Stephen A. Bernhardt

Review Essay

Rhetorical Technologies, Technological Rhetorics

On the Blunt Edge: Technology in Composition's History and Pedagogy
Shane Borrowman, editor
Anderson: Parlor P, 2012. 178 pp.

Going Wireless: A Critical Exploration of Wireless and Mobile Technologies for Composition Teachers and Scholars
Amy C. Kimme Hea, editor
Cresskill: Hampton P, 2009. 366 pp.

Rhetorical Delivery as Technological Discourse: A Cross-Historical Study
Ben McCorkle
Carbondale: Southern Illinois UP, 2012. 207 pp.

Digital Detroit: Rhetoric and Space in the Age of the Network
Jeff Rice
Carbondale: Southern Illinois UP, 2012. 247 pp.

Technologies of Wonder: Rhetorical Practice in a Digital World
Susan H. Delagrange
Logan: Utah State UP, 2011. Web.

Copyright © 2013 by the National Council of Teachers of English. All rights reserved.

My title reversal underscores a dynamic we all recognize: the reciprocity between technology and rhetoric. No communicative technology escapes our impulse to frame every technology in the terms of rhetoric: we ask how technologies serve certain purposes, how they fit within communicative situations, how they shape the relations between rhetor and audience, how messages are framed within generic constraints, and how all messages are shaped by delivery via a specific medium. We rhetoricize communicative technologies to understand their power to influence human affairs. Rhetoric acts upon technology, taking it as its object.

At the same time, our rhetorics become technologized. That is, we adapt rhetoric to make sense of new technologies. The influential developments in rhetoric over the past fifty years have relentlessly sought to understand emerging technologies and develop the rhetorical framework to analyze hypertext, the Web, media, computing, social networking, messaging, and other developments. And so technology acts upon rhetoric, taking it as its object, forcing it to change and accommodate.

My purpose here is to find common threads that run throughout a collection of recent books focused on technology and rhetoric, but also to distinguish each for its distinctive contributions to our field. It goes without saying that these various books all assume that rhetoric has much to say about technologies and their influences. All recognize that our rhetoric has to adapt to insistently mediated forms of communication. All recognize that methods of rhetorical analysis are accommodating, that we can profitably borrow upon the constructs and frameworks of a long scholarly tradition to make sense of current practices. This shared reliance on tradition binds these works, gives them coherence as contributions to an evolving rhetoric of technologies. While each of the five works concerns technologies, all do so from the vantage of scholars interested in rhetoric and writing studies: the ground is rhetoric while the field is technology studies.

Each work offers perspectives on technologies that have transformed rhetoric. Shane Borrowman's collection turns our attention to a wide range of technologies, each influential in shaping rhetorical behaviors in classrooms and out. Each of his contributors examines technologies that "bear down upon the writing process . . . technologies that came onto the cultural scene, flourished within and beyond the writing classroom, and failed (either by being abandoned or replaced) without being subject to critical interrogation" (xi). Amy C. Kimme Hea and her contributors look to the current ways that we and our rhetorics are being technologized by increasingly ubiquitous wireless and

mobile devices. Full, saturated, ubiquitous mediation demands that rhetoric be reconceptualized.

How do we respond? How do we make sense? How do we reformulate rhetoric? Ben McCorkle would resuscitate the canon of delivery, seeing it as key to understanding technological discourse. He argues for a dialectical understanding of the dynamic, with new media influencing prior rhetorical practice, but also prior practice influencing our experience of the new media. Reciprocity is key to understanding the evolution of both technologies of communication and communicative practices. Susan H. Delagrange pursues a path similar to McCorkle's, taking up the goal of re-embodying our communicative practices, resisting the impulse to see technology or digitization as erasing the physical, the personal, the embodied presence of the author or audience. Delagrange also works within an understanding of the canon, knowing that a new theory of arrangement or delivery cannot simply be a matter of technology and technique but must preserve the personal, the perceiving and feeling individual.

Of the several works reviewed here, perhaps Jeff Rice's book sets out the most ambitious model for considering the relations of rhetoric and technologies. Rice argues for a new mode of analysis, bringing network theory into rhetoric. Rice pursues a large project here, asking in broad ways how we understand our places in the world, how we position ourselves within a complex, chaotic, and contradictory network of associations. His postmodern take leads us to a large rhetoric of urban spaces while making a place for the intimately personal and quotidian.

