Afterword: Does the Focus on Embodied Information Broaden or Narrow Library and Information Science?

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I want to thank Jenna Hartel for inviting me to write the afterword to this set of papers. She is largely responsible— fifteen years ago when I was a visiting professor at UCLA—for introducing me to the rich autonomous literature in library and information science (LIS) that relates to my own project of "social epistemology" (Fuller 1988). That phrase turns out to have been an LIS coinage, though I had not known that when I began my project. However, since that time, I have taken a special interest in this field—and the field in me (e.g., Zandonade 2004; Fuller 2010).

As someone whose conception of social epistemology is derived mainly from philosophy and sociology, the striking feature of the LIS contribution has always been its preoccupation with the means by which ideas, information, and/or knowledge are materially realized. (In what follows, I will simply use the word *information* to capture anything in the noösphere.) Both philosophers and sociologists tend to be blind to this feature for complementary reasons: philosophers tend to ignore materialization altogether, and sociologists tend to ignore that which is not already materialized. In contrast, because librarians and other information professionals are typically close to the processing of media—that is, print, audio, and video records—they are well placed to deal with the "in between" aspects of the ideal/material character of information. In short, they mediate the media.

This concern is reasonably seen as being about the *embodiment* of information, and historically it has been associated with a universalist ethos that aimed to make information available to the widest number of users. Indeed, it was this sensibility that linked the mundane tasks of the public librarian with the world-historic ambitions of a Paul Otlet. "Embodiment" in this sense was about identifying original sources, certifying authorized

copies, including translations, and, most importantly, embedding all that information (what is now called "metadata") in a classification system that enabled efficient access, whatever the user's entry point (Wright 2014). In this vision, we see LIS's signature concerns with acquisition, storage, and retrieval bound up in one program of research and practice. This original sensibility is most clearly represented by Marcia Bates in the assembled pieces here, though her frame of reference—informed by cybernetics and evolutionary theory—updates it for our own times.

But most of the rest of the pieces are really focused only on embodiment at the information acquisition stage. To be sure, this looks "broad" if the opposing view is that information can only be acquired from official documents, which is certainly one way in which Otlet's project has been stereotyped. However, as a matter of fact, Otlet wasn't simply fixated on official documents. He wanted LIS professionals to be honest brokers in the documentation process itself, which should incorporate consideration of the information storage and retrieval phases. This is intellectually interesting work. It is also challenging because, practically speaking, the LIS professional must aim for documents that are at once faithful to the original source and responsible to the potential user.

From that standpoint, a focus on embodied information simply at the point of its initial acquisition is "narrow" because it does no more than half the LIS job. To be sure, it is nice to learn that information about people's meaningful activities can be acquired by attending to the various sensory modalities that are not normally subject to official documentation. But as more seasoned LIS practitioners such as Bates know, this insight is not unique to the recent turn to embodiment. A half-century ago, it was common to attend to nonverbal behavioral streams in experimental and applied psychology. To be sure, there were more data points and fewer ontological speculations back then, but the phenomenology was largely the same. In any case, the LIS professional should be concerned with how such information needs to be encoded and stored so that others who are not privy to the original modalities of its acquisition may be able to access it.

In this respect, I must concur with Jenna Hartel's editorial, which politely suggests that LIS's newfound focus on embodiment may be partly misdirected with regard to the field's deeper professional interests. One way to think about this misdirection is that many of the pieces in this special issue are written in a way that preserve the esoteric character of the original information acquisition phase by stressing its contextual distinctiveness and even uniqueness. This may be due to the authors' sense of fidelity to their sources and/or their need to mark out intellectual turf that they can call their own. However, the net result makes it difficult to see how such information could be made accessible to users who have not

had or are unlikely to have similar information acquisition experiences. Of course, our authors may say that they behave differently when writing for academic colleagues and engaging in practical information transfer settings. However, the larger politics of this recent turn to embodiment also needs to be considered.

As someone with a long institutional memory, I recall the rise of "body talk" in Anglophone sociology and cultural studies in the late 1980s as a kind of reaction to the "logocentric" focus of both the structuralist and poststructuralist theorizing of French academic luminaries of the "sixty-eighter" generation. Even such great archaeologists and deconstructionists of knowledge as Foucault, Derrida, and Lacan were largely concerned with rereading the "archive," understood in a fairly conventional sense of documentation, namely, written records. To be sure, it was possible to register nondocumented events and experiences—but only as the "unsaid," which still privileged "language" as the primary mode of information conveyance, notwithstanding people's differential access to this privileged sense of "language."

The turn to embodiment by the following generation was thus meant to do two things at once: It was designed to open up the modalities in which information acquisition officially happens—beyond the production of written records. However, as I have already suggested, behaviorists have long advocated this, without having to take a detour into recent French philosophy. The second thing—the truly distinctive feature of the turn to embodiment—is the sense of exclusive ownership that is asserted over these nonverbal behavioral streams, which in turn has become the source of today's identity politics.

