Introducing the What Makes This Paper Great? Series at INFIDEOS?

Description

Introducing the What Makes This Paper Great? Series at INFIDEOS & “The Invisible Substrate of Information Science” by Marcia J. Bates

Jenna Hartel

Thus far, the multimedia column at hand has featured short or Tiny Videos, which are highly reduced, visual versions of big ideas. A different video series at INFIDEOS, What Makes This Paper Great?, goes much deeper into the Information Science literature and lingers upon landmark papers. These longer videos (12-17 minutes) are perfect for educators to assign alongside their actual source papers to facilitate a class discussion, or for doctoral students to independently analyze the mechanics of successful ideas. Presently there are eight What Makes This Paper Great? episodes and more are forthcoming.

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Our first multimedia foray of this kind explores Marcia Bates’ 1999 paper, The Invisible Substrate of Information Science. It may be my favorite article in our literature, for it contains an accessible and inspiring vision of the Information Science field. Of note, this featured paper appeared in a special double issue of JASIS&T, celebrating the journal's 50th anniversary.
metaphor of an iceberg. As we all know, an iceberg appears as a frozen protrusion in the ocean, while underneath is a much larger formation not apparent to the uneducated observer. Likening the collective understanding of Information Science to this very architecture, Bates aims to reveal the qualities of the field that are more unspoken, elusive, and lying “beneath the water line.” To this end, the paper presents ten of these nascent qualities of Information Science, and my video brings five of them to life, visually (leaving the other five for viewers to explore in the original paper).

For example, we learn how Information Science focuses upon “the content of form.” This unusual phrase means that for any information phenomena an information scientist’s attention is not predominantly drawn to its content, but to its information structure, often called “metadata.” Using the example of books about the art movement of Impressionism, my video shows our leading concern for descriptions of these publications, not the stories, facts, or images about Impressionism itself. Moving on, Invisible Substrate’s most controversial assertion is that information scientists resemble actors. Watch the video to see George Clooney, cast as doctor, to illustrate this surprising principle! In elaborating the invisible substrate of Information Science, Bates addresses its origins, values, and three central research questions, among other things. (This entertaining paper even includes a long-running insider joke, about a mysterious character named Llewnellyn C. Puppybreath.) Readers and viewers who have been following this column will note that Bates’ Invisible Substrate is the source of multiple Tiny Videos, such as Histories of Information Science and Information Science is a Metadiscipline, which I presented a few weeks ago.

Each episode of What Makes This Paper Great?
ends with my opinions on the strengths of the featured paper. In the case of *Invisible Substrate*, Bates’ folksy and accessible writing and vivid use of metaphor are its most winning qualities. For example, the statement that information scientists are, “Always looking for the red thread of information in the social texture of people’s lives” has touched and inspired dozens of my students over the years. My admiration for *Invisible Substrate* is not unique, for the paper went on to win *JASIS&T’s Best Paper of the Year Award for 2000*.

It appears that the Information Science community is enjoying this video! It is a favorite at INFIDEOS, with more than 1,500 views over six months. Both educators and students have commented, in particular, that they learn much from the process of moving over and into the paper, a visual technique I invented for the *What Makes This Paper Great?* series and that appears in all episodes. There has also been a strong positive response to the parts of the video that break the paper down at the paragraph level (each paragraph is a ?), a perspective that is hidden in a conventional document. In my opinion, this is just one of the many affordances available in educational videos.

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Marissa Caico

As a student it can sometimes be difficult to explain what information science is and how it is situated among other disciplines to people unfamiliar to the field. Dr. Jenna Hartel explores this in her *What Makes This Paper Great?* video on Marcia Bates’ *The Invisible Substrate of Information Science*. Understanding
information science through Bates' iceberg metaphor puts into perspective the scope of the information science and what is seen and unseen about the field. Dr. Hartel's breakdown reveals that the structure of Bates' paper mirrors the iceberg metaphor that she uses, spending the bulk of the paper discussing the elements of information science that exist below the waterline or the invisible substrate. It is really helpful to see the main themes of this influential paper highlighted, even though we only delve deeper into a few. Getting a hold of concepts like information science as a metafield, the content of form, subject expertise, information science theory, and information science's universe (plus more covered in Bates' paper) are all foundational in studying information science. Illustrating Bates' *Invisible Substrate* not only helps new information scientists understand what makes this paper great, it also prepares us to be "always looking for the red thread of information in the social texture of people's lives."