After we discuss PEA, we present a series of interwoven narratives that analyze and consider our experiences through the PEA lens.

POLITICAL ECONOMY ANALYSIS

We use political economy analysis (PEA) to examine shifts in a department culture brought about by two new hires. In his *Politics of Letters*, Richard Ohmann (1987) explicated the basic methodology of PEA as placing the object of study against a superstructure that mediates culture and ideas through ideological institutions, which serve as a means of preserving and reproducing class structure. By superstructure, Ohmann meant laws, institutions, cultures, beliefs, values, customs, and so on—essentially, all that surrounds us. Similarly, Sarah Collinson (2003) defined PEA as focusing on the "distribution of power and wealth between different groups and individuals, and on the processes that create, sustain and transform these relationships over time" (p. 14).

In "Literacy, Technology, and Monopoly Capital," Richard Ohmann (1985) located the mock crisis of computer literacy within the larger hypothetical literacy crisis. After situating technology and literacy within a cultural ecology, he then provided historical evidence to support his claims that these crises have been used to serve the needs of monopoly capital through the management of labor and the control of sales within a "universal, national market, increasingly managed by the same corporations that produced the goods" (p. 679). To demonstrate the collective efforts of the elite force of technology producers, Ohmann provided several reflections: suppose writing had been developed by slaves to communicate without their masters' knowledge; suppose print technologies had been developed by radical, local groups for their own purposes rather than being aimed at a mass audience; suppose wireless communication had been invented by women working from home to establish "networks of childcare and concern" (p. 680). Instead, the technologies that we study have evolved, "shaped within particular social relations, and responsive to the needs of those with the power to direct that evolution" (Ohmann, p. 680).

In "Issues in Political Economy," Phil Graham (2005) examined a history of political economy and argued that PEA is instrumental in understanding global social dynamics, including "politics, finance, and military propaganda; resistance, revolution, and technological change; commercial production, distribution, exchange, and consumption; fundamentalisms of all sorts, peace activism, and environmental struggles," all of which "are now conducted largely within the realms of communication" (p. 25). To understand the meanings of various communicative acts, Graham posited three elements that comprise the basic PEA approach:

- **Consciousness:** "the total awareness of life which people have. It includes their understanding of themselves as individuals and of their relations with other individuals in a variety of forms of organization, as well as with their natural environment" (Smythe in Graham, p. 22).

- **Value:** "forms of labour that can be bought and sold in order to produce artifacts of conscious activity" (p. 23); these include systems of symbolic capital as well as systems of monetary value.
- **Mediation:** tracking the "movement of meaning from one text to another, from one discourse to another, from one event to another. . . . the constant transformation of meanings. . . as media texts and texts about media circulate in [various forms] and as we, individually and collectively, directly and indirectly, contribute to their production" (Silverstone in Graham, p. 24).

For Graham and other political economists of communication, PEA is about how cultural values are produced, maintained, and transformed through the production, distribution, value, consumption, and use of various cultural artifacts, including communicative acts such as advertisements, political debates, reports, memos, and conversations. Our particular challenge, brought about by the introduction of two new members to our department's already diverse ecology, was to understand and articulate this ecology through PEA, allowing us to evaluate a range of actions through their potential for affecting that ecology.

PEA is useful in understanding the complex ecology of an English department, especially in tracking various meanings of concepts like "technology" and "research" through their uses within specific ecological settings. Generally, we have found—largely through trial and error, and through applying PEA mostly after the fact—that the basic and most effective PEA method can be articulated as a series of four basic steps:

1. Locate a shift, contradiction, or new development within a culture under investigation that suggests an interesting site of contention or cultural training. This step identifies what Graham (2005) referred to as *consciousness* by exposing different agencies in conflict.
2. Look for patterns of commodification or processes of valuing, both in terms of artifacts *and* agents. Here, we are looking for value—Graham's notion that labor results in measurable artifacts of potential change.
3. Identify professional organizations, experts, or institutions that mediate and shape responses to the contradiction identified in the first step. These organizations exist to mediate and sustain (or to resist) particular transformations within a discipline or field.
4. Discuss the impact of that mediation upon the further propagation of the culture.

Keeping these methods in mind, what follows is our reflection as colleagues in one specific ecology affected by the introduction of two new faculty members; one of us was established in the department (Kelli), and the other two were the new faculty members (Cheryl and Rylish). Across our discussion, we advocate situating complex, social ecologies as being inherently unstable. Sustainability comes from constantly communicating and negotiating ecological changes through a dialectical process of change.

