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What are contexts?

Contexts capture the relativity of meaning of data and knowledge.

Some aspects of contexts include the following (among others).

Assumption

Is there a Southwest flight from MHT to RDU on Apr 24th, 2010?



No Yes

(Depends on whether the knowledge base is complete w.r.t. SW flights and thus impacts use of the Closed World Assumption)

Partial Info



A white sheep or a sheep with a white side facing us?

Source

[1] dig.csail.mit.edu/2010/LinkedData/ppl.html
 « [Tetherless World Constellation](#)
 From Cpedia, the automated encyclopedia
 He [Jie Bao] is a member of the OWL Working Group at W3C.
 [1]
 The constellation consists of senior professors James Hendler, Deborah McGuinness and myself and includes several professional staff, research scientists and associates and graduate and undergraduate students (tw.rpi.edu). [2] This person would be responsible for a variety of software architecture and code development and maintenance duties related to a new e-science data center initiative. [3]

[2,3] <http://nysl.nysed.gov/libdev/libjobs.htm>

Scope



Bart Simpson hates Family Guy.
 True in "Simpsons" or in "South Park"?

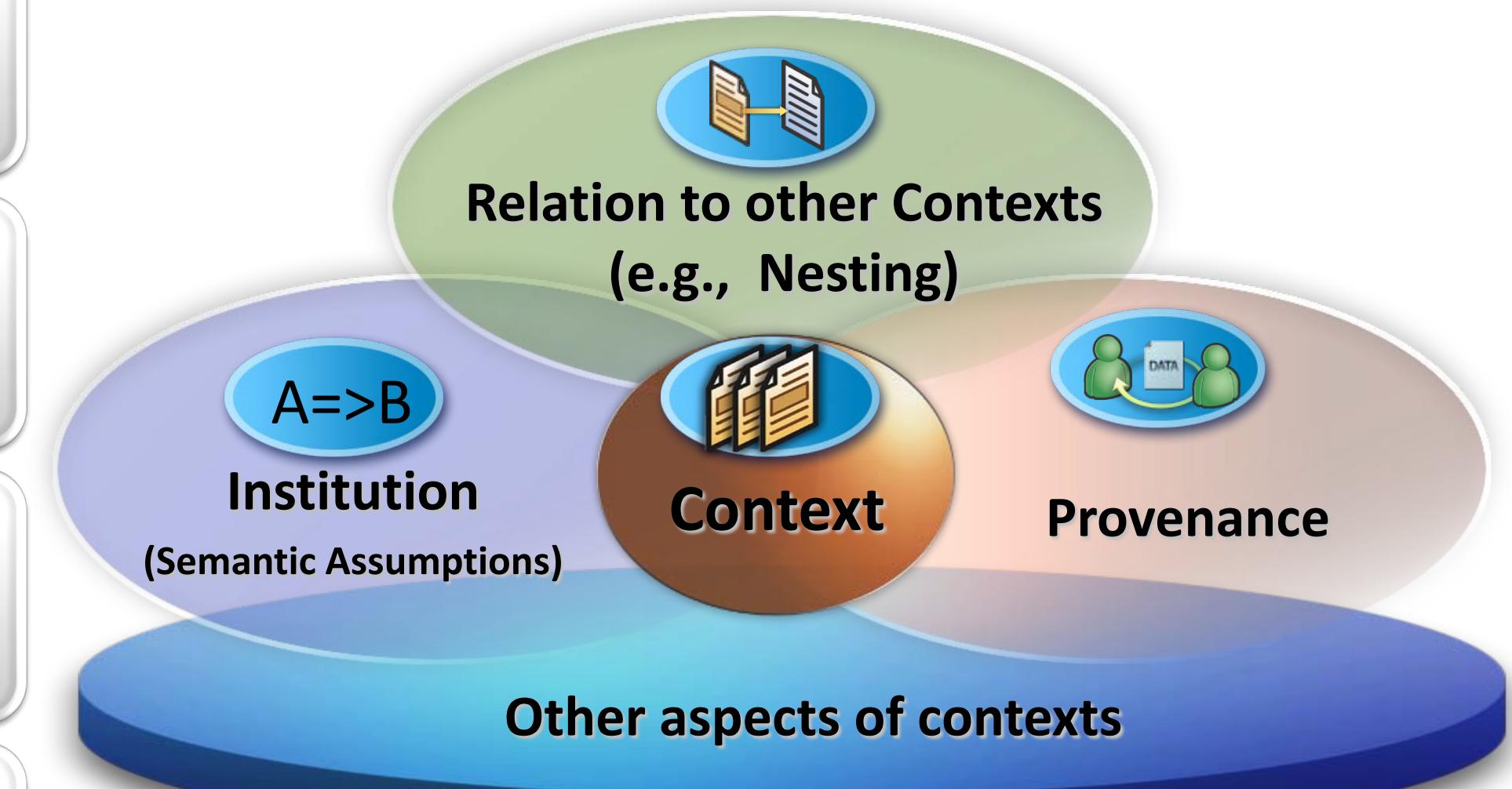
Formalizing Contexts

Extending McCarthy's context theory

A context is an object (so we can say something about it)

A context has a jurisdiction to interpret some data [$\text{isin}(c, \text{data})$]

Relations between contexts control knowledge flow and inference w.r.t. contexts



Representing Contexts on the SW

