

M. K. Buckland “Information as Thing”

I. Overview: Buckland distinguishes between three different meanings of “information” — information as knowledge, information as process, and information as thing. These distinctions provide a basis for classifying information related activities. Information as thing plays a fundamental role in information systems.

A. Information as Process: “When someone is informed, what they know is changed. In this sense “information” is the act of informing.” “Information is the act of informing.” In coming to know or understand we go through a process.

B. Information as Knowledge: “Information is also used to denote that which is perceived in ‘information as process:’ the knowledge communicated concerning some particular fact, subject, or event ...” Intangible ideas, etc. are examples.

C. Information as Thing: “The term ‘information’ is also used attributively for objects, such as data and documents.” Tangible physical objects, items, and entities are examples.

Buckland’s Four Aspects of Information:

	Intangible	Tangible
Entity	Information as knowledge Knowledge	Information as thing Data, document
Process	Information as process Becoming informed	Information processing Data processing

II. What “things/objects/physical entities” are Informative?

A. Information as Evidence: “Textbooks and encyclopedias . . . literary texts and commentaries . . . arrays of statistical data . . . statutes and law reports . . . photographs . . . In each case it is reasonable to view information as thing as *evidence* . . .” (p. 353)

B. Types of Information

1. Data
2. Text and Documents
3. Objects
4. What is a Document?
5. Events

III. When is Information not Information

A. Everything is Information: Since all physical objects, entities, and the like might be informative, Buckland concludes that they are all information. “We conclude that we are unable to say confidently of anything that it could not be information.” Buckland note that “If everything is information, then information is nothing special.” (p. 356)

B. Being Information is Situational:

P1. Information as process is situational.

C2. So it follows that the evidence involved in information as process is situational

C3. It also follows that objects, documents, and data are informative depending on the circumstances.

C4. Thus it also follows that being informative — the essential characteristic of information as thing — is also situational.

C. Worries:

- What, pray tell, does Buckland mean by “Situational”? Does he mean ‘situated’ in space and time AND related to other physical entities — maybe entities that are aware?
- Could ‘evidence’ be non-physical or intangible?
- How does C2, C3, and C4 follow from P1
- Why think that P1 is true?

D. Information by Consensus: “We have shown that (1) the virtue of being information as thing is situational and that (2) determining that any thing is likely to be useful information depends on a compounding of subjective judgments. Progress beyond an anarchy of individual opinions concerning what is or is not reasonably treated as information depends on agreement, or on at least some consensus.” (p. 357)

E. More Worries: It seems as if Buckland has been arguing all along that tangible things are informative — they are information — if we look hard enough. Here he appears to be saying that we as a community can, by agreement, make an object informative or not. A kind of radical subjectivity looms.

IV. Copies of Information and Representations

A. Copies: Type and Token

B. Interpretations and Summaries of Evidence

V. Information, Information Systems, Information Science

- A. Information systems deal with physical objects – with information as thing.
- B. Information systems can deal directly only with physical objects.
- C. “Representations of knowledge form a distinguishable subset of information as thing.”
- D. “Information as process could also be the basis for defining a class of information related studies.” Cognitive psychology, rhetoric, and other studies are examples of the how information as thing and information as process may overlap.