Borrowman's edited collection of essays on technology and composition, *On the Blunt Edge: Technology in Composition's History and Pedagogy,* caught me off balance. From the title, and on the basis of my own narrow presuppositions, I expected essays focused on the intersection of computers and writing. Instead, what is to be discovered in this collection is a historically and rhetorically grounded consideration of a wide range of technologies that have received relatively scarce consideration as to their shaping influences on writing studies. Borrowman and the editors of Parlor Press are to be commended for bringing a work of considerable interest and surprise to the field.

In nine short and well-focused chapters, Borrowman's contributors explore seldom discussed technologies that have exerted large influences on the field of rhetoric and composition. Richard Enos leads off the collection, examining fragmentary physical evidence to build a taxonomy of commonplace, everyday,

functional writing technologies in ancient Athens. These graffiti represent the work of nonprofessional writers going about their daily lives, scratching letters onto durable surfaces. School children write their alpha, beta, gammas in boustrophedon, reversing the order of letters at the end of each line. Horos stones, or boundary markers, offer first-person, voiced declarations, "I am the boundary stone of the Agora" (8). These technologies serve purposes that are familiar to us. Voters record their ballots, and gift givers inscribe their gifts with personal notes, often right on the surviving fragment of the gift object. Banquet items are listed on one fragment, while another is addressed to a "boy" who is delivering a couch, a boy who can obviously be expected to read the directions himself. Enos even produces fragmentary flames: the writers record obscenities, name-calling, and visual pornography. Enos offers plates or reproductions of the inscriptions (though he disappointingly skips the pornography) with brief but pointed observations about how we come to understand daily life through a fragmentary written record.

Discussing a familiar but surprising technology, Daniel Frederick discusses transportation as it supported rhetorical education. In classical times, students had to be prepared to travel to seek an education, and traveling was dangerous business whether by sea or land. Processions to school safeguarded students in groups, and shoes protected their feet during the procession. Walking staffs and donkeys facilitated travel, as did improving Roman roads. Sailing rituals headed off shipwreck, while constantly improving ship designs led to safer sailing. Gaining a rhetorical education was a dangerous enterprise, for it meant leaving home and community. Frederick's is a surprisingly insightful take on the material objects associated with rhetorical education.

Other chapters probe more recent technologies, each offering a historical case study of the place of technologies in rhetorical education. Shawn Fullmer explores the development of the typewriter and its appropriation by schools, where it was hyped as a transforming technology, much like personal computers more recently. As detailed by Joseph Jones, audiovisual aids figured prominently in teacher education during the early twentieth century, with over a thousand motion pictures available for rental to classrooms as early as 1910. Visual images were incorporated into classrooms via stereopticon and reflectoscope technologies, all meant to make instruction more dynamic and stimulate the visual imagination of students. Radios and phonographs had their places and proponents, as did duplicating machines and filmstrips. A short bibliographic chapter by Sherry Rankins Robertson and Duane Roen covers the long his-

tory of textbooks in higher education, while Jason Thompson and Theresa Enos discuss technologies of hidden or invisible writing, palimpsests, codes, and other tools of making texts obscure or physically layered with meanings. Thompson and Enos build a "kairotic ethos" that allows us to write and read hidden messages, ambiguities, and obscurations at the right time and place.

If these sound like provocative and seldom explored topics in the field of rhetoric and composition, they are. The collection benefits from shrewd selection of authors, each of whom brings a somewhat unexpected perspective on rhetorical technologies. Kathleen Blake Yancey's take is personal, as she considers handwriting and literacy, with close initial consideration of the handwriting, circumstance, education, and politics of her grandparents and parents. She then moves to broader issues of handwriting in schools as a form of discipline, character building, social order, and individual identity. Richard Rawnsley brings his own work history to a revealing discussion of printing technologies, having been a printer and typesetter for many years before returning to school. He is articulate about the advantages of movable type, and he is informed about the evolution, or revolution, of typesetting machines: the Linotype, the Monotype, the keyboard, and the typewriter. His observations on technology are insightful:

> The history of writing machines *is* the history of technology, and a cutting-edge technology remains sharp for only a short time before it becomes part of the past, relegated alongside other more primitive and clumsy ways of accomplishing tasks. Despite this, new technologies have a deceptive sense of immediacy that obscures their backgrounds, development, and decrepit futures. Generally, what seems remarkable and new is really the current point of a long line of development—a point that quickly becomes, if not obsolete, archaic. (31)

This tempering observation can well be applied to more recent technologies.

