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Knowledge Organization as a Cultural Form
From Knowledge Organization to Knowledge Design

Abstract
By drawing on Lev Manovich’s argument about the database as a cultural form, I argue in this paper that knowledge organization consequently may be considered a cultural form. I use Manovich’s argument to locate an understanding of knowledge organization activity in light of new media. Knowledge organization is not an appendage but rather a prime communication and production form of new media, turning knowledge organization into knowledge design. This implies moreover that knowledge organization is not only an activity ensuring storage and retrieval but is also media design as well. The theoretical consequence of this is to engage in ‘info-aesthetics’.

Introduction
In his book The Language of New Media (Manovich, 2000), Lev Manovich argues that the database is the new cultural (or symbolic) form in our culture. Before that, Manovich claims, the narrative was the dominating cultural form. The database makes it possible to (re)present and (re)configure culture in ways not possible before the computer. It means that our way of approaching and using knowledge and information is changed (once again) due to a particular medium. In a previous article (Andersen, 2002), it was argued how various forms of media (orality, writing, printing and the computer) influence on our concept of knowledge organization in library and information studies (LIS). This argument was two-fold: 1) Knowledge organization lacks an awareness of media and how they historically shape the way societies and cultures store and organize knowledge, and 2) Media not only shape how knowledge is stored and organized, media also organize knowledge themselves and that this aspect is to a large extent ignored in knowledge organization research.

In this article, I want to further develop the argument presented in Andersen (2002) by taking a specific point of departure in Manovich’s argument about the database as a new cultural form. I want to examine what such an understanding of digital media brings to knowledge organization research. I believe that we still do not pay enough scholarly attention to digital media in knowledge organization research and it is this I want to address here through Manovich’s argument. It is more imperative than ever to pay attention to digital media as the practices of storing and using knowledge and information are not separated with digital media. Moreover, digital media abound and produce what we in the knowledge organization research community consider as knowledge organization activities.

Manovich’s discussion is a challenge to and informing for knowledge organization research exactly because it takes a view on a specific practice (the database and its collection(s)) that bear a resemblance to what is studied in knowledge organization research and elevates this to cultural and aesthetic level.

The structure of the article is as following. Having made a suggestion as to reconfigure knowledge organization, I move on to outlining Manovich’s argument about the database as a cultural form. From here I discuss the implications for knowledge organization research.
Reconfiguring knowledge organization
I suggest we broaden our understanding of knowledge organization so as not to exclude social practices and human activities that do organize knowledge but in a different form and on a different level than indexing, cataloguing and classification (cf. Andersen & Skouvig, 2006). This will bring knowledge organization theory in much closer contact with sociological and cultural understandings which is needed if knowledge organization research intends to have a social and cultural relevance. Therefore, I suggest we understand knowledge organization research to be concerned with knowledge organizing activities as they are practiced and mediated by societies, humans, information and communication technologies, texts, media and genres and the relationship between these. Thus, knowledge organization research has (at least) two levels: 1) The study of problems related to the organization and representation of texts in various forms of information systems, and 2) The study of social and cultural practices and discursive activities understood as knowledge organizing categories. This opens up for including the study of, for instance, how texts, genres and media organize knowledge, a perspective not that much present in knowledge organization research.

The database as a cultural form
The notion of the database as the new cultural form could lead one to conclude that knowledge organization is a new cultural form and to some extent it may be. The general public is more than ever in touch with and uses more than ever forms of knowledge organization such as search engines, folksonomies, or wikipedias. The content of these systems is to a very large extent produced by the general public and, consequently, these forms of knowledge organization are not restricted to particular professional domains.

But when stating that the database is the cultural form of our time, how does Manovich arrive at this statement? To claim that a particular instance of computer technology (the database) represents a new cultural form may sound not only deterministic but may also be to ascribe a cultural significance to the database more than it actually has or is capable of having.

Manovich’s argument is sophisticated drawing on both the database as ‘just’ a piece of technology and on what he considers as ‘old’ cultural forms: the cinema (and the novel):

After the novel, and subsequently cinema privileged narrative as the key form of cultural expression of the modern age, the computer age introduces its correlate — database. Many new media objects do not tell stories; they don’t have beginning or end; in fact, they don’t have any development, thematically, formally or otherwise which would organize their elements into a sequence. Instead, they are collections of individual items, where every item has the same significance as any other. (Manovich, 2000, p. 218; my italics)

Such is Manovich’s start out. Of course, representing a list of items is not a new activity in human culture. Jack Goody, for instance, makes the argument that the list is a technology that is not simply a reproduction of oral discourse because the list as a formal and abstract device does not represent speech directly (Goody, 1977, p. 80). But the computerization of society and the ontology of the computer invite the database form (or the list form) and introduce it as an everyday form.