SHIFTS, CONTRADICTIONS, AND NEW DEVELOPMENTS

Consciousness, as we see it, is a process of learning and knowing in an effort to better understand one's own life, connections to others, and environment. Often, this process of learning and knowing is stimulated when we notice shifts, contradictions, and ruptures within regular, sometimes transparent, everyday processes, but consciousness can also be evoked when something new is introduced into our environments. Gaining a new consciousness of

the situation, we re-assess ourselves, our positions, and our surroundings in terms of these developments or shifts. In the narratives that follow, you will see a growing consciousness enacted as we individually describe our newfound awareness that the technological ecology in which we worked would need to undergo a change to sustain the two new media specialists invited to join our faculty.

Kelli: To fully understand how Rylish's and Cheryl's arrivals affected shifts, contradictions, and new developments in our English department, it helps to know something about our culture. Our department is no newcomer in using technology to teach writing. Even before Rylish's and Cheryl's hires, we had a thriving technological ecology. With the aid of a state-funded technology grant in 1995, the department's faculty and a dedicated technical support staff planned and delivered its first online composition courses. This project led to the development of a homegrown classroom management system for teaching composition, an online master's program in technical communication, and a robust and interactive departmental Web site (Smitten, 2005). The CMS was among the first developed by English faculty for the teaching of English, and our fully online master's program was among the first of its kind in the country. By 2005, our chair reported in the *ADE Bulletin* that

> our departmental home page [received] almost a half a million hits a year—not exactly ESPN but an indication of the steady usage our site receives as faculty members, students, and visitors come to it seeking their e-mail, course Web pages, online classes, events information, or any of a dozens of pages or functions available. (Smitten, p. 70)

Our mission statement identified teaching with technology as one of our defining characteristics. We embraced technology. Nevertheless, as a department, we struggled with this identity; we were, after all, an English Department—a department seldom associated with technology—and few people outside the department could conceive that members of our faculty might require money or computer labs to do their work. When Rylish and Cheryl arrived, we found ourselves facing, on one hand, stereotypical images of what others' outside our department thought we should be and what we, as a faculty in professional and technical communication, knew we could be.

Cheryl: In mid-August, Rylish and I discovered that we had independently negotiated appropriate start-up packages to perform the teaching and research we'd been hired to do. (Because the negotiations happened in early February, before we signed our contracts, we didn't know the other had been offered a position, or we might have negotiated in collaboration.) We also realized that despite our fruitful email negotiations with administration, we should have requested start-up requirements in our contracts, which would have meant the funding would be made available as soon as we arrived on campus—an issue of 20/20 hindsight for new faculty to consider. Once we were on campus, it became evident that our earlier negotiations had inaccurately estimated the department's economic situation, which had changed in those 6 months (due, in part, to our hiring) and which we couldn't have fully understood until we arrived.

Rylish: Because I knew the department's history with cutting-edge uses of technology, I assumed that the department was prepared to support my research by providing access to these technologies, including mobile technologies and computer game hardware. The email negotiations said *yes*, but the budget said *no*. So Cheryl and I waited for equipment. Our approved start-up requests consisted only of a new office computer that took months to get because of the convoluted purchasing ecology on our campus. After a couple of months, I became very frustrated. I was situated in an office with a very old computer, barely capable of opening an email application or operating basic word-processing software (and certainly *not* at the same time), and a hard-back chair similar to those found at study desks in the library, which made it physically difficult to sustain long hours of work at the computer. Additionally,

my start-up request for a computer was approved for only the cost of the central processing unit—without the monitor, keyboard, mouse, printer, or scanner I had requested and desperately needed. Our building was not equipped with wireless networking capabilities, so the personal laptop that I had been bringing to work was limited in its mobile capabilities.

Figure. A picture of "the sign" born out of frustration, but which now hangs on the department bulletin board in the English department as a sort of an inside joke among the authors.

At this point, I constructed a sign out of a torn-up cardboard box that read "Will Work for Research $$$" (see Figure) and (almost) seriously considered camping outside of the office of the vice president for research. When I evaluated my particular ecology, I didn't recognize—and thus I was not conscious of—the agency I had through sustained negotiation. Instead, I sought agency through more confrontational methods.

Kelli: To say Rylish's sign surprised me is an understatement. When my colleague, who chaired the graduate program in technical and professional communication, and I saw it, we knew we had a serious problem. We met with Rylish and Cheryl to learn what was happening. When we learned that their problems emerged from a lack of funding for technology, we decided to act quickly. We talked with Rylish and Cheryl about their unmet needs, actions that eventually led us to college and university administrative offices where we argued for investments in our new faculty and the work they hoped to do—and were hired to do. First, we visited our department chair to advocate for our new colleagues. Although the chair was sympathetic, he was clear that the department had no money to buy expensive multimedia technology. He recommended that we take the matter to the dean first and then to the vice president of research.

