

What Is a “Document”?

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Ordinarily the word “document” denotes a textual record. Increasingly sophisticated attempts to provide access to the rapidly growing quantity of available documents raised questions about what should be considered a “document.” The answer is important for any definition of the scope of Information Science. Paul Otlet and others developed a functional view of “document” and discussed whether, for example, sculpture, museum objects, and live animals, could be considered “documents.” Suzanne Briet equated “document” with organized physical evidence. These ideas appear to resemble notions of “material culture” in cultural anthropology and “object-as-sign” in semiotics. Others, especially in the U.S.A. (e.g., Jesse Shera and Louis Shores) took a narrower view. New digital technology renews old questions and also old confusions between medium, message, and meaning.

Introduction

What is a document? What could not be a document? Ordinarily information storage and retrieval systems have been concerned with text and text-like records (e.g., names, numbers, and alphanumeric codes). The present interest in “multimedia” reminds us that not all phenomena of interest in information science are textual or text-like. We may need to deal with any phenomena that someone may wish to observe: Events, processes, images, and objects as well as texts.

This article reconstructs and comments on the development of thought on this topic with an emphasis on the ideas of continental European documentalists in the first half of this century. If “documentation” (a term that included information storage and retrieval systems) is what you do to or with documents, how far could you push the meaning of “document” and what were the limits to “documentation”? The work of European pioneers such as Paul Otlet and Suzanne Briet has received renewed attention in recent years and has been related to discussion of physical forms of “information” [e.g.,

“information-as-thing” (Buckland, 1991a, 1991b, 1991c)]. These issues are important because mechanical information systems can only operate on physical representations of “information.” This background is relevant to the clarification of the nature and scope of information systems.

From Document to “Documentation”

In the late 19th century, there was increasing concern with the rapid increase in the number of publications, especially of scientific and technical literature. Continued effectiveness in the creation, dissemination, and utilization of recorded knowledge was seen as needing new techniques for managing the growing literature.

The “managing” that was needed had several aspects. Efficient and reliable techniques were needed for collecting, preserving, organizing (arranging), representing (describing), selecting (retrieving), reproducing (copying), and disseminating documents. The traditional term for this activity was “bibliography.” However, “bibliography” was not entirely satisfactory for two reasons: (i) It was felt that something more than traditional “bibliography” was needed, e.g., techniques for reproducing documents; and (ii) “bibliography” also had other well-established meanings, especially historical (or analytical) bibliography, which is concerned with traditional techniques of book production.

Early in the 20th century, the word “documentation” was increasingly adopted in Europe instead of “bibliography” to denote the set of techniques needed to manage this explosion of documents. Woledge (1983) provides a detailed account of the evolving usage of “documentation” and related words in English, French, and German. From about 1920, “documentation” was increasingly accepted as a general term to encompass bibliography, scholarly information services [“wissenschaftliche Aufklärung (Auskunft)”], records management, and archival work (Donker Duyvis, 1959; see also Björkbom, 1959; Godet, 1938).

There are numerous writings on the definition, scope, and nature of “documentation,” much of it concerned with the relationships between documentation, bibliography, and librarianship. Unfortunately, much of this literature, like much of the later discussion of information science and librarianship, is undermined by the authors’ attempts to create or amplify distinctions where the differences are not really fundamental but, rather, a matter of emphasis.

Loosjes (1962, pp. 1–8) explained documentation in historical terms: Systematic access to written texts, he wrote, became more difficult after the invention of printing resulted in the proliferation of texts; scholars were increasingly obliged to delegate tasks to specialists; assembling and maintaining collections was the field of librarianship; bibliography was concerned with the descriptions of documents; the delegated task of creating access for scholars to the topical contents of documents, especially of parts within printed documents and without limitation to particular collections, was documentation.

After about 1950, more elaborate terminology, such as “information science,” “information storage and retrieval,” and “information management,” increasing replaced the word “documentation.”

From Documentation Back to “Document”

The problems created by the increase in printed documents led to development of the techniques of documentation. However, the rise of documentation led, in turn, to a new and intriguing question that received little direct attention then or since.