One such recent technology is wireless computing, examined in the collection edited by Amy C. Kimme Hea, which brings together scholars from technical and professional communication, on the one hand, with those in computers and writing on the other. *Going Wireless: A Critical Exploration of Wireless and Mobile Technologies for Composition Teachers and Scholars* was published in 2009 by Hampton Press. Book publishing moves slowly, especially edited collections, so it is a fair question whether this work has held up over time. Most citations in this collection range from 2000 to 2005, with many from the 1990s. Surprisingly, however, the collection holds up remarkably well, and it is an excellent place to begin exploring the technologies that are redefining

rhetoric in an era of ubiquitous computing, with ourselves and our students always connected, always in mid-datastream, always multitasking, always situated, never in the here and now, even as we increasingly realize that being so is neither efficient nor satisfying.

Many of the contributors consider how we situate ourselves and our classrooms within wireless technologies, with particular attention to questions of rhetorical agency. Ryan Moeller considers technologies that serve a wide range of purposes—surveillance, entertainment, attention, and security—technologies that frequently make our private information public (or at least controlled by some other agency). Karla Kitalong pursues related lines of thinking in her rhetorical analysis of ads that sell us our identities as students, instructors, and communities that are always connected, always on, and always vulnerable to manipulative purposes that may lead to alienation, domination, or subjectivity. We find ourselves and our students in situations we would not choose (if offered) or design (if in control). Melinda Turnley also examines student and instructor agency, taking up distance education, wireless access, and mobile learning, asking whose purposes control the spaces and who chooses the positions we are forced to occupy. She usefully emphasizes the social and relationship-based communities that a rhetoric of technology can help us build into our syllabi and classwork.

One set of chapters in the collection gathers a set of research studies on reconfigurations of community when education goes wireless. Will Hochman and Mike Palmquist document the transition from desktop to wireless classrooms at Southern Connecticut State University; Kevin Brooks at North Dakota State University reports on a laudable departmental initiative that provided laptops to graduate students and then tracked their uses of mobile technology. A group of faculty from the University of Memphis tracked student use of wireless laptops with a sampling design that queried subjects periodically, at all hours of night and day, to see whether students were using the devices and what specifically they were doing. Mya Poe and Simson Garfinkel, in a technically well-informed chapter, discuss typical security protocols (address registry, vpn, end-to-end, cryptographic) before looking at how campuses are responding to rogue users, disruptive behaviors, and covert and unauthorized tracking of other users (think electronic stalking). They conclude with the need for rhetorically informed policies, together with suggestions for engaging students with the challenge of creating ethically compliant and respectful wireless communities.

By any measure, large changes in educational and rhetorical practices are underway, and this volume helps put the issues on the table. In the opening chapter, Johndan Johnson-Eilola and Stuart Selber argue for opening class space to new genres of text messaging, while Teddi Fishman and Kathleen Blake Yancey thoughtfully ask what happens when learning is unplugged. Consequent chapters explore specific technologies (iPods, Internet radio, electronic textbooks, electronic graffiti), all with a sense that our rhetoric, and rhetorical practices in classrooms, need to be adaptive, if cautiously so. Kimme Hea herself contributes both an introduction and a strong analysis of anytime/anywhere pedagogy. The collection is timely and thought provoking, with the potential to inform our thinking about how wireless changes communicative interactions in academic settings.

In one of three single-authored books reviewed here, *Rhetorical Delivery as Technological Discourse*, Ben McCorkle argues for a revitalization of the rhetorical canon of delivery, working to link delivery to media and technology. It's an attractive idea. Where once rhetoric concerned itself with a rhetor in front of a live audience, using various techniques to persuade through oratory, our common situation now is increasingly mediated. For our contemporary situation, McCorkle argues, we need a new theory of delivery. The medium may not be the message, but the medium in an important sense delivers, and McCorkle pushes us to consider both historical developments and contemporary practices and thereby ground our thinking in the rhetorical tradition.

