Book Reviews

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Book Review Editor

Martha Lampland and Susan Leigh Star, editors. *Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life.* Ithaca, N.Y.: Cornell Univ. Pr., 2009. 280 p. ISBN 978-0-80144-717-4.

This book emerged from a semester-long faculty research study seminar at the University of California Humanities Research Institute and from a parallel, co-taught student seminar in the Science Studies Program at the University of California, San Diego. It is a graceful collage of essays, newspaper and magazine clippings, and other odds and ends all dealing with the question: "How have people dealt, in ordinary ways, with these millions of interlocking standards?" (p.4).

We are surrounded by standards, from coffin sizes to food-portion supersizing, from red/green traffic lights to "flesh-colored" Band-aids, from ethnic profiles to emission standards—sometimes they work so well they become invisible, and sometimes they provide stumbling blocks. Many standards fit their purpose well, but many violate our rights and our dignity. They enable the smooth running of our technologies, but they frustrate, cause misery, and wreak havoc as well. In their introductory essay "Reckoning with Standards," the editors consider the use, creation, disuse and abuse of standards and identify analytic commonalities. These are (pp. 4-5):

Standards are nested inside one another;
They are distributed unevenly across the sociocultural landscape; and,
Are relative to communities of practice; that is one person's well-fitting standards may be another's impossible nightmare;
They are increasingly linked to and integrated with one another across many organizations, nations, and technical systems; and,
They codify, embody, or prescribe ethics and values, often with great consequences for individuals.

The book is an orchestrated exploration, discussion, provocative probing and illustration of these observations. Ah, standards—you would think the eyes might glaze over, but this is not a traditional linear exposition, and so you are enveloped in the topic as in a well-told tale. It is a recursive and interlocking arrangement among the contributing authors and the auxiliary texts that are used to illuminate the main themes. Put another way, each episode is an exercise in cumulating consciousness-raising.

In "Beyond the Standard Human" Steven Epstein explores "attempts by what might be called an antistandardization resistance movement to displace the standard human." We welcome standards that make life easier; we learn to get around standards that seem inevitable, but the notion of a "standard human" is distasteful to many of us. Even so, there are many instances in which this construct is invoked, and we barely notice. Epstein narrates the rise of statistics in the 1800s and the ability to measure and map the typical human characteristics—the notion of *L'homme Moyen* (pp. 38-9). He goes on to describe, among other instances, the use of the "new standardized object for biomedical research—the human subject (p.41)," and the implications of doing so for those literally not measuring up to the standard—airbags that hit too low, dosages of medicines that are not suited to all, and so on. He illustrates how descriptive standards can become normative by implication, how what is considered "normal" gets accepted.

In "Age in Standards and Standards for Age: Institutionalizing Chronological Age as Biographical Necessity," Judith Treas provides a historical overview of how chronological age "has supplanted other useful ways of thinking about age" (p. 66). She points out that there is often an imperfect match of our subjective and objective perception of age (p. 68), and that, "It does not really matter whether people know their chronological age unless they bump up against bureaucratic systems that demand chronological age (p. 81)." Even so, this construct has triumphed, and Treas provides many examples of how

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today, chronological age determines the timing and progression of individual lives by invoking age norms and rules that link people to age-graded social institutions.

Martin Lengwiler revisits the notion of a standard for humans in "Double Standards: The History of Standardizing Humans in Modern Life Insurance." He says, "the debate about insuring substandard lives serves as an exemplary revealing case to examine the ambivalent practical effects of modern human standards, between inclusive and exclusive, discriminating and privileging, and disabling and enabling practices (p. 97)." He posits the link between the cultural pessimism at the turn of the 20th Century with the notions of inherited and debilitating conditions that then define the substandard characteristics of a high-risk and, therefore, uninsurable individual. This essay also recounts the fascinating tension between the "art" of the insurance physician who made the decisions about standards based on physical examination, and the "science" of the actuarial theorist, who made these decisions based on statistical evidence.

Taking the perspective of class struggles, in "Classifying Laborers: Instinct, Property, and the Psychology of Productivity in Hungary (1920-1956), Martha Lampland explores the topic of work science and the tension among scientific engineering, standardizing, and social classificatory practices (pp. 123-24). The essay is an examination of the belief that people of different classes, gender and ethnic groups were seen to have specific work habits in their makeup—for example, sloth or diligence and the capacity for work (p. 124). She discusses "the nexus of psychology and social engineering" (p. 127), commenting that the Hungarians were not alone in this approach. In the pursuit of increased productivity such characteristics of "human nature" were considered crucial variables by many practitioners of work science (p. 133).