Documentation was a set of techniques developed to manage significant (or potentially significant) documents, meaning, in practice, printed texts. But there was (and is) no theoretical reason why documentation should be limited to *texts*, let alone *printed* texts. There are many other kinds of signifying objects in addition to printed texts. And if documentation can deal with texts that are not printed, could it not also deal with documents that are *not* texts at all? How extensively could documentation be applied? Stated differently, if the term “document” were used in a specialized meaning as the technical term to denote the objects to which the techniques of documentation could be applied, how far could the scope of documentation be extended. What could (or could not) be a document? The question was, however, rarely formulated in these terms.

An early development was to extend the notion of document beyond written texts, a usage to be found in major English and French dictionaries. [For historical background on “document,” see also Sagredo Fernández & Izquierdo Arroyo (1982)]. “Any expression of human thought” was a frequently used definition of “document” among documentalists. In the U.S.A., the phrases “the graphic record” and “the generic book”

were widely used. This was convenient for extending the scope of the field to include pictures and other graphic and audio-visual materials. Paul Otlet (1868–1944), is known for his observation that documents could be three-dimensional, which enabled the inclusion of sculpture. From 1928, museum objects were likely to be included by documentalists within definitions of “document” (e.g., Dupuy-Briet, 1933).

The overwhelming practical concern of documentalists was with printed documents, so the question of how far the definition of “document” could be extended received little direct attention. Nevertheless, the occasional thoughtful writer would touch on the topic, perhaps because interested in some novel form of signifying object, such as educational toys, or because of a desire to generalize.

Paul Otlet: Objects as Documents

Otlet extended the definition of “document” halfway through his *Traité de documentation* of 1934. Graphic and written records are representations of ideas or of objects, he wrote, but the *objects themselves* can be regarded as “documents” if you are informed by observation of them. As examples of such “documents,” Otlet cites natural objects, artifacts, objects bearing traces of human activity (such as archaeological finds), explanatory models, educational games, and works of art (Otlet, 1934, p. 217; also Otlet 1990, pp. 153, 197, and Izquierdo Arroyo, 1995).

In 1935, Walter Schürmeyer wrote: “Nowadays one understands as a document any material basis for extending our knowledge which is available for study or comparison” [“Man versteht heute unter einem Dokument jede materielle Unterlage zur Erweiterung unserer Kenntnisse, die einem Studium oder Vergleich zugänglich ist”]. (Schürmeyer, 1935, p. 537.)

Similarly, the International Institute for Intellectual Cooperation, an agency of the League of Nations, developed, in collaboration with Union Française des Organismes de Documentation, technical definitions of “document” and related technical terms in English, French, and German versions and adopted:

- Document: Toute base de connaissance, fixée matériellement, susceptible d’être utilisée pour consultation, étude ou preuve. Exemples: manuscrits, imprimés, représentations graphiques ou figurés, objets de collections, etc.
- Document: Any source of information, in material form, capable of being used for reference or study or as an authority. Examples: manuscripts, printed matter, illustrations, diagrams, museum specimens, etc.
- Dokument: Dokument is jeder Gegenstand, der zur Belehrung, zum Studium oder zur Beweisführung dienen kann, z.B. Handschriften, Drucke, graphische oder bildliche Darstellungen, usw. (Anonymous, 1937, p. 234)

Suzanne Briet: Physical Evidence as Document

One individual, who had, for years, been involved in discussions of the nature of documentation and documents, addressed the extension of the meaning of “document” with unusual directness. Suzanne Briet (1894–1989), also known as Suzanne Dupuy and as Suzanne Dupuy-Briet, was active as a librarian and documentalist from 1924 to 1954 (Buckland, 1995; Lemaître & Roux-Fouillet, 1989).

In 1951, Briet published a manifesto on the nature of documentation, *Qu'est-ce que la documentation*, which starts with the assertion that “A document is evidence in support of a fact” [“Un document est une preuve à l'appui d'un fait”]. (Briet, 1951, p. 7.) She then elaborates: A document is “any physical or symbolic sign, preserved or recorded, intended to represent, to reconstruct, or to demonstrate a physical or conceptual phenomenon” [“Tout indice concret ou symbolique, conservé ou enregistré, aux fins de représenter, de reconstituer ou de prouver un phénomène ou physique ou intellectuel”]. (p. 7.) The implication is that documentation should not be viewed as being concerned with texts but with access to evidence.

The Antelope as Document

Briet (1951, p. 7) enumerates six objects and asks if each is a document.