McCorkle takes up the big, well-rehearsed arguments about monumental cultural and cognitive changes accompanying breakthrough technologies—writing, printing, new media. His book offers a chance to revisit the debates around transformed consciousness as a result of media shifts, including those arguments advanced by Eric Havelock, Ignace Gelb, Walter Ong, Marshall McLuhan, and other prominent theorists, historians, and prophets. McCorkle is always convincing in his temperate view of the supposed "Great Leaps" in consciousness—the supposed massive social and cognitive transformations that arise as a consequence of evolving media. As he considers the spate of scholarship that urges us to reconsider the Great Leap theory, his reading on the issues is best framed in terms of a dialectic:

> Such revisionist moves are important to consider for this study, as they emphasize the *reciprocal* dynamic between orality and literacy and how they work to refashion each other, not simply at the formal level but at the broader level of cultural consciousness and epistemology. The mentalities and practices associated with

> writing and speaking were not discrete to each medium but instead overlapped into both and, in so doing, contributed to the refashioning of each. (53)

This reciprocal or dialectical perspective on the process of remediation is a core argument in McCorkle's text. As he moves across rhetorical history, he reasonably argues that we ought to see speaking and writing as mutually informing practices, with changes in one form of delivery shaping practice in other forms.

McCorkle's book is not by any means a history of rhetoric, though he takes up broad periods and key events. Delivery has a long but uneven history, and so McCorkle looks to the charged periods, where delivery (or medium more broadly) becomes a focal concern. Delivery plays a heightened role in both theory and practice within given time frames—as it informed the performance of civic life in Athens, or as it provided professional skills to enliven and inform medieval preaching arts (*praedicandi*), or as it was elaborately codified as part of nineteenth-century elocutionary training. McCorkle moves in separate chapters across those periods: the transformation from speech to writing in the classical world, life before and after the revolution of the printing press, the heyday of rhetorical instruction in delivery in nineteenth-century elocutionary schools, the subsequent eclipse of delivery, and the advent of new media. Within each period, he considers the consequent changes in the relationships of rhetors and audiences. He ends by looking forward to new delivery media and anticipating their effects on us. McCorkle emerges as a champion of delivery, working to bring this neglected canon to the fore. McCorkle's analysis, like Borrowman's collection, exemplifies how the rhetorical tradition speaks to contemporary technologies.

McCorkle tends to play a very conservative hand—reasonable, taking likely positions, but in the end not being terribly daring. He also tends to argue through repeated theoretical assertions as opposed to demonstration via new evidence from primary sources or even well-developed examples. He makes frequent, earnest statements to the effect that a revitalized sense of delivery really would help us understand technologies and literacies. Such arguments could be strengthened if supported by more original analyses, cases, or extended examples. Toward the end of the book, he does venture away from his steady reliance on secondary sources to speculate about the ways emerging technologies will extend our senses, allow intimate contact through immersive interfaces, and put us in touch with new spaces through haptic interfaces. When he engages in such speculative moves, and when he makes use of his own experiences of technologies, his analysis has more vigor.

Theoretically, the book suffers from some conceptual leakage across the canons and a missed opportunity to help establish a reconfiguring of all five canons. As a reader, I kept waiting for McCorkle to establish some useful distinctions between what is delivery and what is something else. If delivery is the neglected canon, one way of reestablishing the canon would be to position it against arrangement and against memory, our other two neglected canons. Surely, technologies figure large in arrangement, particularly as we think about how electronic texts are reshaped, refashioned, relinked, reread. So the question is, in an age of mediation, an age of medium, where is the line between how a text is arranged electronically and how it is delivered? Or is that line erased? Similarly, in a work that sets out to establish a renewed place for delivery, being deliberate about what is delivery and what is memory would be of significant help. One might well consider much of technology to be taking over the work of memory: How do we keep track of and how do we recover what we know? As Plato anticipated, we do it via technologies of storage, query, and retrieval, relieving us of the need for rehearsed mnemonics. The information explosion is in many ways an explosion of memory, not delivery, into a massive cloud. However, instead of pursuing such provocative lines and establishing some intellectual demarcations, McCorkle is often content to push his broad theoretical argument, that orality and literacy exhibit reciprocity, with new technologies being shaped by prior technologies and vice versa. The work that could be done to reestablish the place of delivery in the canon, that is, as positioned within a structural dynamic of the five canons, is neglected.