Cheryl: I was grateful that our senior colleagues were willing to invest time—time that they weren't required to spend—to make our research possible and our tenure-track lives better. My research differed from Rylish's in that mine focuses on pedagogical practices of teaching students to read and produce new media texts. The university investment that I needed was to improve the lab in which I taught students to produce these texts. If the students in my classes couldn't compose new media, then my research in this area would be halted, and my tenure case would be uncertain. However, because our only source for immediate funding was to request additions to our start-up packages from the vice president of research, my asking for money to make the teaching lab more suited to my pedagogical (and thus research) needs was out of the question. I had to approach the situation from a different angle, an angle that my colleagues and the department chair, once we discussed the situation, helped me to imagine. We would propose starting a small, new media "research" lab from scratch—similar to how scientists do.

Rylish: Armed with the original job ad for my position, which called for a technology specialist, and some statistics on the meager nature of external funding in the humanities, we were able to convince all three levels of administration (department, college, and the vice president of research) to support our research with modest start-up funds. I say "modest" because these

were nowhere near what my colleagues in the sciences would expect or need to equip and staff a research lab. As a result of our senior colleagues' mediation and with the support of our department chair and dean, we were able to secure $35,000 in startup funds to develop a collaborative research lab and project development space with faculty in the department of instructional technology, and to develop the English department wireless networking infrastructure.

Cheryl: From that $35,000, Rylish purchased the equipment he needed for his gaming and mobility research (high-end PCs, gaming consoles, wireless PDAs, etc.), and I got the equipment I needed for teaching new media production (video cameras, scanners, and audio recorders)—portable tools that also allowed groups of students to work on new media projects outside of the new media lab. The department and college also provided $15,000 in matching funds to upgrade the student lab. All told, Rylish and I shared $50,000 to put toward technological resources in support of our research agendas. By the end of our first year, Rylish and I had set up the new media lab in the instructional technology department—pooling our monies with an assistant professor starting his own multimedia lab there—and had purchased most of the equipment we needed for teaching and researching the following year.

A downside to this generous start-up package was the amount of time we spent trying to purchase and set up the four-machine lab, time that included everything attendant with administering a larger lab—such as researching price comparisons, hauling machines across campus, installing software, driving across the state to pick up chairs that were on sale but couldn't be delivered, and putting computer desks together. I didn't do any research that semester because I was preparing the lab so I *could do* my research. Had the resources already been in place when we were hired (or had been considered in the summer prior to our arrival), that research year wouldn't have been lost. The contradiction in performing the lab administration work is that Rylish and I were completing these tasks because we had to in order to complete our research; in other words, we took on the duties and responsibilities of lab directors and technical support because our start-up funds didn't include monies to hire someone to manage the lab for us. Although the added technological resources helped us to purchase all the equipment we needed, we still lacked the long-term resources to maintain, staff, and support the equipment. The student lab could be maintained with student fees, but the external lab—our "research" lab—was subject to our ability to find external grants to continue supporting it. Throwing money at technology without a necessary infrastructure will always bring technology specialists to this uncertain place.

Rylish: Rather than sound ungrateful, we hope to illustrate that sustainable research agendas do not magically appear with relatively small investments in technology. Investments—especially with respect to time—should be in people and in lines of communication, not just in equipment. When hiring technology specialists in English departments, our ways of thinking about material needs must change. This is not to say that specialists do not bear some responsibility of shouldering the burden by seeking external funding when and where appropriate to further their research needs, but to be truly sustainable, an ecology must be flexible and always changing to accommodate the various needs of its diverse agents.

PATTERNS OF COMMODIFICATION

In this first year, we recognized that the traditional methods of supporting new faculty members were insufficient, creating delays and even roadblocks to their research agendas. We were thus grateful when these problems appeared to be resolved with the new start-up packages and matching department and college funds. We soon realized that these solutions were only a step in the ongoing process of departmental technological sustenance. Furthermore, we can now see how these shifts, contradictions, and developments created

new patterns of commodification. PEA led us next to considering patterns related to the revaluing of agents (faculty, students, support staff) laboring within our modified and commodified technological ecology; a growing awareness of the new economy required for producing works of both functional and symbolic capital; and the advantages and disadvantages of the commodification of our technologically rich computer classroom. The stories that follow explore these patterns of commodification and illustrate our growing awareness of and reaction to these patterns.

Kelli: Our success in raising funds for our new hires came with a price: Both the dean and the vice president of research required us to accept the burdens of their investments—in other words, if we, as faculty members, require greater research investment, then our research must demonstrate a greater return to the university. Our research agendas must now not only produce knowledge for the field, but also bring in dollars. This requirement has brought its own challenges as we struggle to find sources of outside funding that will support research in technical and professional communication and computers and writing studies. As our work becomes more commodified, we find ourselves engaging in other shifts, such as educating our development officers and research office administrators about the research we can and will do, and mining their knowledge of grant-making resources to raise additional funds to support our work.

