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Miroslav Petricek and the Quest for a New Ontology of Information

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An excursus on Timothy Luke's paper
"What is Information?: Digitalization, Disciplines,
and Datafication of Discourse"

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In his paper "What is Information?: Digitalization, Disciplines, and Datafication of Discourse," Professor Timothy Luke raises the question "what is information?" and then goes on to discuss the importance of what he calls "datafication" for the institution of scholarly publishing. He charts many of the changes that have occurred in the realm of academic publishing, and he points out many of the potential dangers, which exist in the process of what he calls the "unbundling" or "unbinding" of academic discourse. At the same time, he concludes that this unbundling offers certain positive avenues forward. In order to comment on his discussion, I would like to begin by giving a brief account of the effects that "datafication" has had on the discipline known as "information and library science."

Research and academic libraries, as well as academic publishing, belong to the same sub-category of what we in information science call the infosphere, or, in other words, the "Institution of Knowledge". The changes in our material conditions, of the kind which Prof Luke described in relation to academic publishing, suggest that the primary obstacle to, in his words, "a less uncertain future" for traditional institutions of knowledge may in fact lie in the coherence of our *ontological* understanding of today's emergent technologies.

Most library and information scholars in the early nineties considered the internet to be a place for entertainment, pornography, terrorism, cyberpunks, and teenage gaming, *not* a space for respectable research. They did eventually come to see the internet and new media as a potentially useful tool for improvement of the traditional models of knowledge-management, but they refused to confront important ontological questions. During that time, the dominant discourse became an exhausting and idle debate regarding "how to organize the Internet" and "how to bring order to chaos." (Skenderija, 1999, 2004) In other words, the one discipline —information science — which should have been

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most prepared — and eager — to accept the lessons, the importance, and the challenges brought about by the new medium, was the one discipline which was probably the most resistant, the most conservative, and the most reluctant to comprehend these challenges.

The result was not only that Information and library science did not make any significant contribution to the development and utilization of the Internet, but even worse—let me paraphrase a conclusion reached by a survey conducted in 2003 by library science's most expert service (OCLC; the Environmental Scan) today we have to face the fact that: "Google is disintermediating the library." (Kenney, Anne R., 2004)

I would like to report a few statistics from the field of library science which relate to the publishing institutions that Professor Luke discussed in his paper.

There are 139,000 libraries in the United States. They circulate nearly the same number of items as Federal Express ships in one day. Amazon ships over one fourth as many books per day as circulate in all US libraries combined — which means that in one week Amazon.com ships more books in one week than all of the libraries in the US circulate in one day.

Today we must also consider the fact that Google is replacing the library as a primary research tool:

A recent survey, commissioned by the Association of Research Libraries, collected data concerning the user behavior of faculty, graduate students, and undergraduates in the US, in order to find out what resources they most frequently used in their daily research.

The survey showed that on average less than 10% of faculty and approximately 15% of undergraduates and graduates used library resources on the actual premises of the library.

The percentage of faculty who used library gateways and web resources from a distance, that is to say, not on the premises, rose to almost 36%, while 31% of graduates used library resources at a distance and only 17% of undergraduates did.

But when we look at the percentage of NON-library portals, resources, and gateways—which is to say, basically, GOOGLE—the numbers jump significantly. The percentage of faculty, graduates, and undergraduates in this category is on average 62%.

*(*Source: Kenney, Anne R., 2004*)*

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In order to "build bridges between isolated intellectual islands" and to remedy the lack of method in my field, in 1995 my colleagues and I at the Charles University of Prague established an interdisciplinary research team for comparative studies of new media <http://www1.cuni.cz/ffuisk/med/>. As we became aware of the fact that information and library science was completely unprepared—and even openly hostile — to understanding the importance, nature and consequences of the changes taking place in the datasphere, we asked one of the leading Czech contemporary philosophers, Miroslav Petříček, to assist us.