Only in the last couple of chapters does the book start to take flight, when McCorkle considers delivery in light of present and near-future technologies. But it is also in these later chapters that the canon of delivery is released from any moorings, where the problems of failing to position delivery against arrangement, memory, and even medium are most apparent. McCorkle never makes it clear why a construct like delivery would illuminate our understanding of how new media affect audiences. Instead, delivery is confounded with emerging technologies, with haptic interfaces, with immersive environments. There is a loose associative reasoning at play—that delivery traditionally addressed bodily control and manner, and therefore, with new technologies that also involve the body, theories of delivery once again are meaningful, at least potentially. But this argument, while attractive, needs much fuller development to be persuasive.

In *Digital Detroit*, Jeff Rice develops a rhetoric of the network, much as Ben McCorkle develops, or resuscitates, a rhetoric of delivery. Both works have

a singleness of purpose, though Rice is ultimately more successful because of his inventiveness, insight, and willingness to take risks at theory building. His network is at once a matter of technology, but also and importantly a rhetoric of place and connected spaces, personal and public, residing in both physical and memory-laden traces. The space is Detroit, the much maligned, practically abandoned city, our shared cultural symbol of urban decay and disintegration, but also a charged trope for those who envision post-industrial northern cities rising around a new urbanism. Detroit is a city we all know—for cars and music, for riots and burning, for abandoned lots and depressed inner city, and for various schemes of mostly failed revitalization. Rice came to know Detroit when he was an English faculty member at Wayne State University. (He is now the Martha B. Reynolds Chair in Writing, Rhetoric, and Digital Media at the University of Kentucky.) Rice presents an alternative rhetoric to the predominant one of urban despair, decline, and disintegration, rejecting the trope of urban failure. He offers instead a complex map of a network constructed of both personal and shared cultural iconography, asking how it is that we come to represent and understand a cityscape, to know a place and to inhabit a world that triggers a rich tapestry of memory against the background of a pressing, if not depressing, and urgent present.

Some large part of Rice's project is to rethink Lloyd Bitzer's construct of *exigence*—the triggering situational impulse toward rhetoric as a call to purposeful action, wherein rhetoric is relied upon to resolve arising problems though systematic analysis and response. He finds a large gap between what rhetoric hopes to explain as purposeful, rational, deliberate, and predictable versus his own experience of the world and urban reality as evanescent, repetitive, evocative, loosely coupled, contradictory, and surprising. In important ways, Rice is more concerned with knowing than doing, with epistemology over pragmatics. When Rice asks what it is to experience and to know Detroit, nothing is off the table—not personal life events, not buildings whose functions and meanings have shifted, not an overly familiar daily commute to work. He is mapping the city, and his mapping of the boulevards gives rise to an intersection (or collision) of the daily life of former and present residents, of the historical remains of places and businesses, of the images and sounds of past and present culture, and of the signs left everywhere that once established boundaries and identities. Rice's networking of Detroit purposefully embodies the confusion, indeterminacy, and mixed messages of a heavily trafficked and overloaded web of connections. Detroit is more like the buzzing, blooming confusion of the Web than it is a resolved, understood, and consistently signifying city.

Rice does not abandon rhetoric and its methods, but neither is he content to rehearse practiced and familiar rhetorical analysis, preferring the topic of contradiction:

> Throughout Digital Detroit, I have found the contradictory to be the source of most of my inventive strategies. Connections may, indeed, contradict one another while also providing me with further information to explore and build form. (217)

Rice is working invention through juxtaposition and contradiction, building form, recovering narratives, and relying on connections to construct a rhetorical space. He is aware that his project is not pragmatic and that the network he is building is not typical for work in our field:

> I have tried to uncover my own space based on my own physical locale generated from my own interactions. That uncovering reveals a grammar that is imaginative, associative, and affective. In other words, I have found my computer interface . . . . The pragmatics of that interface have not been entirely enacted yet here. . . . By the book's conclusion, the interface's role will hopefully be clearer; it is allowing me to produce this chapter as well as the other four. (140)

This passage, midway through the text, characterizes Rice's style and approach: open, personal, revealing of intent, unfolding, and self-reflexive in foregrounding questions of personal motivation and method. In general, Rice favors openness over closure, and his book opens many inviting avenues of thought. It also raises many unanswered questions.