Rylish: Our department has made some promising strides in this area. In our most recent discussions of promotion and tenure, for example, we have convinced administrators to value grant-seeking efforts and to give some amount of credit to unsuccessfully submitted grants, even if such credit goes toward merit and service. Our department head has also granted a course release to a faculty member to serve as a liaison between faculty and development officers and opportunities. This faculty member will facilitate collaborative opportunities among the English department faculty on identified external grants.

I have been lucky in my efforts to secure funding. At the time we wrote this chapter, I have been a part of three external grant proposals and three internal grant proposals, and we have secured about $200,000 to further technology research within the department. Such success doesn't come without cost, though, because every grant proposal signifies countless meetings with potential collaborators and development personnel, a significant number of drafts, as well as intense negotiations about the distribution of funds and potential research outcomes. Moreover, each successful grant typically signifies several unsuccessful attempts to secure funding.

Ironically, the viability of our work has also been questioned within the English department, especially when we began to attract attention for the cost of our research and equipment. I'm often goaded about the validity of the Xbox 360 I carry around campus, and Cheryl and I have each been referred to as adding a particular "quirkiness" to the department. I think that it becomes incumbent upon those of us who are pushing the technological ecology of the department to educate our colleagues—in addition to industry partners and external funding reviewers—about the value and validity of our research.

Cheryl: This negotiation—educating others as to the validity of our technological needs in regards to research and teaching—also must happen within our curricula. As I began to investigate the department's ecology, one that contains a multitude of areas (e.g., literary studies, American studies, British and Commonwealth studies, professional and technical writing, English education, creative writing, and folklore), I was surprised to learn that one of the department's graduate curriculum committees had discussed the possibility of adding the word "Technologies" to the Literature and Writing masters degree title, as a way of suggesting that technology (pencil, paper, or computer) could be the glue that holds the more disparate areas together. Although that suggestion was turned down, the fact that it was a possibility indicates that sometimes, as new media specialists, we fail to recognize those who might

support us within our departments because we become complacent to change, or perhaps desensitized by the lore that circulates in English departments. If we become open to alternative, more interdisciplinary ecologies, however, we might notice that the negotiations of technology's role in the department happens frequently in meetings, in hallways, even in our classrooms, and that we can become an agent of change in those settings. (For continued help in being a change agent, I look to Laura McGrath's (forthcoming) work on collaborating with, consolidating resources of, and simply listening to her colleagues in the hallways of and beyond her English department.)

Kelli: Our curricula and, consequently, students' educations were affected in both positive and negative ways. Positively, we are able to offer them more diverse technological training and learning opportunities, and graduate students in our department have more cutting-edge technologies available for their education and research. These technologies allow us to provide students with additional opportunities to build core competencies desirable in industry (Rainey, Turner, & Dayton, 2005; Whiteside, 2003). Working with research technologies by bringing them into our classrooms, students are better prepared for industry and the corporate world.

I am concerned, however, with the commodification of students—in other words, I wonder if we may be enculturating them through our labs and classroom activities to be "better" consumers and indoctrinated users of certain technologies. We also haven't substantially addressed possible concerns about how "workplace" training goes hand-in-hand with our continued "progress" in improving labs and classroom spaces. Theoretically and practically, what is driving our decisions to improve the technology in our labs? Carolyn Miller (1989) addressed a similar concern in "What's Practical about Technical Writing?" when she wrote that

> being useful is not necessarily being good. . . . Because Marxist critique features practical activity as a central concept, it raises questions that are particularly germane to technical writing, questions about whose interests a practice serves and how we decide whose interests should be served? (p. 154)

In our case, whose interests are being served by the incorporation of technology into our teaching and learning spaces?

Rylish: I see commodification as a process of valuing something—of assigning measurable or tangible value to an object, artifact, or agent that otherwise might be left to stand on its own. The Marxist in me wants to delimit value in (mostly) economic terms, but I think that there are many ways of valuing something. For example, by having students design Web portfolios in Macromedia's (now Adobe's) Dreamweaver or design their documents in Adobe's InDesign, we send a clear message of how we value this software. We also run the risk of perpetuating a common myth among technical writing students—that potential employers want software specialists rather than communicators.

Kelli: Another perennial question is "how much technology should we teach?" Because technological skills appear to be valued highly in job advertisements, students cry out for more concrete software instruction. The managers who will employ our graduates, however, report that they rank collaboration skills and writing competencies well above technical skills when they are reviewing job applicants (Rainey et al., 2005). Even more troubling is our seeming complicity in this process. At conferences and in our own department, teachers who teach with technology are sometimes accused of "selling out" and reproducing aspects of the dominant, technology-seduced culture.

