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Medium cool
Genres, attitudes, and affect

Abstract
This paper uses “cool” as a metaphor to examine the role that affect and social context play in the design and use of knowledge organization (KO) systems. I provide a theoretical basis for beginning this inquiry, then consider the headway made by KO scholars in expanding the paradigm of KO study in order to engage user experience. I then consider how KO may produce affect, and how this aspect may be engaged for further design and study. In conclusion, I look at the value “cool” may have as a commodity in the larger political economy of information.

1: Background and ideas
This paper contemplates the concept of “cool” with regard to the study of knowledge organization (KO). In his 2004 work *The laws of cool*, literary scholar Alan Liu argues for a more complex understanding of the processes of knowledge work as they relate to humanistic concerns: “What is the mediating role of information technology as both the servant of the knowledge economy and the medium of the new humanism and aesthetics of tecnologica “cool”?” Examining the intersections of new media genres, social attitudes, and affect can inform the design of knowledge organization systems (KOS). In particular, I am interested in examining what may make a KOS compelling and persuasive, and pose the question of what “cool” would look like in a KOS.

I take into consideration several ideas about design, but use cybernetics as a particular touchpoint for engineering representative systems (Hayles 1998). In evaluating design, I look towards studies of culture (Bordieu 1979). In opposition to design, I adopt Deleuze’s model of affect as a prompt to impulse or response (1983).

1.1: Information as pattern
In order to understand the role that affect may play in the design of KOS, it is first important to consider the intellectual genealogy of system design, and to engage critiques of the underlying notions prevalent. In the case of KOS, examining the cybernetic foundations of system design is of use for determining a theoretical context. Cybernetics’ influence can be seen throughout information studies, in design studies and in the multiple strains of human-computer interaction study. The genesis of contemporary cybernetics is attributed to the demand for responsive machinery. Norbert Wiener’s work is seen as canonical in examining the cybernetic agenda, and has been critiqued by Donna Haraway (posing an “informatics of domination”).

However, Katherine Hayles (1998) argues that Claude Shannon’s information theory is central to understanding the significance of cybernetic thought. In it, he defined information as “a probability function with no dimensions, no materiality, and no necessary connection with meaning”. He reduces information to “pattern”, thus prompting a necessity of design as context. This thinking informed the development of the idea of media as transmission interpretation, and thus, Hayles argues, prompted some of our core ideas as to the significance of document forms.

This early vision of the “man-in-the-middle” gave way in the 1970s to one of “self-organization” as the cybernetic ideal. Hayes couches this transition by evoking the
notion of performativity: “in performative utterances saying is doing because the action performed is symbolic in nature and does not require physical action in the world, at the basic level of computation doing is saying because physical actions also have a symbolic dimension that corresponds directly with computation”.

Thus, default groupings, and the schemes that designate them, acquire a rich significance that is manifest in everyday actions.

1.2: Social distinctions
Taking from the investigation in cybernetics, another set of concepts is needed in order to consider the significance of everyday dealings with large scale representations of data, and how these patterns integrate into everyday life. The parameters of what we prefer, what we are positioned to like, and what we are drawn to can be described by theories of taste. Bordieu’s distinction asserts that the discourse of aesthetics, as well as that of general organization, is one controlled by factors of social class. These ubiquitous distinctions of “taste” are, in most regards, articulations of a particular sort of social knowledge structure. He then builds on this concept in his work on “habitus” (1977; 1992): schemes of perception, thought and action.

Social distinctions are of utmost importance when critiquing a KOS. Questions such as who uses a system and in what capacity are ones that evoke social and intellectual distinctions. Moreover, the degree to which we consider effectiveness ultimately reflects a professional habitus.

1.3: Affect
The two preceding factors present some underlying concerns in approaching affect. I posit that KOSs do achieve affective dimensions, and that these are among the considered aspects of their use and design. To consider affect is to consider not just the components and standard workings of KOSs, but the impressions they leave and the impulses they prompt.