One route that Rice tours in detail is Woodward Avenue, Detroit's main road, full of landmarks such as the Fox Theater and the stadiums of both the Tigers and the Lions. Rice travels its past as the center of a cigar-making industry—who knew?—and later as the main road of the auto industry. He pulls out a photo of his own father at the wheel of a Ford Model T, speculating about the family's brief ownership. Consideration of the 1967 race riots is contextualized within the dominant reading of the time, a *Newsweek* article that detailed the way Detroit was choosing the wrong path—or more appropriately, going down the wrong road. From there, Rice cruises past historic buildings (including the expected General Motors Building, but also the repurposed Maccabees Building, built to house an insurance company but later repurposed for the school district administration and eventually the home of Wayne State's English Department and Rice's own office). As Rice travels the avenue, he dials up music, including Blind Arthur Blake's "Detroit Bound Blues" and Johnny Cash's "One Piece at a Time," as background for discussion of assembly lines, of Fordist automation,

and of the immigration of southern blacks with the consequential integration of the urban north.

Rice gives extended space to Bob Dylan's conversion from acoustic to electric, with attention to Dylan's 1965 concert at Detroit's Cobo Hall and subsequent concerts, where fans were furious at his betrayal of folk music. Rice reviews filmmaker D. A. Pennebaker's documentary on Dylan, *Don't Look Back,* asking "What kind of film is this?" Other questions arise: What kind of music was Dylan playing? What was he signifying? And from there, it is a short hop to the big questions about Detroit: What kind of town is this? What story can capture this rich history? How do we taxonomize or folksonomize the ever-changing cityscape of Detroit? Is it Motor City or Motown? Do we see cigars or automobiles? Sports or crime? Is it a tough working-man's town or a broken-down post-industrial wasteland? No single signifier will hold against the manifold and contradictory pasts and futures that Detroit holds. Only a complex, interconnected web of frequently contradictory associations can get close to the experience of Detroit.

Rice has produced something of a hybrid cross here—part rhetoric, part urban geography, part pop culture or American studies. Beyond what one might expect in rhetoric and technology studies, the richly diverse scholarship on which he relies extends from postmodernism and semiotics (Fredric Jameson and Roland Barthes), to city studies and urban geographies (Michel de Certeau, Henri Lefebvre, Katherine Harmon), to anthropology (Jack Goody), to sociology (Bruno Latour), to networking and interface design (Jef Raskin and Marc C. Taylor). His book is a wildly unpredictable ride that triggers unexpected associations for the reader. It's been many years since my brothers and I would run home from grade school to catch *Lunch with Soupy Sales,* and I would never have guessed it was filmed in the Maccabees Building, now home to the Wayne State English Department. I never read the Detroit-based, rock-and-roll magazine *Creem*, but Rice did, and he spent long hours tracking down lost issues in an attempt to connect his childhood in Miami with his future home of Detroit. Rice is articulate about his motives:

> In various parts of this book, I pose speculative gestures as central to network decision making. These speculations allow me room to move through a network of meanings so that I may find and create connections among spaces of meaning that feel right or good enough. Such is partly the nature of network decision making; it allows for personalized rhetorical arrangements, many of which challenge or do not correspond to what has become familiar in print culture. (207)

Rice writes with large degrees of freedom, and it was fun to see cultural touchstones gathered in one place: Gordon Lightfoot, *Saturday Night Live* routines, *Robocop,* and *The Lone Ranger* (also broadcast from the Maccabees Building). On any given page, the reader can be treated to his insights from film studies, his musings on the modern city, or his personal reminiscences, including a self-mocking photograph of Rice himself at age fifteen in a Rolling Stones T-shirt and cap. The result is a book that builds a new theory of the network, one that pulls together personal and cultural connections while reactivating paths that have been seldom or never traversed. For Rice, all of Detroit is still in the network, with nodes waiting to light up upon activation. All are brought together in the network, his way of reading the world of Detroit. (Or perhaps not all but most—oddly missing are any connections to life in the English Department at Wayne State. Were work and teaching and students somehow off the grid?) His Proustian memory, characterized by idiosyncratic preoccupations with personally iconic things and events, makes the book somewhat quirky, but that never gets in the way of his willingness to track down the shards of history, the visual reminders of a connected past, or the audio and visual tracings in song and film.

