First Commentary on "XML and the New Design Regime"

Glenda Burch IBM Durham, NC 27709 gburch@unity.ncsu.edu

Abstract

While taking exception with some of Wilkes's points and with the omission of details in the article, the author fundamentally agrees that Wilkes succeeds in his primary purposes of setting XML within a theoretical framework for changes in written artifacts.

I.7.2 Document Preparation—Languages and systems, Markup languages **Keywords**: XML, designers, data modelers

Guided by the statement of purpose presented in the abstract preceding "XML and the New Design Regime: Disputes Between Designer, Application Developers, Authors, and Readers in Changing Technological Conditions and Perceptions of Social and Professional Need" by Gilbert Vanburen Wilkes IV, I read with the intention of finding the answers to three questions:

- 1. Is the historical character of change in written artifacts specified as a theory?
- 2. Is the theory applied to XML?
- 3. Are the norms of written discourse identified, described and analyzed?

My first impression was that a study designed to answer all of these questions could easily become mammoth; however, the article is relatively short. Wilkes addresses this concern by explaining that his article discusses only one case from a study consisting of three cases. The full study compares modern textual communication systems to more traditional systems and explains the transition from one to the other. This study excerpt addresses a valid and intriguing research topic—the historical changes in textual communication in comparison to changes happening today as we move away from linear text and toward dynamic documentation used by XML practitioners. While the separate ideas set forth in each section of his summary article are clear enough, the abbreviated nature of this excerpt leaves the reader with the task of building transitions from one section to the next, and wanting more detail about the entire work process that Wilkes performed.

The identification of XML text as "incunabula," defined as the first effort at a new way of writing, certainly describes any XML coding. In our world where quantity of data and its management often receive more attention than quality of data, any new way of writing that would help organize information and make it quickly accessible would help support the goals our culture now deems important. In answer to my first question, Wilkes describes historical accounts of other fledgling writing systems and the accompanying incunabulae. A point of interest was that once a writing system is established, subsequent studies of the system often

ignore incunabulae for their oddity. I agree with Wilkes that they should not be ignored, as they often provide valuable insight into social forces alive at the time. As we study the rise of XML and other textual systems built on the databasing of words, perhaps we can better understand our own reasons for and efforts at organizing the knowledge our culture has generated.

Elaborating, Wilkes provides a graphic adapted from Pinch and Bijker which shows the progression of a "new literate practice" to a state of closure, a process which seems chaotic or creative, depending on your point of view. One section of the graphic depicts the reactions experienced by those affected, and most of the reactions are negative, such as a "sense of decline" or a "sense of professional interests under threat." Wilkes addresses the notion of reaction again with a different definition set forth by Smeijers, which focuses on "appropriating" instead of "imitating" current systems. The notion of reaction would shed light on the development of any writing system, providing information about the movement from one system to another, but the discussion in the text and the text appearing in the graphic is abbreviated and discontinuous. An elaboration of the discussion of reaction would enhance the position Wilkes takes, because he makes the statement that he intends to focus on reaction when analyzing his study participants.

The study participants are an important factor in

answering my second and third questions. Wilkes studied the reactions of the participants to obtain an answer to the question "Is the (historical) theory applied to XML?" The third question, addressing the norms of written discourse, is limited to the XML community, or in this case, the study participants. His participants (unknown number) were contributors to a newsgroup discussion about XML, and mostly "gathered and collated" information, as opposed to the novelists in the discussion who created fictional text in linear form.

Wilkes analyzes participants' comments with a statistical program and charts it by disaggregating the data by work processes considered normative by the participants, which successfully establishes what is considered normative by this group. Although the study has an ethnographic bent (hard to repeat, for one thing), no qualitative data was offered, which would have been helpful in determining the reactions, as defined by the previous graphic, of the participants. The raw data is available online, and I assume more discussion about reaction is present in the full-text paper.

This study's value lies in stressing the importance of addressing initial transitional issues sometimes ignored in textual studies, and in tapping a modern source of raw data that is easily accessed. Wilkes answers the three questions set forth in his abstract and provides a good background for the full-text paper.