Whether I buy this idea completely or not, we ought to consider students and their possible

indoctrination as consumers as part of our political and ecological analysis, given our dependency on these technologies. To balance this enculturation and possible indoctrination, it seems right—and ethical—that we also teach technological analysis and critique to help students recognize the benefits and constraints of the technologies with which we work.

Rylish: I think there is certainly a both/and aspect to the types of enculturation we are talking about here. We do place value on the technologies we bring into English studies, both from a research and a pedagogical perspective. This is certainly going to have an effect on the departmental culture as well as effects on students, but what helps me out of what otherwise looks like a binary problem (we can either accept or resist the dominant culture) is to think about students as mediators and shapers of (at least) a part of our ecology. I have learned from Kelli the activity of having students examine the job market and explore what experiences, skills, and awarenesses qualify them for their preferred careers—showing them, for example, that listing Dreamweaver under the "software" section of their resume is not enough to get them a job. Cheryl has presented students with the actual department budget and empowered them to advocate for the changes they deemed most important. And I have been very careful to show students how their own technological choices will affect their audiences. For example, when working with computer games, it's very easy to find yourself on the cutting edge of technology. More often than not, game developers are creating games for next-generation computers and platforms. So it's easy to see how games push the consumption of technology. When faced with a choice of development platforms for game design, I asked students to look at the technological requirements for each platform and decide which platform offers greater accessibility, even at the risk of lower-end graphics or functionality. The choice became easy for them, and they immediately decided on the more-accessible platform. Placing students in positions where they act as mediators and shapers of change helps them to negotiate the patterns of commodification that our choices impose upon them.

MEDIATORS AND SHAPERS

Students were not the only mediators and shapers who became important agents as our departmental technological ecology evolved, but they were among the first. Indeed, we drew upon our faculty as a whole, departmental and university public relations experts, and other resources to promote the new ecology we were shaping. In the following stories, we explore student roles in mediating our technological ecology, and we introduce other characters (some human, some not) who also influenced our abilities to situate ourselves and our work. As you read these stories, you will likely note that the principal characters are those of us who engage in new media research and support it. Recognizing our agency in creating and maintaining a sustainable technological ecology is among our most important lessons learned.

Cheryl: The first semester when I taught Web design with few resources to help students compose with current standards of practice, we had frequent conversations about the frustrations this caused. The lack of resources prompted a new lesson plan, one in which we examined the student-fee model of lab funding compared to what a well-equipped, sustainable lab costs to fund. Students were shocked at the difference between what they paid per course ($35 then, $50 now) and what students at other universities paid per course for a similarly sized, sustainable technological environment (in some cases, well over $200 per semester in departmental lab fees, with an additional $150 fee per media-composition course; see Selfe's 2005 *Sustainable Computer Environments* for a sample sustainable lab budget based on income from this range of student fees). After that lesson, students were appalled at how little they were paying and stopped complaining to me about the lack of resources. Instead, they started complaining in their course evaluations, writing comments for administrators whom they knew read the evaluations. In those comments, students made heart-felt suggestions

about the need for more technological resources so that their teachers could implement the kinds of assignments students needed to communicate effectively in digital environments.

Rylish: Along with the acts of critique and institutional change Cheryl engaged in with students, we also found that bringing in public speakers helps to educate colleagues on the value of our teaching practices and research agendas. The second year I was here, I brought my dissertation director to campus. He had recently published a book on game studies and rhetoric, and I asked him to speak on why humanities scholars should pay attention to computer games. We had a standing-room-only audience. Additionally, I use the publicity resources in the English department to disseminate research successes. For example, I nominate students for research awards whenever possible, and I invited two undergraduates to present their work at a regional conference. Each time, I make sure the announcement gets posted on the department Web site.

Kelli: As a whole, the technical and professional writing faculty has employed public relations and student project showcases to focus attention on the products students create. In our showcases, we promote our clients, their services, and student work. For examples, students in the advanced multimedia class have created DVDs for instructors to use in their smart classrooms, built Web sites for literary archives, and redesigned the departmental Web site. The success of our showcases has spread, with many other professors now holding end-of-the-semester course conferences, in which students present their literary and creative work to the public. Through our use of showcases, not only are we changing what our colleagues know about our work, but we have also begun to change the way the department thinks about student work. These events have further shaped our administrators' willingness to support new projects.