In continuation of this, Manovich (2000, p. 217) claims that “Information access has become a key activity of the computer age; it is a new category of culture. From the user’s point of view, new media appear objects as databases because users can perform various actions with them like viewing, navigating, and searching:
The user’s experience of such computerized collections is, therefore, quite distinct from reading a narrative or watching a film or navigating an architectural site. Similarly, literary or cinematic narrative, an architectural plan and database each present a different model of what a world is like. It is this sense of database as a cultural form of its own which I want to address here. (Manovich, 2000, p. 219)

Almost echoing the famous McLuhan-statement ‘the medium is message’ (McLuhan, 1964), Manovich tries to show how the database has evolved into a cultural form. That is to say, how culture has moved into the database and then turning the database into more than just a piece of computer technology. About this Manovich (2000, p. 225) says that what makes the database a cultural form is its way of representing the world as a list of items and not as a narrative. Thus, what makes the database a cultural form is what on the surface seem to be the ‘innocent’ characteristic of the database. This claim about the database is of course not to say that the database as a physical and technical object is a cultural form but rather what the database is capable of doing (i.e. representing a list of items), or what users are capable of doing with a database, is what constitutes a cultural form. With this, Manovich claims that representing the world as a list of items has become a dominant form of culture in the digital age.

Thus, Manovich brings us an understanding of the database as more than a technological phenomenon but as an articulation and materialization of human culture. This insight is what I want to relocate in knowledge organization research as it provides ground for an understanding of knowledge organization as a specific cultural practice; a specific way of handling the products of human culture and human activity. In short, what I am trying to argue in the following is that, paraphrasing McLuhan, ‘knowledge organization is the message’, meaning that the activity of organizing knowledge is not just a ‘technical operation’ performed on e.g. documents or knowledge, but that this activity is an everyday cultural practice and a mode of production in our culture.

Knowledge organization as cultural form: From knowledge organization to knowledge design

Human societies have throughout history created diverse forms of communication and forms of culture and knowledge organization activities can be considered a response to such forms. Given that the database is a form of knowledge organization implies that knowledge organization is part of a new cultural form, a new common cultural practice. We can observe many kinds of such new cultural forms.

A website does in most cases contain a collection of links to either internal pages or external pages: “There is hardly a Web site that does not feature at least a dozen links to other sites; therefore, every site is a type of database”, making indexing a new hobby (Manovich, 2000, p. 225). Search engines practice and remediate to some extent the old function of enumerative bibliography in digital culture. Digital libraries and archives organize collections of texts and hence act like metatexts themselves (Dalgaard, 2001). Folksonomies and the practice of tagging are expressions of cultural forms of communication and sharing of knowledge. Weblogs contain archives of previous postings and in some cases search fields. Digital scholarly journals perform archival activities at the same time as they appear as journals. Thus, whereas many these activities in print culture were separated, they are now integrated in digital media. Moreover, what matters here is that these cultural forms on the surface are not considered databases and rightly so. But the way they perform is to a large extent shaped by the database form. The very activity of these cultural forms in digital media could not have been accomplished without the un-
derlying database form. That is, our actions with these cultural forms are different from cultural forms relying on for instance the narrative or linearity in their structure. In digital media, narrativity or linearity is one option among many.

The very practice of collecting links, searching, tagging and archiving in digital media performed by all sorts of people suggests that these are everyday activities exactly because digital media invite these practices due to the database ontology of digital media. Thus, not only represents the ubiquitous database form a new cultural form, it also seem to remediate older forms of knowledge, namely the list and the encyclopedia. But there is a difference. It is not a matter of seeing databases as storage and retrieval forms only but primarily to recognize databases as particular forms of design and communication in digital media. In this way, knowledge organization becomes knowledge design. It is the design of knowledge for action.

Thus, we can understand knowledge organization practices in new media as cultural forms, as modes of designing and communicating culture. Not as something technically inherent in digital media but something digital media invite us to do in much the same way writing invites writing down myths, producing novels or communicative stability. The point is that we could have chosen to see these practices as anything else than cultural forms. But by viewing them as cultural forms we subscribe to them shared symbolic meaning and shared modes of action that make symbolic forms act or perform in specific ways in human activity.