In "Metadata Standards: Trajectories and Enactment in the Life of an Ontology," Florence Millerand and Geoffrey C. Bowker use the Long-Term Ecological Research Community (LTER) and the Ecological Metadata Standard to conduct an ethnographic study of how a community enacts standards and coordinates different social worlds. They trace how distributed and disparate sites follow different trajectories in not only contributing to the metadata project but also in adjusting their infrastructure to accommodate the goal of sharing and preserving data after the paper or report is written . The challenge is "to analyze change at the scale of a continent and beyond the six-year funding cycle or the thirty-year ca-

reer cycle of the scientist" (p.153). Thus, time and place become important factors in analyzing and, more importantly, evaluating the metadata standards. The authors argue that standards and ontologies should be socially and organizationally bundled and not considered merely as an afterthought to the work that produced them.

In "ASCII Imperialism," Daniel Pargman and Jacob Palme use the development of the English-centric ASCII code to study the standardization of language and its intersection with the technical standards on the Internet (p. 181). We are quick to assume that technological imperatives guide the development of standards, but the authors argue that it is both a social and a technical issue, and while emergent consequences can't always be anticipated, this does not absolve us of making an effort to remedy the situation. Who decides how we communicate on the Internet? Demonstrating the problem is easy— for example, the municipality of Hörby being forced to represent itself as "www.horby.se" (village of fornication) due to ASCII limitations—but analyzing the issue is not. It isn't until something cannot be done that we realize there is a problem, and by then we feel we are restricted by decisions that were made long ago and by the resulting inertia (p.186).

These seven guiding essays are interlaced with several shorter ones, as well as articles and illustrations, and finally a sample syllabus in case you'd like to run a seminar of your own. Here's a sampler: Ellis Island standards for immigration, clothing sizes, healthy-infant growth charts, increasing coffin dimensions, California's Three Strike penal standard, arsenic content in water standards, Polish pork-farm infrastructure and cleanliness standards, train-track standards and the width of two horse's behinds, and from the vault of apocryphal EU standardization stories: the case of the straight (not curved) bananas.

One way to view the overall subtle coloring of this book is to pay attention to the metaphors. For a topic that is seemingly dry, it's interesting to note how standards seem to evoke rather earthy and heartfelt metaphors. The prominent one is mentioned by the editors in the introductory essay. This is the metaphor of imbrications: "an evocative picture of uncemented things producing a larger whole (p. 20)." They speak of standards as nested, and throughout the book there are other structural allusions. For example, in speaking of metadata standards for shared scientific data, Millerand and Bowker point out that "[in] the traditional model of scientific research, data are wrapped into a paper that produces a generaliz-

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able truth—after which the scaffolding can be kicked away and the timeless truth can stand on its own (p.149)." They argue that, instead, the metadata can continue to be that scaffolding. In the chapter on the standard of chronological age, Teas refers to age as part of the steps of life (p.69) thereby forming a structure of the life lived in a particular shape—up and then down.

Looking at it from a more social perspective, Lampland and Star speak of our relationship with standards as a romance (p.4), invoking an image of infatuation followed (one would hope) by commitment, and then (perhaps) disenchantment, or heaven forefend, heartbreak. The sense of standards acting as a communication medium is strong throughout. We invoke the standard when we want to say, "This defines it; this is the last word; this is the way it is." Millerand and Bowker say (p.154) that, at the very least, standards "structure the conversation."

There are also what might be called "biological" metaphors, suggesting that standards participate in life in a peculiar way. We perceive the processes of measurement used in standards as taming "wild" phenomena (p. 21) or transforming raw data (p. 150). We see how the notion of hereditary deterioration helped shaped the concept of a substandard human being (pp. 100-01). Finally, there are the metaphors of space: compression marginalization, being within or outside of boundaries, centrality, that imply standards define more than just the physical and technical world, but in fact, have consequences for the everyday lives and activities of the humans interacting with them.

Several themes run through all the essays, articles, and illustrations; the editors have done an admirable job of presenting a conceptual description of these themes by using the analytical commonalities outlined in the first essay. In their discussion they fill in that outline with other aspects of standards: their invisibility and the implication of the fact that standards often deal with "boring things"; the intersection of standards with "messy reality;" the question of who matters in the standard process; the role of infrastructure in conceptualizing standards; and the intellectual home of standards in Science Studies.

To these I'd like to add a few more threads taken from the perspective of standards as classificatory structures. This perspective is woven tightly into many of the essays. For example, Pargman and Palme explicitly cite Geoffrey Bowker's and Susan Leigh Star's (1999) observation that "Classification schemes and standards literally saturate our environ-

ment" (Bowker and Star 1999, 37). My contribution aims to add some additional thoughts.

Several of the authors point out that standards, like classifications, are born within a particular point of view, for a particular purpose and with observable outcomes. Furthermore, classifications, like standards, help define, communicate and negotiate contested spaces. Modern notions of classification take into account multiple perspectives, tangled structures, and prototypicality (Kwaśnik 2000). Thus, it seems natural to talk of standards and classifications as closely linked, and there are ways of talking about classification that might usefully be extended to standards. I'll touch on a few examples.