Object	Document?
Star in sky	No
Photo of star	Yes
Stone in river	No
Stone in museum	Yes
Animal in wild	No
Animal in zoo	Yes

There is discussion of an antelope. An antelope running wild on the plains of Africa should not be considered a document, she rules. But if it were to be captured, taken to a zoo and made an object of study, it has been made into a document. It has become physical evidence being used by those who study it. Not only that, but scholarly articles written about the antelope are secondary documents, since the antelope itself is the primary document (Briet, 1951, pp. 7–8).

Briet's rules for determining when an object has become a document are not made clear. We infer, however, from her discussion that:

- (1) There is materiality: Physical objects and physical signs only;
- (2) There is intentionality: It is intended that the object be treated as evidence;

- (3) The objects have to be processed: They have to be made into documents; and, we think,
- (4) There is a phenomenological position: The object is perceived to be a document.

This situation is reminiscent of discussions of how an image is made art by framing it as art. Did Briet mean that just as “art” is made art by “framing” (i.e., treating) it as art, so an object becomes a “document” when it is treated as a document, i.e., as a physical or symbolic sign, preserved or recorded, intended to represent, to reconstruct, or to demonstrate a physical or conceptual phenomenon? The sources of these views are not made clear, though she does mention, in this context, her friend Raymond Bayer, a professor of philosophy at the Sorbonne, who specialized in aesthetics and phenomenology.

Ron Day (personal communication, 1996) has suggested, very plausibly, that Briet's use of the word “indice” is important, that it is indexicality—the quality of having been placed in an organized, meaningful relationship with other evidence—that gives an object its documentary status.

Donker Duyvis: A Spiritual Dimension to Documents

Frits Donker Duyvis (1894–1961), who succeeded Paul Otlet as the central figure in the International Federation for Documentation, epitomized the modernist mentality of the documentalists in his dedication to the trinity of scientific management, standardization, and bibliographic control as complementary and mutually reinforcing bases for achieving progress (Anonymous, 1964). Yet Donker Duyvis was not a materialist. He adopted Otlet's view that a document was an expression of human thought, but he did so in terms of his interest in the work of Rudolf Steiner (1861–1925), founder of Anthroposophy, a spiritual movement based on the notion that there is a spiritual world comprehensible to pure thought and accessible only to the highest faculties of mental knowledge. As a result, Donker Duyvis was sensitive to what we might now call the cognitive aspects of the medium of the message. He wrote that:

A document is the repository of an expressed thought. Consequently its contents have a spiritual character. The danger that blunt unification of the outer form exercises a repercussion on the contents in making the latter characterless and impersonal, is not illusory. . . . In standardizing the form and layout of documents it is necessary to restrict this activity to that which does not affect the spiritual contents and which serves to remove a really irrational variety. (Donker Duyvis, 1942; translation from Voorhoeve, 1964, p. 48)

Ranganathan: Micro-Thought on a Flat Surface

The Indian theorist S. R. Ranganathan, usually so metaphysical, took a curiously narrow and pragmatic po-

sition on the definition of “document,” resisting even the inclusion of audiovisual materials such as radio and television communications.

But they are not documents; because they are not records on materials fit for handling or preservation. Statues, pieces of china, and the material exhibits in a museum were mentioned because they convey thought expressed in some way. But none of these is a document, since it is not a record on a more or less flat surface. (Ranganathan, 1963, p. 41)

Ranganathan’s view of “document” as a synonym for “embodied micro thought” on paper “or other material, fit for physical handling, transport across space, and preservation through time” was adopted by the Indian Standards Institute (1963, p. 24), with a note explaining that the term “document” is now extended in use to include any embodied thought, micro or macro and whether the physical embodiment is exclusive to one work or is shared by more than one work.”

Others, also, took a limited view of what documents were. In the U.S.A., two highly influential authors opted for a view of documents that was only an extension of textual records to include audiovisual communications. Louis Shores popularized the phrase “the generic book” (e.g., Shores, 1977) and Jesse H. Shera used “the graphic record” with much the same meaning (e.g., Shera, 1972). Shera was gratuitously dismissive of Briet’s notion of documents as evidence.

Anthropology: Material Culture

Otlet was explicit that his view of “document” included archaeological finds, traces of human activity, and other objects not intended as communication.

Collections of objects brought together for purposes of preservation, science and education are essentially documentary in character (Museums and Cabinets, collections of models, specimens and samples). These collections are created from items occurring in nature rather than being delineated or described in words; they are three dimensional documents. (Otlet, 1920; translation from Otlet 1990, p. 197)

The notion of objects as documents resembles the notion of “material culture” among cultural anthropologists “for whom artifacts contributed important evidence in the documentation and interpretation of the American experience” (Ames et al., 1985, p. ix) and in museology (e.g., Kaplan, 1994; Pearce, 1990).