Rylish: For good and for bad, laboratories also make for strong mediators both on campus and in public opinion generally. This is partly due to the cult of science, but it is also due to the ethos of credibility and validity that the space and title give to our work. As we mentioned earlier, using part of our start-up funds, Cheryl and I worked with another junior faculty member from the department of instructional technology to establish a research and development space. We called it the Creative Learning Environments (CLE) lab, and outfitted it with four high-end computers for project development. Having that space, along with the other requisite publicity materials like a Web site that featured ongoing research projects and a mission statement, afforded us something concrete to point to when asked what exactly it is we do, or why we ended up in an *English* department. Spaces can be either physical or virtual (and both, as in the case of the CLE lab), but space bestows a certain legitimacy to one's work, because space is often one of the most precious commodities on campus.

Since this article was originally drafted, the CLE lab has dissolved due to the shifting ecologies of both departments: the need for physical space by all units as well as the always shifting needs and resources within our respective departments. However, my work with our colleague from Instructional Technology has not ended. We submitted a collaborative grant proposal along with two faculty from Graphic Design and Art to create a new lab, the Interdisciplinary Media Research Consortium (IMRC). (This grant proposal was funded, and you can view the Web site for the IMRC project at http://imrc.usu.edu/.)

MEDIATION IMPACTS

Although the impact of mediators and shapers may never fully be known, we have seen ecological changes beyond our original expectations. We now realize that although our department was well known as a highly technological site, its ecology had become stagnant. It had not changed significantly in years. Previously, hires had been assimilated into the ecology

and their work sustained by it; for our new colleagues, however, there was no such assimilation. Their arrival required us to move from a stagnant and complacent state into one that was active and in flux—one that reflects the constant state of transition that technology now mandates and that we must attend to in our teaching and research. This new state, still not stabilized, continues to impact our department. Despite seemingly constant transition, we move in the direction of stability, and we want to note that we now have an ecology that likely will not return to its previous stagnant shape; stable, that is, does not mean static. We see more work ahead as we sustain yet continue to evolve technologically. While the third stage of PEA addresses the ways in which connections, organizations, and experts mediate and shape change, the fourth stage focuses on identifying the potential impact of such mediation. The fourth stage also focuses on cultural propagation—the ways in which change is fostered and thus continued. Our final stories speculate on the effects our new ecological state may bring.

Kelli: At this stage in our programmatic development, we are evolving our images as English scholars, slowly changing computer-by-computer and grant-by-grant how we conduct our research and how others perceive our research. As chair of the undergraduate program in technical and professional communication, I have worked with my senior colleagues to articulate our research agendas to administrators who still think of us as traditional English scholars, and I have worked to support my junior colleagues as they seek the resources they need to do their work well. In taking on these roles, I have wondered how I can go further to enhance our research profiles within our department and throughout our university, how we can become more adept and successful at grant-making, and how I can better mentor and collaborate with fellow faculty members as we move through this learning and teaching process. Answers to these questions, I think, are the keys to a sustainable ecology within our program and our department.

Rylish: In *Technology and the Contested Meanings of Sustainability*, Aidan Davison (2001) remained cautiously critical of the sustainability movement, preferring instead to craft "apparently disparate experiments in the experience of sustenance together into new social structures capable of providing genuine alternatives to the imperative of production" (p. 212). In our efforts to change the technological ecology of English departments and humanities programs, we should remain vigilant that we not replace one sustainable model of research with another that may prove equally rigid and limiting. After all, the image of the lone scholar writing amid stacks of books has sustained us for generations, leading E.L. Godkin (1974), a prominent newspaper editor at the turn of the 20th century, to say of the professorate: "a professor is looked on as sort of a bookish monk, of whose opinions on the affairs of the world, nobody need take any account" (p. 153). To imbue new English faculty with transformative power, we must secure many opportunities for them to demonstrate success in research, and through various types of media.

Cheryl: We are hopeful that our impact within the English department, as well as across campus, has been felt, and that the need for technological resources within humanities departments is on administrative radars. We were all encouraged during the summer of 2006 when the department head approached Rylish and me to write an internal grant proposal that would award departments up to $100,000 for innovative projects. While he was hoping this would be another chance for the department to gain technology, Rylish and I knew that adding technology-for-technology's-sake—without pedagogical, theoretical, and infrastructural support for doing do; that is, without the support of colleagues like Kelli and our systems administrators—would put the department into the same technological tailspin it experienced after the resources from the early-1990s technology grants and our start-up funds started to age. We wrote the innovation grant not to add new technology, but to replace and update outdated technologies in our student labs. The upper administration recognized the potential in this proposed change, granting us $86,000. We included provisions for creating a sustainable lab budget, including infrastructural and staff support for these systems. The staff-

support line items, however, were removed from our final budget, suggesting that we have much work to do to convince administrators that throwing money at equipment still isn't the solution. Although the new technology is nice, our primary goal is to make an impact on the ecology of the entire department, so that the lab becomes a place where students and teachers want and feel welcome to work, and are supported in that work. Our first lab "open house" occurred when Rylish invited a new faculty hire in technical communication to present his work to the department in the newly remodeled and refurbished lab space.