Among these authors, Susan H. Delagrange is alone in delivering a work on the rhetoric of technology that is also a product of new technology, showing in various ways what a newly technologized book might look like. *Technologies of Wonder: Rhetorical Practice in a Digital World* is published by Utah State University Press in only one form, as a pdf, downloadable for free from their website. Delagrange takes advantage of the medium in important ways, particularly in offering us a work about visual rhetoric that is also a visually engaging object. Most pages have an accompanying image—of an artwork or an object of some sort, a drawing, a photo, a page from a book—and all increase the visual interest of the text. Also included are various animations and links to external objects, such as websites that exemplify or expand some aspect of discussion. Delagrange deliberately divides her text into relatively short segments, so within five long chapters are sequences of one- or two-page modules. The design, use of color, heading structures, and page layout all take advantage of working in Adobe for screen presentation. The result is a work that argues successfully and self-reflexively for the importance of display technologies to authors and readers who are visually oriented and perceiving selves. Her book points toward ways that technologies afford new approaches to arrangement and delivery.

Delagrange's precipitating argument is that as a field, we need to attend

to seeing and embodiment as an alternative to the logocentric domination of scholarly exposition. She characterizes her theoretical underpinning as feminist, and like Rice, she pushes us to consider rhetorical patterns of organization that are associative, that represent collections of objects and ideas, and that work against any notion of a unified text making a unified argument. Her feminist positioning also leads to an affirmation of the person and the personal:

> Bodies *do* matter. Embodied pedagogy, which allows the literal or figurative materiality of the teacher and her topics to emerge, communicates in ways far richer than words alone can convey. The visibility of specific gendered, raced, classed, and more or less abled bodies— whether physically in front of a classroom, textually on the pages of a book, electronically on a screen, or implicitly in the design of interactive multimodal digital media—matters, because knowledge is located and specific; it has no meaning outside of the contexts in which it is deployed. Embodied pedagogy communicates social and cultural values that can be analyzed, understood, and, if necessary, challenged and emended. (66)

As Delagrange seeks to analyze and understand through objects and visual processes, her governing metaphor is the cabinet of curiosities, the *Wunderkammer*. Such cabinets, though often curiously ordered, provide objects with which to think, to speculate on the order of nature or the findings of science. They were a product of collectors, an early expression of scientific curiosity. The *Wunderkammer* is in some ways a personal-sized museum of natural history. When collections grew large, we ended up with cultural treasures such as the medical curiosities collection of the Mütter Museum in Philadelphia, and when they grew orderly, with the great urban museums of natural history.

How does a collection arrange itself? What sort of revitalized rhetoric of arrangement might do justice to collections that provoke wonder?

> Today, wonder as a visual *techné* of inquiry allows us to use these technological tools to construct wonder as both perplexity ("I wonder . . . ?") and wide-eyed delight ("Wonderful!"), to relish the ambiguities and uncertainties of a process that has no pre-determined ending, and to savor the unexpected congruencies and insights that result in the process of discovering "unexpected solutions to unrealized problems" (Feyerabend, 1988, p. 160). (45)

The permutations of wonder take Delagrange on various explorations of what is wondrous, what causes wonder, why we wonder, and what is a wonder in this world. She calls on theories of perception, asking what it means to read pictures or to see words, how vision leads to revision, and what happens during

textual or visual remediation. Always, Delagrange is attentive to the linkage of vision to embodiment and of embodiment to a feminist perspective, one that preserves the personal, the private, and the intimate.

There is some irony in this work being presented as an electronic text, which, while offering visual affordances, is in some ways freed of its own embodiment. Perhaps it is hard to say which is more embodied, print or electrons. Delagrange works this territory, asking with some persistence why it is that we valorize very traditional forms of print scholarship while infantilizing work in new media. A recurring thread throughout the book is the need to recognize alternative rhetorics and arrangements of the visual.

> However, I want to argue here that digital remediation opens up a new (virtual/material) space within which to re-imagine the canon of arrangement, not as concerned merely with the order of written and spoken discourse, but as a visual practice, a *techné* of discovery and representation, that takes on many of the rhetorical tasks formerly performed by delivery. As a verbal canon, arrangement deals with the order in which a discourse unfolds over time. In a visual canon of arrangement, the persuasive combinations of words, images, and other media are multiplied and multiple, and unfold in time *and* space. (58)

Here her work is at a boundary—a product realized within new media but carrying many of the markings of old scholarship. Her work pushes toward visual incorporation, though in the end her scholarship is overwhelmingly verbal, just as our profession is. We have a long, rich textual and rhetorical tradition, a logocentric tradition, which has only occasionally been attentive to the visual, rarely to the spatial, and only attentive to the aesthetic when exploring verbal or linguistic poetics.