The first of these is warrant. Clare Beghtol, writing in 1986 said "the warrant of a classification system can be thought of as the authority a classificationist invokes first to justify and subsequently to verify decisions about what class/concepts should appear in the schedules …. Warrant covers conscious or unconscious assumptions and decisions about what kinds and what units of analysis are appropriate to embody …. The semantic warrant of a system thus provides the principal authorization for supposing that some class or concept or notational device will be helpful and meaningful to classifiers and ultimately to the users of documents (p. 110-11). Warrant can derive from the scope of the collection itself, from historical and scientific consensus, from educational and mission-specific goals, and from cultural influences. In many of the discussions of standards throughout the book the term "who matters?" is invoked to discuss not only what a standard defines as "the standard" but also why that choice was made. When warrant is made explicit it can illuminate such issues.

Another notion from classification is that of expressiveness. A classification is sufficiently expressive when it has the requisite number and specificity of classes to smoothly and gracefully accommodate the phenomena within its scope. Thus a selection of two or three very general musical genres for my eclectic collection will certainly not be expressive enough. Epstein discusses how women were not considered good human subjects for medical studies because they were "too complicated" (p. 44), with hormonal cycles and other such confounding attributes. The standard was simply not expressive enough to accommodate such complexity. Indeed, many standards are created specifically to avoid complexity or to reduce it. As Dunn points out in her discussion of standards and infrastructure (p. 118), standards

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tend to "gloss over" the realities on the ground. The small, poor farmer operates in conditions that do not even fall under the basic categories of the standard. Those left on the margins are excluded from the standard not only because they don't matter, but also because it may seem to be too difficult to make the standard expressive enough.

A good classification can function as a theory (Kwaśnik 1992). That is, we can use it to describe, explain and predict (e.g., the Periodic Table of Elements). Even a flawed classification, though, has some theory or world view or set of assumptions behind it – and so it is for standards as well. It was interesting to note how many of the standards had behind them some formal set of assumptions, from the theory of deterioration (in insurance, p. 100), to human nature (in social engineering in Hungary, p. 123), to actuarial theory and reasoning with statistics. Functioning theoretically, a classification can serve as a lens into the domain it represents. Similarly, Millerand and Bowker state that metadata standards, for instance, are not neutral but can "condition access to data" (p. 154) and therefore function as a form of knowledge in themselves.

There are many other aspects of classification that seem pertinent to standards such as: flexibility, hospitality, parsimony and elegance. I think there is a connection between standards and classification because both can serve to represent, define, connect, smooth distinctions, make distinctions, and reduce to essentials. It might be fruitful, having read this book, to now examine classifications using the analytic commonalities outlined by the editors in the first essay.

Most of the time I personally appreciate standards, and am especially aware of them when they are missing. Being a cataloger (um, knowledge organizer) I do, after all, think fondly of the simultaneous ingenuity and nonsense of my *AACR2*. I wished, sometimes, while reading this book, to learn about some of the thorny problems that have been solved by standards—the beauty of the Pantone color chart and the clever color-numbering system on my L'Oreal hair rinse, the amusing but helpful alcohol-level indications on Finnish beer … the list goes on. The book takes a mostly critical approach, but it is for a good purpose. I am now sensitized to the subtleties and intended and unintended consequences of not only the standards themselves, but also the standard-development process. Thus, another question that might well summarize this book, besides the one the authors posed of how people deal with standards,

is what do the standards say about us? The contributing authors of this volume have illuminated a great deal but have also planted the seeds of many interesting investigations and discussions to come.

References

Beghtol, Clare. 1986. Semantic validity: concepts of warrant in bibliographic classification systems. *Library resources & technical services* 30: 109-25.

Bowker, Geoffrey C., and Star, Susan Leigh. 1999. *Sorting things out: classification and its consequences.* Cambridge, Mass.: MIT Press.

Kwaśnik, Barbara H. 2000. The role of classification in knowledge representation and discovery. *Library trends* 48(1): 22-47.

Kwaśnik, Barbara H. 1994. The role of classification structures in reflecting and building theory. In Fidel, Raya, Kwaśnik, Barbara H. and Smith, Philip eds. *Advances in classification research 3: Proceedings of the 3rd ASIS SIG/CR Classification Research Workshop, October 25, 1992, Pittsburgh, PA*. Medford, NJ: Learned Information.

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1.0 Edition-work: digital critical editions and the digital humanities

The first volume of the Series "Digital Research in the Arts and Humanities," *Text Editing, Print, and the Digital World* is a summative and reflective anthology concerning the inception and growth of several text-based digital collections projects. The essays express diverse viewpoints- contributions come from librarians, curators, textual scholars, historians and administrators from both public and educational institutions. The volume's focus is on the scholarly act of editing and the creation of editions as scholarship. It thoughtfully introduces the rigor and values of the