However, it is not at all clear that LIS can support identity politics in this strong sense—at least if it is to remain faithful to Otlet's universalist ambitions. Put pointedly, Otlet regarded the fact that information is always embodied as the fundamental *problem* that LIS needs to solve, since even in the case of official written records, relatively few people can ever gain access to them, let alone be able to contextualize them in a way that yields some use value. It is here that LIS was meant to perform a mediating role, effectively rendering documentation a vehicle of democratization. Nevertheless, in the current climate of identity politics, this same function can be seen as having a decidedly undemocratic effect. In this context, the term *expropriation* is invoked, since by increasing access to a previously esoteric form of knowledge, the LIS professional—at least in the Otlet mold—potentially divests the original source of its power over how that knowledge is used. While that might serve to reduce the power of the powerful, it may also seem to rob the powerless of their only hope for power (cf. Fuller 2016a). I don't share this verdict, but it helps to explain the visceral hostility to Otlet's project by many current LIS scholars, not

least Ron Day in this collection (*Library Trends* 66, no. 3). I shall have more to say about his intriguing piece shortly.

To epitomize my point in today's cyber-parlance: Those LIS practitioners who continue to adhere to Otlet's terms of engagement are open to the idea of information "virtualization," whereas those whose interest in embodied information involves a commitment to identity politics regard that prospect as anathema.

Now, let me turn to Ron Day's contribution, which I read as raising very profound issues regarding the embodiment of information, albeit operating in a mode that seems to be antagonistic to Otlet's project. At the outset, I should say that as someone trained in philosophy, I find philosophical labels distracting from whatever a nonphilosophical author is trying to say. And Day is by no means alone in LIS in disparaging Otlet as both an empiricist and an essentialist—two terms that normally mean opposite things in philosophy. But none of those philosophical swear words really matter to Day's interesting argument. His pretext is an observed contrast between Otlet and Georges Bataille with regard to photography as a form of documentation. Bataille is normally seen as a theorist of primitivism, violence, and pornography—three terms that I regard nonprejudicially. Bataille remains radical even today. But unlike Otlet, who was a lawyer, Bataille was actually a librarian, which establishes a *prima facie* relevance to LIS. (By the way, Leibniz and Hume—two early modern philosophers who earned a living as librarians—might be seen in a similar fashion by LIS, even though Leibniz rationalized the proliferation of reading material, while Hume decried it.) So what's at stake in the contrast?

Otlet believed that information is to documentation as the mind is to the brain: on both sides of the analogy, the former term is instantiated by the latter. Thus, the information stored as publicly available documents are like the "clear and distinct" thoughts registered in some normative version of the neural firings in one's own brain. To be sure, to philosophical eyes, Otlet's vision seems to reinvent Platonism or Cartesianism. He suggests that by possessing a brain, we can—at least in principle—access all of mental life. According to Day, Bataille addressed the same issue orthogonally by asking what made the brain such a privileged vehicle in the first place. Here the big toe takes center stage. On Bataille's understanding of biological evolution, the big toe is what has enabled us—in contrast to the other apes—to stand upright for a significantly long period to support a brain as large as ours. This has consequences for understanding photography as a vehicle for documentation. After all, photography has functioned as a surrogate brain that allows for much better mechanisms of storage and retrieval than the brain's own "mind's eye" and memory ever could. Otlet and Bataille would probably agree on this. However, Day—speaking through Bataille—wants us to focus on the *contingency* of the big toe as the

condition for the brain to have developed such that photography has now managed to acquire the documentary power that Otlet asserted.

"Contingency" implies that things could have been otherwise—and would have been otherwise under different conditions. This is how we should understand Bataille as a philosopher of *excess*. When Bataille fixates on the big toe, he is referring symbolically to the various alternative documentary functions of photography that could have developed, had this appendage not evolved as it did over so many hundreds of thousands years. Had we gone down any of these alternative evolutionary pathways, we would now have possessed somewhat differently equipped and positioned brains to the ones we have now—which may have resulted in alternative normative standards of documentation. "Excess" in this sense means unrealized possible worlds or an unexploited potential. A sensitivity to this state of excess requires a critical attentiveness to the mode in which information is normatively embodied. Moreover, Otlet and Bataille could at least in principle agree on this point, which is about, following the transhumanist literature, information's "morphological freedom" (Fuller 2016b). But this literature ultimately involves exploring modes of information embodiment in a way that puts Otlet and Bataille on the same side—as against the more proprietary approach to information favored by today's identity politics advocates.

To conclude, the pieces assembled in these two special issues of *Library Trends* bring out very clearly information's multiple modes of embodiment and the variety of methods that are needed to acquire proper access to them. Taken together, they demonstrate the breadth of scholarly activity currently at play in LIS, a credit to all the authors. The question now facing the writers—and readers—of these papers is how to ensure that they contribute to the core mission and values of the LIS field.

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