(p. xxi). Despite some methodological and theoretical questions that arise in connection with arguments and examples presented in several essays, it is clear that *Inventing a Discipline: Rhetorical Scholarship in Honor of Richard E. Young* makes a timely and significant contribution to the contemporary understanding of the field of rhetoric and composition. The collection deserves a wide readership, particularly among teachers and scholars in the field of rhetoric and composition.

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ELLEN ROSE. *HyperTexts: the language and culture of educational computing.* London, ON: Althouse Press (2000). Pp. 210. $ 24.95. (ISBN 0-920354-48-3).

Every generation, it seems, believes that it invented sex and "the" technology. *HyperTexts: the language and culture of educational computing* by Ellen Rose, reveals nothing about the former but attempts to shed light on how "the" technology – the digital content, use, and production of computer based education – is wrapped in a discourse that is permeated by social, ideological, and political structures and values. Rose uses a poststructuralist interpretation of various "texts" produced by 'technologists'. She states that it is not her contention to adopt a position as either an advocate or a detractor of educational computing. However, it is clear early on in her book that she sees the current practice of educational computing to be, in effect, old wine in new bottles. To Rose, it is nothing more than an updated, slicker version of power-structures and social beliefs that limit the potential of new technologies to truly inform and reform educational practices.

That education is a value laden enterprise is undeniable, even if this insight is frequently neglected in research that focuses on content and delivery. Poststructuralists maintain that what we teach (the content) is implicitly a symptom of what is valued that "needs" to be taught. At the same time, how it is taught, by whom and with what tools (the delivery) is equally important. *HyperTexts* is situated in the continuing debate about the values that underlie the relationship between knowledge and power. Dismissing the notion of neutrality or innocence in digital technologies, Rose presents a

critique of our acceptance of computer based learning and instruction as a sort of Trojan Horse of cultural norms, values, and desires that serve to reinforce existing power structures. The problem she raises is not about the effectiveness of the computer technology as teaching content, but rather its effectiveness in teaching "colonizing" values and practices that are frequently hidden or masked in the discourse around assessment and evaluation. As a poststructural work, *HyperTexts* is unapologetic about its activist goal of prompting a heightened awareness leading to more conscious choices of educational practices.

Poststructuralists believe, as do many educational, social, and cognitive psychologists, that language in use is an indicator of structures of thought. Meaning making is a discursive activity that either explicitly or implicitly reproduces the basic social, political, and ideological values in place in that society. In other words, no human enterprise is neutral, including scientific research, educational research, and, as mapped out in this book, educational technology. Further, any artifact or program produced in a society acquires value through the construction of meaning afforded by the discursive practices in that society. Thus, the classroom is a microcosm of larger sociopolitical values, and the production, adoption, and use of computer technologies mirrors the larger context in which digital meaning is made.

Much of the force behind poststructuralist inquiry is the notion of "problematizing," adopting a reflective and critical look at the commonplace, at tacit and habitualized practices. Turning the mundane into the exotic is, according to Rose, assisted by techniques instituted by Foucault, Derrida, and Lacan, such as looking at the edges of cultural practices and deconstructing the semiotic associations.

HyperTexts: the language and culture of educational computing investigates educational technology through the texts produced in advertising, popular culture, film, jokes, policy making, and software and instructional design, and researchers and educators including Papert, Minsky, Tapscott, and Negroponte. This indirect probe of the technology through the discourse surrounding it is in line with the subversive nature of poststructural inquiries. Poststructuralist interpretation has a forensic feel, as the researcher tracks and investigates who benefits from the phenomenon in question, who profits financially, culturally, or politically in its production. In essence, Rose's interpretation of meaning as the construction and reconstruction of power provides the lens through which educational technology is explored in her book.

Rose distances her critique of educational computing from the proponents and detractors of educational computing who emerge from more scientific backgrounds, whose work she dismisses as argumentative theoretical posturing, resting on positivist claims. She maintains that we must "find new ways

of apprehending. . . . educational computing as a cultural phenomenon." Instead, she focuses on the language and meaning woven into cultural tracts. Her aim is to "understand the assumptions, interests, and desire lodged behind those claims," and to "illuminate the way language constructs our understandings of educational computing, as well as such fundamental concepts of learning, knowledge, and education."

She does this by amassing a collection of cultural texts that she cites as "being the most influential over the years." The book presents what are, in effect, four zones under her rubric of educational computing: information technologies in general, educational computing, the production process of computer learning software, and the educational policies of McKenna's New Brunswick.

She begins with what she describes as the cultural desires inherent in the modernist attachment to technologies. A gloss of films, jokes, and other texts from popular culture coalesce around the fantasy surrounding space travel and automata. Rose infers a cultural bias towards technological determinism and scientific progress leading to a technocracy that betrays a colonial impulse.

This underlying mind set is played out in the tales society tells about educational computing. Here, Rose uses an analysis of popular films, advertisements, and publications to argue that the so-called benefits of classroom computer use are nothing more than cultural "wishes". In particular, she describes notions of interactivity, motivation, and individualization, life-long learning, and job preparation as symptoms of cultural values rather than computer assets.