SUSTAINING THE UNSTABLE

Our analysis comes full circle at this point. Reflecting on our conversation, we now draw some conclusions about how new faculty hires can shift and change departmental technological ecologies and what we might do to keep these ecologies sustained, robust, viable, and healthy. The most prominent conclusion that we have come to via the PEA methodology is to approach English departments as complex, dialectical ecologies in a state of constant flux. If they are not changing, they should be. Mapping out the various relationships between agents, artifacts, and mediators will assist new faculty in assessing their potential agency within the ecology, and will assist other agents in negotiating the mediational effects of new and shifting agents.

Obviously, bringing new faculty into a departmental culture creates shifts, contradictions, and new developments. What we found, however, is that the effect of these changes extended beyond our program and beyond our particular technological needs, rippling through conversations and interactions with departmental faculty and college and university administrators. Perceptions of who and what we were as a program and a department were abruptly (and necessarily) shifted when contrasted with what we hoped to become with the integration of our new faculty members. Although "technology" was once considered a boundary-spanning word to describe our department's disparate programs in literature, folklore, American Studies, creative writing, and professional and technical communication, the technology that Cheryl and Rylish needed to do their work was uneasily integrated into our departmental culture. New additions—such as video cameras, iPods, and game consoles—were not previously recognized as typical or perhaps even "acceptable" technologies for English scholars to use or study. Furthermore, college and university administrators, who were much less aware of our departmental penchant for technology integration, were often surprised by our request for monies to support the technologies and labs our new hires needed.

We offer a set of recommendations to help better anticipate and support technology specialist hires:

Job candidates:

- During the job interview, locate the obvious agents and mediators in the department. How do they position themselves with/against technology?
- Be honest about your material needs. As soon as possible in the hiring process, get your research needs and expenses approved in writing. (And if you require particular items to accomplish your research agenda, be able to explain why.)
- Thoroughly investigate your teaching conditions *before* you plan your classes; the technology you anticipate may not be available.

- Examine tenure and promotion policies for statements concerning grant-seeking activities. Ask to speak with faculty members who have brought money into the department to support their research.

Hiring committees:

- Identify the potential material needs of candidates. Seriously consider whether your department has the infrastructure to support such needs.
- Explore key ecological components likely to be stretched by potential candidates (technology needs, teaching labs, etc.). Identify support personnel and put hire(s) in touch with those people as soon as possible.
- Understand protocol for conducting start-up fund negotiations. Realize that just because the new hire may be in an English department does not predetermine his or her research needs.

Our physical teaching and research spaces were perhaps the most changed. New peripherals, printers, computers, and servers were added to our computer classrooms. We could record images and sounds, and we could play and alter with new applications. Not only did we have the hardware to play games in our labs, but we could also build and test them, too. Most importantly, students had server space to save their work. But our spaces and the technologies housed within them were not the only commodified products in this process. People, too, were changed in the process. As a program, we asked for seed money to support our work in exchange for promises to seek additional external funding. By integrating the new technologies into our teaching practices and curricula, we increased the technological expertise of students and senior colleagues, but—to counterbalance the effects of this integration—we had to re-evaluate our curricula to assure ourselves that we were teaching students to critique these technologies as well as use them.

Based upon these realizations, we make the following recommendations for faculty:

- Practice being an active observer. Identify key mediators and shapers who can help advance your research agenda. Don't overlook students, colleagues, or administrators from outside your immediate specialty and department.
- Use formal titles for established research relationships. To the extent that you can, give your research space a title. This adds legitimacy and ethos to your research efforts and makes visible what might go unnoticed (i.e., some computers in a room become a lab with active research going on).
- Position any request for funds as seed monies to be used (at least in part) for seeking external funds. Be able to demonstrate expertise and activity in grant-seeking efforts.
- Identify ways that your research is pushing the ecology of the department, including the curriculum. Be prepared to support these changes as needed.
- Hold public events and publicize them widely. Invite the public, including parents, friends, administrators, local business leaders, community members, etc.

At the beginning of this process, we knew that our departmental and university administration would be among the most powerful mediators of change. It is difficult to forget our strategy sessions—those in which we strategized how to "sell" our ideas to administration. What has surprised us, however, is how many unexpected allies we found in shaping and mediating our departmental technological ecology. Among those allies were fellow faculty members in

programs other than technical communication, who met with us to talk about potential changes we could bring about and to share ideas about how to bring our plans to fruition. We, initially, did not expect students to be such influential shapers or mediators; their enthusiasm for our new hires and their work was evident in their attendance at public events and in the showcases we held to exhibit their work. We found little resistance in the classroom itself, where students embraced the new technologies and helped us articulate arguments in favor of better and more technology access.