Delagrange's argument and examples never really escape the logocentric bind. Related work is primarily represented through citations, titles, publishers, and journals. Many of her examples are works of art, and while visually engaging, these representations do not represent scholarship, at least not to those outside of art departments. She predictably calls upon *Storyspace* productions—but these tend to be dated, places where we've been for some years, and spaces where not very many people spend very much time. Such hypertexts are easy to get lost in and impossible to navigate with any degree of comfort or control except by wandering link to link. A specific hypertext Delagrange discusses is Shelley Jackson's *Patchwork Girl* (1995), a hyperlinked, hyperpersonal exploration of one woman's body. When the reader is in *Patchwork Girl*, the only available routes of navigation are several hyperlinks on any

given page, and unless I missed something, no other wayfinding or even place-finding devices are available, so the choice is essentially to go to another page through an associative link, without any way to go up or out or see things from above. Delagrange does not ask about the limits to tolerability of such textual arrangement, but it would be useful to wonder about where such texts take us, and whether people want to go there.

Delagrange invests some urgency in arguing that we need a more open concept of scholarship within our academic enterprise, that we need to respect new forms of mediated texts based on embodied, associative rhetorics. She could do more to show us what such scholarship would look like, for example, in the pages of *Kairos* and elsewhere. And she does not argue, though I would, that in many ways we are already there. It is typical to recognize creative work, since most university departments have had to address scholarly productivity in creative writing, and all English, music, theater, art, and other departments allow room for imaginative creations. Many departments have been building online publication into their definitions of scholarship. Departments are moving to wider acceptance of a diverse range of scholarly work, including not just products but activities, built things, projects, and so on. Most departments are moving to embrace multimodal composition, and our job lists are saturated with searches for those who work in digital humanities, since in some sense the field is seen as the lifeline of literary studies. In my department, for example, faculty members can be found who study maps, dissect images of the female body, examine print and material culture, work at the intersection of art history and literary history, and diagram altered Renaissance cosmologies. In our research journals, e-publishing initiatives have been underway for some time, and traditional text forms, such as research reports, now have a new openness on matters of length, incorporation of visuals and appendixes, and innovative data displays. So while Delagrange is earnest about the need to accept new forms of composition, there is little force to the argument as it seems we are already there.

One final criticism I would direct at the Utah State University Press. While having a university press book freely available as a Web-published artifact is wonderful, indeed, the Press needs to work on how that text is built. The chapters are very large, from 60 to 127 MB. I suspect the picture files have not been optimized for screen display but were captured at high resolution and are unnecessarily large. So download times are long, even for the pdf files, and many networks will not allow file transfer of chapters as attachments because they

are so large. A telling fault with these files is that the animations will not play on a Windows operating system. They are embedded in the file, as opposed to calling out animations on a server, so they further expand the bulky files. The animations worked on a Mac, but even with solid tech support and the use of media players designed to handle many kinds of files, I could not get them to play on my Windows PC. Emails to the press were responded to, but there was some frustration expressed on their side about the encoding of this book and the problems of reading across platforms. As we move toward new modes of delivery, our rhetoric is increasingly technologized, to the point where we are all readers who have become technicians, simply trying to get texts to work on our machines. Our presses will need to do their part on the delivery side.

Together these five volumes offer provocative challenges to rhetorical theory as it confronts an endless and accelerating stream of new media and newly digitized experiences. We are lucky to be so well situated, able to draw on a long and adaptable tradition. We are also lucky to have scholars who so productively discover ways to connect our traditions of rhetorical analysis to our mediated lives.

Works Cited

Bitzer, Lloyd. "The Rhetorical Situation." *Philosophy and Rhetoric* 1.1 (1968): 1–14. Print.

Feyerabend, Paul. *Against Method.* Rev. ed. New York: Verso, 1988. Print.

Stephen A. Bernhardt

Stephen A. Bernhardt is the Andrew B. Kirkpatrick Jr. Chair in Writing at the University of Delaware.