Knowledge organization as cultural form: The implications and perspectives for knowledge organization theory
The notion of knowledge organization as a cultural form implies that we must start to understand knowledge organization as mode of designing and communicating culture and knowledge. Is that not what knowledge organization always has been concerned with? Yes and no. Knowledge organization has been very much concerned with communicating culture and knowledge by means of, for instance, classification systems. But knowledge organization has not been viewed as a production and aesthetic form. In new media the database form is a dominant creative production form:

Understanding knowledge organization as a cultural form, as knowledge design, invites a rethinking and a reconfiguration of knowledge organization theory and practice. Knowledge organization theory should be reconfigured along the lines of what Manovich calls ‘info-aesthetics’:

...a theoretical analysis of the aesthetics of information access as well as the creation of new media that “aestheticize” information processing. (Manovich, 2000, p. 217)

Given that information access is a ‘key category of culture’ (Manovich, 2000, p. 217), it is necessary to recognize the ‘culturalization’ and ‘aestheticization’ of knowledge organization that new media bring with it. This means that our present vocabulary and approaches to knowledge organization are limited. We must engage in discussions about how and with what means knowledge is designed in new media, what actions are to be accomplished with knowledge design. To some extent parts of this is not new to knowledge organization theory as human-computer interaction and information visualization
have also been contributing. But with Manovich we get a vocabulary and an understanding that situates interfaces and knowledge design in a larger media-historical perspective. The approach is humanistic in the sense that media and media development are seen as cultural products and cultural developments together with media-technological developments. In knowledge organization theory we are not used to see knowledge organization theory in such a perspective partly because we may have had a too narrow understanding of what knowledge organization is or could be.

Understanding knowledge organization as a cultural form broadens the domain of knowledge organization both in its theory but also in its practice. On a theoretical level, we gain insights from media theory as to how human experience and culture has been and is shaped and structured by various forms of media, with the computer seen as the latest enlargement of our media-cultural matrix (Finnemann, 2001; McLuhan, 1964). Various new media do not replace older media but develop alongside existing media and stabilize and adjust themselves in the media-cultural matrix. The content of any new media is always older forms of media (McLuhan, 1964). The computer is just a medium whose content is defined by older media such as radio, television, mail, books. But due to its digital status the computer is capable of treating older media as variables in the computer medium (Finnemann, 2001). Thus, we can say that the computer treats older forms of media as items to be structured. This leads to the practical outcome. Knowledge organization in new media is not only about ordering a list of items for retrieval. It is about seeing knowledge organization as a creative and aesthetic practice. Knowledge organization in new media is to produce a work of art in the sense that making access to the work is a design process (knowledge design) and not a process of following or applying rules, techniques, or standards. This suggests awareness towards how to materialize and communicate digital culture. Such materialization and communication of digital culture is performed by many people as part of their professional and everyday life. Thus, this strikes back on knowledge organization theory and research. We have to take seriously the activities in which knowledge design is performed by people and gain knowledge about what kinds of shared symbolic meaning people ascribe to their knowledge design activities. In a discussion of what constitutes rhetorical genre, Carolyn Miller (1984) argued that such an understanding of genre should not be located in the form or substance but on the actions the genre is used to accomplish in people’s everyday communicative practices (Miller, 1984). Likewise, I suggest for knowledge organization theory that we should not be looking ‘closed’ understandings of knowledge organization and the form and substance of knowledge organization but on the actions knowledge organization perform for and by people in everyday digital communication practices. This will provide us with a window as to how and to what extent knowledge organization as knowledge design is a cultural form.

Concluding remarks
Outlining an understanding of knowledge organization as a cultural form supplies us with a means for situating knowledge organization activities in light of new media. The challenge is to start to see knowledge organization as a form of media itself in digital culture. That is, knowledge organization is not an attachment to other activities communicating and designing knowledge. It is a knowledge design activity itself. In digital media the database is the prime communication and production form. Building on Manovich’s notion of ‘info-aesthetics’, knowledge organization research opens for an orientation that stresses to understand culture and identity in knowledge organization research as a matter
of aestheticizing knowledge design activity and to understand this activity as media creation as well. Aesthetics, then, brings a new dimension to knowledge organization theory (knowledge design theory); a dimension that provides knowledge organization theory with a view that sees knowledge design as creative digital art.

References