

Counterfeit Capital: Searching for a Silver Lining in Bernadette Longo's *Spurious Coin*

Michelle Trim
Department of Humanities
Michigan Tech University
mdtrim@mtu.edu

Dr. Bernadette Longo, Ph.D., uses the metaphor of devalued currency to trace some of the roots in technological history for technical writing's lack of intellectual and cultural capital. She ingeniously incorporates early threads of management and industrial technology, like the formation of the railroad, in an attempt to contextualize her research. Academics must view Longo's text, *Spurious Coin*, as just one branch of what must be a webbed tree of intersecting social attitudes towards knowledge definition and science. In understanding the gaps in Longo's narrative, people interested in technical writing might find her book to act as a launch pad for better defining the questions guiding their own research. In this review, I will focus on some of the important gaps I see in Longo's research methodology as she historically situates the emergence of engineering as a discipline and then as the determining factor in technical communication's subjugated position within the academy and industry.

In order to begin expressing my reaction to and evaluation of Longo's book for technical writing researchers, a point needs to be made regarding the inseparability of cultural attitudes from any systematized implementation of technology. The invention of the printing press is a prime example. While that technology alone certainly did not depose and execute a King of England, it facilitated a new kind of rhetoric that played a major role in the regicide. Individuals capitalized on the printing press' innovation by applying its technology to their political activism. The idea that such an uproar occurred solely because the printing press was invented seems preposterous because it was the tyrannical and inhuman conditions within which common people were struggling to survive that provided the ethos for that political and resistant rhetoric – not the technology. Those conditions, and therefore the different kinds of ethos found in these texts, differed greatly depending on the author's religion, economic class, education, gender, and political preference. One might then argue that for us to understand the historical significance of the printing press, we must also understand the variety of social and political upheaval that both was effected by and affected it. In other words, to understand the historical use of a technology, we must also understand its users.

Longo attempts to illustrate the historical significance of technical writing by proposing a theory for how technical writing became a systematized and integral part of science, management and technology. She does an excellent job of depicting the role of technical communication from a corporate standpoint. In chapter 5, she discusses how the need

for fewer accidents and defects in early American railroad construction prompted an institution of written specifications and procedures, "By basing the modern inspection system on technical writing, 'well-managed' organizations such as Pennsylvania Railroad and Bethlehem Iron could transcend the boundaries of any individual's knowledge and local geography ... In the complex modern organization, interchangeable workers who were not physically proximate could be controlled through technical writings" (91). Longo points to this early moment of standardization as being necessary for workers to rely on company protocols instead of their own experience. The idea that technical writing was the vehicle for industrial safeguards and standards as well as "control" of workers seems to support Longo's claim that technical writing can occupy an institutional position of power, but I was disappointed that she never critiqued that power, i.e. "control."

While using examples from early American industrial practices is a clever and interesting method for tracing moments when technical writing exerted power over society and culture, the power itself never gets questioned or situated within the cultural events of the time period. Just as the overused example of the Challenger disaster raised questions about the ethical responsibility of technical writers, shouldn't Longo's depiction of standardization also be interrogated? What are the ethical ramifications of using language to homogenize workers into a collective? Was this call for a homogenized, agent-less workforce merely part of a plan to improve railroad safety or might it have been a reflection of then current cultural practices and ideas? As a student of technical writing, I want to know what these workers looked like, where they were from, what kind of education they had, and how they were situated socially in relation to the engineer. As a scholar in technical communication, I want to know why companies assumed it was ethical to "control" workers actions and attitudes through language and I want to know then how marginalized the technical writer must have felt as the warden for company policy.

Just as technical writers today have to imagine diverse and dynamic audiences for their texts, historic researchers need to consider how the writers of historic texts constructed their audiences. It is important to know what kind of rhetoric the railroad used to convince its employees to follow rules instead of listening to their "consciences." Longo suggests such rhetoric was a balance between the moral constraints of the engineer and the capitalist goals of the company, "If

engineers designed only from their consciences, they would build structures that minimized human cost but maximized dollar cost. If they designed only from their employers' pockets, on the other hand, they would build structures that maximized human cost but minimized dollar cost" (90). Longo is using this relationship between engineers and morals to help illustrate her suggestion that engineering as a discipline became allied with science by making connections to "intellectual and moral advancement" (91). She is also pointing out how working for money and working for moral advancement continued to be a polarized theme in determining social capital. Workers worked for money, but scientists and engineers worked for the glory of mankind. She is doing complicated and interesting research for this point to be so clear but she does not contextualize her revelation. I am left wondering what social attitudes were prevalent for individuals to actually believe engineering was a more "moral" profession than technical writing or brick-laying or anything else. In other words, why was this idea still so important to the people of the 1880's?

Going a step further, I think it is crucial to understand what happened when engineering became such a revered vocation. Who could become engineers? People of color? Women? Immigrants? What percentage of people in the country could be an engineer in the 1900's? I am concerned that Longo does not address the demographics of the engineering discipline in explaining why it so easily gained a moral reputation. The fact is virtually all of these morally dedicated engineers were white men from middle to upper-class families. They had to have had money to attend college, had to be accepted in colleges with engineering programs, and had to have some remedial training in mathematics and science. Subjects not considered necessary or appropriate for young women, their possible courses of study limited by societal and institutional constructions of gender. For technical writing to affect power, it had to appeal to dominant values and beliefs, one of which was that white men with means were more moral than other groups within society. If we are to understand how technical writing functioned in fashioning engineering as a discipline, we must understand what constraints and dominant attitudes were functioning within society at the time. The moral argument worked for Thurston as a technical writer in the 1880's because the group of people eligible to belong to the engineering "club" already occupied the most moral positions

within society, not because a technical writer made the argument.

As ethics become more and more prevalent in a technical writing student's education, issues of perpetuating systems of oppression will continue to need to be addressed. Teachers integrating technology into their technical writing classrooms are already facing student populations with differing degrees of technical literacy, monetary resources, social support, and agency within the educational system. It seems to me that in naming any study of technical communication, one must ask at some point how technology, science, and management came to be gendered male and colored white. How did these vocations become strong markers for a middle-class American identity? What facets of society are adapting technology for this to take place and who is automatically excluded? With Longo's focus on standardization and system-centered social schemas, surely she must have asked herself why technical writing helped standardize industry and systematize society and yet not perform the ethical methods expected of

technical writers today. Her method in presenting the history of technical communication lacks the attention to social structures and institutionalized systems of oppression necessary for communicating the historical significance of technical writing as a discipline and as a technology.

That said, *Spurious Coin* does serve an important function in attempting to articulate the history of technical communication in the United States. It addresses the complexity of tensions between disciplines like engineering and technical writing from a historical perspective, providing scholars in the field of technical communication with an understanding of how marginalized disciplines can have an impact on dominant practices. While Longo did not fulfill her promise of performing a better contextualization of historical events than the "social constructionists," she does provide evidence that technical communication has an important disciplinary history that deserves investigation and interrogation.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not make or distributed for profit or commercial advantage, and that all copies bear this notice and the full citation on the the first page. To copy otherwise, to republish, to post on servers, or to redistribute to lists, requires prior specific permission and/or a fee. ©2001 ACM 1527-6805/01/002--0003 \$5.00