peril; by refusing to change our methods or our approaches in the face of collaborative tagging systems, we run a serious risk of allowing information architects to become anachronisms in emerging information environments. The implications underlying *FlickR* and *del.icio.us*—that vocabulary control, disambiguation and consistency are not always necessary for good information experiences—could lie dormant for a period of time, and then produce changes that completely overwhelm the slower structures of an information architecture.

Those parts of a system that have large and slow rhythms of change contribute to the preservation of memory within the system. The small and fast layers, however—those presumably represented by tagging and folksonomies—frequently affect the larger and slower layers through revolt: destructive energy which destabilizes the entire structure. This fits with paradigms of complexity theory, in which complex systems, if unable to evolve in response to external stimuli, merely freeze in place or disintegrate (Waldrop 1992). If the fast layers affect the slower layers in a destructive way, they produce either chaos, or an unproductive stability in which change consists primarily of "the destructive act of creation": destroying what exists and then reinventing the wheel (Morville 2001).

Information architects can respond to these challenges in two primary ways. On the one hand, IAs can voluntarily choose to align themselves with the leisurely forces of stability and memory, continuing the commitment of the profession to reinventing and reviving tools of librarianship and information organization in web environments. This approach has precedents: library schools continue to teach traditional cataloguing, and cataloguing continues to be relevant in many traditional libraries. However, Web search engines had an iconoclastic effect on earlier information retrieval systems such as catalogues, because, in their design and structure, they violated some of the most basic assumptions about metadata and trust (Lynch 2001). While these violations forced us to form more sophisticated and realistic notions of structure and metadata, they have pushed more traditional tools such as library catalogues from the center to the periphery of information services. "Mob indexing" could conceivably have the same effect on traditional information architecture.

On the other hand, information architects could elect a second option: repositioning themselves as guardians, not of a system's architectural stability, but of its ecological resilience. Such a role would involve negotiating and monitoring the many complex and unpredictable ways in which fast layers such as tagging interact with slower layers such as controlled vocabulary maintenance. Such a role relies less on the metaphor of architecture, and more on the metaphor of urban planning. The information architect, therefore, will need to design a system which interacts with tagging systems in a way that channels such energy into evolutionary patterns, rather than allowing that energy to overwhelm the architectural structures at the lower, slower layers. In this sense, the tagging phenomenon represents the greatest challenge we have yet faced in our field's working relationship with complex systems. Instead of replacing "mess" with controlled vocabularies and sound hierarchies, we must now accept the mess of folksonomies into a permanent relationship with our ordered structures. We need theoretical and practical insights from other complex systems to ensure that this relationship remains productive, rather than destructive.