To do so is to consider KOSs as a constructed space. Using Deleuze’s concept of the “any-space-whatever”, we can see a KOS as a coherent space that is comprised (and achieves definition) of multiple and shifting viewpoints. Deleuze furthers this concept as space as a “locus of the possible”.

2: Approaching experience in knowledge organization
In her study of classification as argument, Melanie Feinberg (2008) uses an account of visiting the Prelinger Library in San Francisco as a means of demonstrating the effectiveness of selection and arrangement on the user: “These items have not merely been warehoused, as they might be in a used bookstore or library fire sale; they have been consciously gathered and painstakingly arranged for a very particular experience of access”.

Classification researchers have, in various capacities, mapped particular aspects of experience. They have examined personal meaning in organization (Kwaśnik 1991), and the interplay of disciplinary and individual knowledge practices (Beghtol 2003). These studies have been redrawn by personal information management (Jones 2007). Raya Fidel (2007), whose work has examined the user experience with knowledges, poses a holistic, or “ecological” approach, using the cognitive work analysis framework.
Engaging experience is a logical next step in the pursuit of “theoretical foundation that starts with activities of the people for which the classification is designed and constructed” (Mai 2004). Anderson (2008), advocates “reconfiguring” KO, “so as to not exclude social practices and human activities that do organize knowledge”, thus incorporating questions such as “how texts, genres and media organize knowledge”.

3: Images of organization: how KO produces affect
Deleuze’s construction of affect draws parallels between “the face on screen” and the faces of the audience. We can think of affect in KOS as that of considering the face of the user, and perhaps, the face of the cataloger. But perhaps a more broad consideration of affect may be in the way that we may consider the experience of using a system to be compelling, intuitive, or possibly cool. Marcia Bates (2007) has long asserted that system design should ultimately strive to be “fun”, that is, simulate the naturalistic pursuits of interestingness and user satisfaction.

Paired with a critique of KOS, affect study can explore components of a compelling user experience, including what can make for a meaningful and desirable experience. To do so, I say we acknowledge the value of “cool”, and then proceed to unpack it. As Liu and others have pointed out, the pursuit of social and cultural capital has become a powerful force in the development and dissemination of information technologies. The rise of “social” media has blurred the boundary between work and leisure time use of technologies. In their use, we are able to view patterns and displays of particular sorts of habitus.

This is of particular concern in view of the recent dialogue on online catalogs. With the integration of tools such as tagging and user profiling into catalog interfaces, library catalogers are left to witness either a transition to an engaged user base, or a far more disappointing lack of real adoption and user disenchantment. The perceptions and experience of users in this case is one of essential consideration. Moreover, a systematic understanding of these factors can lead us to gain a more nuanced understanding of “cool” in values.

In her influential essay, *Visual pleasure and narrative cinema*, Laura Mulvey (1975) theorizes that visual engagement is a gendered process, as images cross-reference particular points of gender identity. To take this understanding a step further, Judith Halberstam (2005) argues that affection images “depend on a sexual and gendered economy of looking, watching, and identifying”. Building on this, we may see that the images produced by KOSs, much like cinematic images, are productions in which a range of deliberate factors converge. They, like images, rely on wider indexical value systems: we can draw on not simply their instante of affect, but the context in which they occur.

Studies in surveillance and privacy (Elmer 2004) have highlighted concerns that present themselves in the face of government and commercial profiling. This leads to an important question of how the experience of systems has accommodated the expectation of customization and response. According to Elmer, the shift to persona as a focus of systems, rather than content, is a direct attempt to engage users on an affective level. The affective dimension of de rigueur personalization and profiling gives us a rich ground to examine what personalization does and how it shapes the user process.
Library and information science has provided several innovative models of “information-seeking behavior” (see Krikelas 1983) and the “life-world” of information (Chatman 1996), but each separates the identity of the user, or seeker, from that of the experience with, or their networked use of “information”. In turn, KO study has yet to engage such models in a way that addresses design concepts.