As we seek more and more technology specialists within English departments, promotion and tenure committees and administrators can facilitate ecological shifts by not only applying a PEA-based analysis to help anticipate and negotiate shifts, but also by:

- Being aware of the diverse material needs of faculty. Material needs are more than desks, chairs, books, travel, office supplies, and computers. They can and often do include *other* technologies or, at least, access to technologies and space. They also can and often do include technological needs beyond an established default start-up computer package.
- Finding ways to support faculty research in all its diverse forms:
    - Supporting funded research by giving faculty credit toward promotion and tenure for reasonable efforts to secure funding, and discussing what "reasonable efforts" may be.
    - Seeking to understand how the faculty member's colleagues and professional organizations value their work.
- Establishing forums and methods for publicizing faculty research accomplishments from Web sites and newsletters to award ceremonies and financial support for disseminating research results (presenting at conferences, giving public presentations, consulting, etc.).

This is the point at which we realize that what we have brought about through this process and analysis is a new ecology, one different from the place at which we started, but similar in that it, too, must change and grow to sustain its inhabitants. For instance, since we originally drafted this chapter in 2006, the status of the labs has evolved through the internal grant mentioned earlier that we received in 2006–2007, as well as through an additional internal grant in 2007–2008. More importantly, the status of many supportive faculty members and administrators has radically changed, including those who have left the institution, transitioned into larger administrative roles, been hired since (at least one of whom has a direct impact on the department's technological ecology through directing the lab), and, sadly, those who have passed away. As people and resources and curricula change, so, too, must the outcomes of our political economy analyses: We must remember that departmental ecologies are always unstable, and our work to make them stable will result in changing, but hopefully better, understandings of the whole department's use of technology in research and teaching.

REFERENCES

Anderson, Daniel; Atkins, Anthony; Ball, Cheryl E.; Homicz Millar, Krista; Selfe, Cynthia; & Selfe, Richard. (2006). Integrating multimodality into composition curricula: Survey methodology and results from a CCCC research grant. *Composition Studies, 34* (2), 59–84.

Collinson, Sarah. (2003). *Power, livelihoods and conflict: Case studies in political economy analysis for humanitarian action*. Humanitarian Policy Group Report No. 13. Overseas Development Institute. Retrieved November 25, 2007, from http://www.odi.org.uk/hpg/papers/hpgreport13.pdf

Davison, Aidan. (2001). *Technology and the contested meanings of sustainability*. Albany: State University of New York Press.

DeVoss, Dànielle N.; Cushman, Ellen; & Grabill, Jeffrey T. (2005). Infrastructure and composing: The *when* of new-media writing. *College Composition and Communication, 57* (1), 14–44.

Godkin, E. L. (1974). *The gilded age letters of E.L. Godkin*. W. M. Armstrong (Ed.). Albany: State University of New York.

Graham, Phil. (2005). Issues in political economy. In Alan Albarran, Sylvia Chan-Olmsted, & Michael Wirth (Eds.,) *Handbook of media management and economics* (pp. 493–522). Mahwah, NJ: Lawrence Erlbaum Associates.

McGrath, Laura. (Forthcoming). Negotiating access to new media: A framework for faculty and other stakeholders. In Cheryl Ball & James Kalmbach (Eds.), *RAW* (*reading and writing) new media*. Cresskill, NJ: Hampton Press.

Miller, Carolyn R. (1989). What's practical about technical writing? In Bertie E. Fearing & W. Keats Sparrow (Eds.), *Technical writing: theory and practice* (pp. 14–24). New York: Modern Language Association.

Nardi, Bonnie A., & O'Day, Vicki L. (1999). *Information ecologies: Using technology with heart*. Cambridge, MA: MIT Press.

Ohmann, Richard. (1985). Literacy, technology, and monopoly capital. *College English*, *47* (7), 675–689.

Ohmann, Richard. (1987). *Politics of letters*. Middletown, CT: Wesleyan University Press.

Rainey, Kenneth T.; Turner, Roy K.; & Dayton, David. (2005). Do curricula correspond to managerial expectations? Core competencies for technical communicators. *Technical Communication, 52* (3), 323–352.

Selfe, Richard J. (2005). *Sustainable computer environments: Cultures of support in English studies and language arts*. Cresskill, NJ: Hampton Press.

Smitten, Jeffrey. (2005, Spring). The English department online. *ADE Bulletin, 137*, 70–76.

Whiteside, Aimee L. (2003). The skills that technical communicators need: An investigation of technical communication graduates, managers, and curricula. *Journal of Technical Writing and Communication, 33* (4), 303–318.