Semiotics: “Text” and “Object-as-Sign”

Briet’s ideas concerning the nature of a “document” invite discussion in relation to semiotics. In this context,

we note Dufrenne’s discussion of the distinction between aesthetic objects and signifying objects:

The function of such [signifying] objects is not to subserve some action or to satisfy some need but to disperse knowledge. We can, of course, call all objects signifying in some sense. However, we must single out those objects which do more than signify merely in order to prepare us for some action and which are not used up merely in the fulfillment of the task. Scientific texts, catechisms, photograph albums, and, on a more modest scale, signposts are all signs whose signification engages us in an activity only after having first furnished us with information. (Dufrenne, 1973, p. 114)

We can observe that by the inclusion of museum and other “found” objects, Briet’s “any physical or symbolic sign” appears to include both human signs and natural signs. Others developed the notion of “object-as-sign.” Roland Barthes, for example, in discussing “the semantics of the object,” wrote that objects

function as the vehicle of meaning: in other words, the object effectively serves some purpose, but it also serves to communicate information: we might sum it up by saying that there is always a meaning which overflows the object’s use. (Barthes, 1988, p. 182)

We can note the widespread use of the word “text” to characterize patterns of social phenomena not made of words or numerals, but there seems to have been relatively little attention to the overlap between semiotics and information science. (See, however, the careful discussion by Warner, 1990.)

Comments

One difference between the views of the documentalists discussed above and contemporary views is the emphasis that would now be placed on the social construction of meaning, on the viewer’s perception of the significance and evidential character of documents. “Relevance,” a central concept in information retrieval studies, is now generally considered to be situational and ascribed by the viewer. In semiotic terminology,

signs are never natural objects. . . . The reason is simply that the property of being a sign is not a natural property that can be searched for and found, but a property that is given to objects, be they natural or artificial, through the kind of use that is made of them. Both as objects and as means, signs have to be treated as something invented, and in this sense they are correlated to actions. (Sebeok, 1994, vol. 1, p. 18)

Briet’s notion of documents as evidence can occur in at least two ways. One purpose of information systems is to store and maintain access to whatever evidence has

been cited as evidence of some assertion. Another approach is for the person in a position to organize artifacts, samples, specimens, texts, or other objects to consider what each could tell one about the world that produced it, and then, having developed some theory of its significance to place the object *in evidence*, to offer it as evidence by the way it is arranged, indexed, or presented. In this manner, information systems can be used not only in finding material that already is in evidence, but also in arranging material so that someone may be able to make use of it as (new) evidence for some purpose (Wilson, personal communication, 1995).

The evolving notion of “document” among Otlet, Briet, Schürmeyer, and the other documentalists increasingly emphasized whatever functioned as a document rather than traditional physical forms of documents. The shift to digital technology would seem to make this distinction even more important. Levy’s thoughtful analyses have shown that an emphasis on the technology of digital documents has impeded our understanding of digital documents as documents (e.g., Levy, 1994). A conventional document, such as a mail message or a technical report, exists physically in digital technology as a string of bits, but so does everything else in a digital environment. In this sense, any distinctiveness of a document as a physical form is further diminished, and discussion of “What is a digital document?” becomes even more problematic unless we remember the path of reasoning underlying the largely forgotten discussions of Otlet’s objects and Briet’s antelope.

Postscript: Documenting the Antelope

Briet’s discussion of an antelope as a document is quite specific: The antelope was from Africa; it was a newly discovered species; and it was brought to the Jardin des Plantes of the Muséum National d’Histoire Naturelle in Paris. Her account reads as if she were referring to an actual antelope known to her. In 1947, not long before Briet’s book appeared, the Muséum National d’Histoire Naturelle did announce the discovery of a new African antelope—*Tragelaphus scriptus reidae*, a subspecies of bushbuck—but there is no indication that a specimen was taken to Paris (Babault, 1947). The documentation of antelopes reveals that very few new species were discovered during Briet’s lifetime and documentary evidence of Briet’s antelope has eluded us. Appropriately, the word “antelope” itself, we found, is thought by some to derive from the Ethiopian word for the elusive unicorn.

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