4: Menu-driven identities: typologies of experience
Genre is a natural touchpoint for KO research: as genres emerge, we are able to observe their standards and forms (see Fairclough 2007). We are able to confer this experience in relation to other genres, and assimilate significance and value based on the knowledge we have of this context. This process is one of the organization of knowledge, and one drawing on both affect and action. Moreover, by looking at new types of experiences in relation to documents, we are able to draw on their larger ecologies.

In the face of continually shifting platforms for accessing and organizing information, to fully consider what may be “fun” or “cool” about the experience of using an information system may simply be part of considering what makes it usable. If we are able to do so longitudinally, we may be able to conceive of KOSs as artifacts with a measurable lifecycle.

Moreover, if we can study the patterns of users in adopting, maintaining use of, and ultimately discarding an information system tool – take for example, variables in adoption of social networking systems such as MySpace, Facebook and Friendster (Boyd 2007) – we can conceivably separate the compelling qualities of content itself from what it takes for an intersection of users, content, and structure to be successful, enjoyable, and widespread. We can separate the “menu-driven identities” (Nakamura 2005) from the unique experiences of users.

To separate a cyclical usage pattern from actual engagement, we must rely on more subtle critical distinctions, and re-script our understanding of networked data. As geographer and social theorist Nigel Thrift poses:

“The sheer amount of locationally referenced information about everyday life that is available or is coming on stream, and which, by using wireless, GIS, GPS and other technologies will be constantly updated, suggests that most of the spaces of everyday life will no longer be hidden at all. Indeed, they are likely to be continually catalogued on a realtime basis using categorizations and geometries that are themselves constitutive of subjectivity. But I would argue that much of what actually characterizes everyday life – the creative moments arising out of artful improvisation on the spur of the moment – will still continue to be opaque to systematic surveillance: there will still be ‘strangeness in the commonplace’. It is these performative moments of narrative dissonance that we should be concentrating on.”

I propose that we raise questions such as these in charting a future for KO, engaging both analytical acumen and experiential tactics.

5: Information production
In conclusion, I assert that one possible direction for this study is towards that of a more nuanced understanding of KO’s political economy. Scholars such as Greg Downey have begun an excavation of labor history for information technology, but poses that labor theorists fall short in examining the “soft” work of information. Negri & Hardt (2000)
propose a model of “immaterial labor” as a way to examine information labor in late capitalism:

“The service sectors of the economy present a richer model of productive communication. Most services indeed are based on the continual exchange of information and knowledges. Since the production of services results in no material and durable good, we define the labour involved in this production as immaterial labour – that is, labour that produces an immaterial good, such as a service, a cultural product, knowledge, or communication. One face of immaterial labour can be recognised in analogy to the functioning of a computer. The increasingly extensive use of computers has tended progressively to redefine labouring practices and relations, along with, indeed, all social practices and relations.”

The components of labor in KOS are nebulous and undefined, both in terms of the labor of design and the labor of use. Immaterial labor is defined as well by its division between personal and public value systems.

Negri & Hardt propose that “the labour of computerised tailoring and the labour of computerised weaving may involve exactly the same concrete practices – that is, manipulation of symbols and information”. Negri & Hardt theorize the “personification of information”, which dovetails neatly with the cybernetic ideal of self-organization.

The parameters of “coolness” are, as an example of a standard, hopelessly vague. More importantly, they are inherently contextual, and dependent on factors far more ephemeral than those described. But the pursuit of “cool” products and systems is one powerful factor in a complex economy of knowledge. By examining these pursuits, we may extract a fuller and more telling idea as to the value of KO.

References
Fairclough N., 2007, Critical discourse analysis: the critical study of language, Longman, Harlow [u.a.].
Fidel R., Mark Pejtersen A., 2004, From information behaviour research to the design of information systems: the cognitive work analysis framework, Information research, 10, n. 1.
Hayles N.K., How we became posthuman: virtual bodies in cybernetics, literature, and informatics.


*Web documents have been accessed 31 August 2009.*