

Submitted for publication as one of eleven position papers on the study by Dr Chaim Zins' "Knowledge Map of Information Science" and its implications for the future of the field. June 2006.

## **Models, Metaphors and Metaphysics in Information Science.**

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Dr Zins has done a good job of a difficult undertaking. My comments are not criticisms of what he has done, but an attempt to place his findings in context.

For all the differing perspectives assembled, I, too, was surprised by the degree of consensus that Dr Zins found in the Information Science community surveyed. Nevertheless, this agreement is, in part, an artifact of the population selected. If one had included, for example, participants at the Conferences on the Foundations of Information Science (<http://www.mdpi.net/fis2005/> and <http://fis.icts.sbg.ac.at/main.html>) there would have been a wider diversity of opinion.

In the discussion at the ASIST conference panel session in Charlotte it was noted that the majority of the respondents subscribed, more or less, to a cognitive perspective and that they did not consider their position to be metaphysical. If so, this is a misunderstanding. The "cognitive turn" is both metaphorical and metaphysical. (This is matter of description and not a criticism). It is built on ideas that were imported from cognitive science and artificial intelligence, not constructed from within our field. These imported ideas are expected to be useful for practical purposes and are associated with a kind of engineering. The cognitive turn rests on an information processing model of mind, which has never been demonstrated and is questionable. It is a borrowing that is based on a metaphor and so it can properly be considered to be essentially metaphorical. The reason that the cognitive turn in Information Science is metaphysical is not because it is a borrowing, but because it is constituted by the reification of machine metaphors and a metaphor for communication, and lacks grounding. It is not clear that a cognitive model is necessary in Information Science or that its application in Information Science has contributed to Cognitive Science, as it should have by now if it were "physical" in the sense of being demonstrably a true representation of human cognition.

Dr Zins adopted the popular Data – Information – Knowledge (DIK) model. Some would add Wisdom. But he found it unsatisfactory because it could not accommodate Messages. The DIK(W) model has some utility as a way to make the point that information science is very much about process. Nevertheless, the DIK(W) model, a metaphor imported from data processing, is fundamentally problematic. Bits (D), texts (I), belief (K) – and good judgment (W) -- are different in kind, not a single ingredient cooked to varying degrees. Many of the participants provided highly qualified replies when asked about D, I, and K. Any model that cannot accommodate messages would seem to have little claim to a role in Information Science. A simpler dichotomy of Document and Belief appears to be simpler, more robust, and more apt, but all models and theories need to be considered in relation to the purposes they are intended to serve.