Based on her experiences as an instructional designer and project manager, Rose launches into an inquiry into the workplace setting in which much educational software gets constructed. She tracks the original process of individual authorship and artistry of software design to its current large scale team practices and production model that has its roots in the military and is defined by its appeal to efficiency and scientism. A central feature of this chapter is her finding that the paper trail of decision making and documentation, such as the flow chart, are inscriptions bearing "the modernist language of progress, colonialism, and utopian dreams".

Her final chapter centers on revealing the power structures in the texts surrounding the adoption of technological mechanisms as educational and employment strategies in McKenna's New Brunswick in the latter part of the 20th century.

HyperTexts raises some interesting issues that are hard to argue against. Foremost is the assumption that there are no innocent or neutral technologies. There are especially no neutral words. Texts always reveal more about the cultural mindset of the people who produce and use them than the surface meaning represented. Rose is most successful when she suggests tools with which to deconstruct and interpret meaning making, but she is less successful with many of her own attempts. Thus, I found her discussion of how we have come to confuse "individualism" and "individuality" insightful. On the other hand, her finding that advertisements are optimistic illusions overstates the obvious.

Some of my criticism of *HyperTexts* revolves around the rather disingenuous manner in which it shields itself from the very criticism it lodges against its subjects. Thus, Rose's claims to deconstruct the jargon surrounding educational research is wrapped in terms that only a poststructuralist can understand: "colonizing impulse", "symptoms", "interrogates", "valorized".

Where she finds a conspiratorial motivation behind the conflation of terms such as "the computer calculates", (the shorthand for the person uses a computer to calculate), I could question her divorcing of authorship from text in the very way she "interrogates text". Also, the entire poststructuralist preoccupation with treating culture as disease ("symptoms") or captives ("interrogates") gets tiring after a while.

  But even more fundamental is her claim that the texts in question are representative of the culture she intends to investigate. She doesn't examine the discourse of the detractors to technology with the same scrutiny; in fact she avoids mentioning any of the substantial research which has filtered to even the popular channels, that has cast a more sober or at least questioning look at the technology. Her choices of texts produced by selected authors is further compromised by the dates in which these texts were written. Many of her critical entries are from the 60's and 70's, a fatal error when dealing with a moving target such as technology. She would have had to use more current texts to prove that the same attitudes "valorized" in the earlier tomes are still in play.

Why these texts and not others? She claims, in one unsubstantiated sentence, that these sources were the most influential. Apart from the chapter on McKenna, the reader has no way of assessing the influence of these texts, who precisely the texts seek to influence, and the extent of the influence on the culture of educational computing. In fact, Rose's research position is rather vague in defining the "culture" of educational computing. It is not clear whether it is society or her own interpretation that claims IT to be a monolithic empire.

Because the aim of her book is to provoke and agitate for further debate, she seems more concerned with the impact of her approach than the strength of her inferences. Yet I wonder whether Rose's conclusions tell the reader, as she said in her preface, "what it really means to learn with a computer".

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LIORA BRESLER & CHRISTINE THOMPSON (Eds.) *The Arts in Children's Lives: Context, culture, and curriculum.* Dordrecht, The Netherlands: Kluwer Academic Publishers (2002). 256 pp. US$77.00 (hb). (ISBN1-4020-0471-0). US$27.50 (pb). ISBN 1-4020-0554-7.

Let me start this review with a confession. I had hoped that I could skim the text, get the gist of the ideas, write the review quickly and move on to the rest of the pile of unfinished tasks that clutter my desk. Alas, the plan went awry. The book is just too interesting to skim. Not only is it timely and educationally important; the writing is almost uniformly invitational and eloquent. I had to pause and ponder frequently, and often found myself saying, "My students should read this." In part, this was because the general tenor of discussion confirms what I tell my students in art education; there is nothing like reinforcement after all. And sometimes I have wondered what others are saying to their students. This book reassures me that many of us are indeed addressing the same issues and using similar language to do so, even when our disciplines are different. Indeed, for me, one of the rewarding features of this book is that I found examples relevant to my own field, art education, within the chapters on music, dance, literature and drama education. Perhaps I should have expected this, but I did not. Our separate disciplines do have their own vocabularies and emphases. Familiarity with one does not automatically provide insight into the others. This book, however, does have plenty to offer anyone who is open to the suggestion that the arts are, or should be, part of basic education; and perhaps a skeptic or two might be persuaded as well.

The book is divided into three sections – context, developmental theory, and curriculum content and pedagogy. Taking their cue from music, the editors have begun the text with a prelude in lieu of a preface; and each section is introduced with an interlude. The main body of the text consists of fifteen chapters, each written by a different author, many of whom will be familiar to readers of the various disciplines represented. In this short review I cannot comment on each of the chapters. I will, however, try to give a general sense of the text as a whole, as well as some of the dominant and interlinked ideas and pleasurable highlights.