Since Professor Luke raised the essential ontological question "What is information?" in the context of the emergent changes happening within the institution of knowledge, I would like to mention a few key concepts that Petříček developed for our Prague group in order to provide us with a methodological framework for approaching the complex technological

transformations in the field of knowledge production and management.

Petříček, who is a specialist in Heidegger, Derrida, Deleuze, Guattari, Baudrillard and other post-structuralists, refers to the "dataspace" ("datasphere", or "cyberspace") as a new entity of knowledge emerging through the global network. Petříček noticed that the ontological status of this entity was radically different from what we had previously considered the Institution of Knowledge to be (or what Karl Popper's called "the world of objective knowledge").

Referring to information technology as a new model of the "technology of knowledge", he suggested that we are witnessing a paradigm shift concerning the ontological status of information from what he calls "system" to "structure" to "network." (Petříček, 1998)

By "system" Petříček means the classical paradigm where subject-object relations are located within an identifiable, objective physical space. He writes: "*In the system, the meaning of information is identical with its physical place or topos. The library without a system catalog is not a library, but simply a warehouse of printed paper".* (Petříček, ibid.)

By "structure" Petříček signifies the schematization of meaning that occurs with the datafication of the lifeworld: "In the **structure**, all elements are *mutually sympathetic, which is to* say, the meaning of each of them is derived from the immediate collateral presence of all others."
(Petříček, ibid.)

But what was most helpful for our research group was Petříček's analysis of what he calls "the network."

In his words, the network is historically the next step following the change from system to structure but of *an entirely different order*, because it is "a *virtual configuration*, open to unexpected variants" (Petříček, 1998) — in other words, it constitutes a virtual order which is *not* only a digital world of radical speed and hyperconnectivity — *but also* a place where *each user* at each *interface* within the network is at the same time both an *interpreter* AND an interconnected *creator* of the network.

For example, when a person sits at his computer terminal, he/she is making constant interpretations of the data configuration in front him/her. He/she may choose to access certain blogs, databases, portals, web pages, scholarly repositories etc., all of which will have effects on the network itself, all of which send ripples out into the electronic space of the network. This user can make purchases, can make appointments for future activities, can disseminate information, and create new networks — in short, each user's *interpretation* of the network, each user's position and interaction within the network, projects and creates a virtual configuration which *becomes* information through the particular interaction and virtual relation.

Information is here no longer simply an object conceived from the point of view of an isolated subject sitting at a computer screen, but instead, every interaction itself becomes a virtual configuration of a certain type of knowledge, and *this* virtual configuration itself, now understood *as* information, becomes a constitutive element of the network itself — we could even say that this new virtual configuration, which is no longer simply a subject-object relation, defines and constitutes the network.

However, my point is not to suggest that Petříček's analysis is unique — my point is to add his voice to a growing

discourse on ontological questions related to the institution of knowledge and the technology of knowledge.

What I would like to suggest, by bringing Professor Luke's presentation into relation with Petříček's account of the network, are the following three points:

(1) Petříček's analysis allows us to understand Prof. Luke's description of the nonconventonal changes in the academic infosphere (such as "unbundling of discourse," "liquidification," or "reification of information") in the terms of a coherent and inspirational system of ontological thinking.

(2) Petříček's account of the paradigmatical changes taking place within the ontological status of information (system - structure – network) corresponds with Prof. Luke's observation that the "datafication" and transformation or "unbundling" of academic discourse is not only a matter of so called *remediation* of the previous forms and models of academic communication ([quote] "the creation, circulation and consumption of knowledge"), but also primarily a paradigmatic change taking place within our entire social and cultural context. (Also in Luke, 1998)

(3) Prof. Luke's paper presents still more evidence that traditional institutions of knowledge (including universities, academic publishers, and libraries) are becoming aware that the future lies *not* in *resisting* cyberspace as new form/model of reality but in situating our practices *within* it. For example, the recent debate surrounding "The Open Access Publishing Initiative," a currently hot topic for academic publishers and librarians, is one more indicator of the radical shift taking place within our ontological comprehension of information and the datasphere.

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