

# Fulker's Slides from the BESSIG Launch Meeting

As requested at this evening's meeting (21-Sep-2011), I've attached to this page my slides from the BESSIG launch on 20-Apr-2011. Mine was the second in a two-part presentation with the following abstract:

## **The Role of Standards for Data and Metadata**

*Ted Habermann and Dave Fulker*

A hallmark of science in the Internet age has been the increasing importance of means for exchanging digital data. Indeed the significance is so great that Turing Award winner Jim Gray dubbed this data-intensive pattern the "Fourth Paradigm of Science." Tightly linked with effective data exchange is a critical need for standards such that data providers and data users are, in essence, talking the same language. The authors will cover two aspects of this need: 1) Habermann will discuss important progress, international in scope, on standards for metadata (i.e., information *about* data) that are being widely adopted; 2) Fulker will discuss software and protocols that have, through patterns of use, served to significantly standardize the mechanisms for data exchange, including how complex data structures are digitally represented and serialized.

I deliberately left blank the bullet points for my final slide (titled "Technology & Data - Looking Ahead", my stab at some future projections). I wrote them instead on a paper plate for ease of disposal, so they couldn't be held against me.

Of course this was really intended for humorous effect, so here are the missing bullets, which I described as the areas of technology I'll be watching /following most closely:

- Publication/citation
- Semantics (i.e., meaningfulness)
- Inference (in the manner of Google, e.g.)
- Interesting advances in tools & data models (evident in IDV, RAMADDA & GIS, e.g.)