Nonknowledge:
The Bibliographical Organization
of Ignorance, Stupidity,
Error, and Unreason:
Part One

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1.0 Introduction

To the extent that one can acquire knowledge through the reading of documents, it may be said that documents transmit knowledge. But what would be the *opposite* of knowledge? Does it have a legitimate role in library collections? Can it be broken down into categories or domains? How would it be found? Does the opposite of knowledge (let us call it *nonknowledge*) raise any special problems in cataloging, classification, and indexing? What kinds of subject headings, for example, would apply to it? Can we find a conceptual framework with which to comprehend, classify, and retrieve it?

This two-part essay aims to identify and articulate the rather paradoxical problems inherent in the organization not of knowledge (see Hjørland 2003) but of nonknowledge. Beginning with theoretical problems about modeling a paradigm of nonknowledge as the opposite of knowledge and extending it to encompass negative counterparts of phenomena related

to knowledge, it continues by addressing practical questions in the organization of and access to nonknowledge in libraries, and progresses with an exposition of the categories of nonknowledge. Part one of the essay ends with a review of the concept of stupidity. Part two picks up the discussion with expositions of the remaining areas of nonknowledge. The essay concludes with observations on differentiating between works about nonknowledge and those that disseminate nonknowledge and the implications of nonknowledge for library services.

1.1 Note on punctuation

Single quotation marks are used to indicate that a word is used to refer to the word itself rather than the meaning of the word. For example, 'cat' means the *word* cat, rather than an actual cat or even just the concept of a cat. Capitalized terms in single quotation marks refer to *Library of Congress Subject Headings* and follow the exact punctuation and structure of

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the existing (or once-existing) heading, e.g., 'Music – Acoustics and physics.'

2.0 A nonknowledge hierarchy?

Knowledge, the basis of all intellectual life, is so all-encompassing that it is helpful to have a conceptual framework for interpreting its meaning, forms, structures, and dynamics. In information science a hierarchy is recognized and generally accepted starting at the elemental level with data, which, when put in context, becomes information, which put into deeper context becomes knowledge, which put into even more profound context becomes wisdom. This model, known by several names, has most recently been referred to by Rowley (2007) in a review of the literature as the "DIKW hierarchy," in which the initials stand for Data, Information, Knowledge, and Wisdom. Although the model is relatively simple, straightforward, and easy to grasp, the definitions of each term can be debated ad infinitum. Ackoff (1989) is often cited as the originator of this paradigm, though earlier precedents can be found, as Rowley itemizes. For Ackoff, who writes from a management perspective, "knowledge is know-how, and is what makes possible the transformation of information into instructions" (Rowley 2007, 166). Such a definition does not differentiate between the basic two senses of 'knowledge' identified by Machlup (1980): the state of knowing something and the content of what is known (see also Zins 2004).

Each of the terms—data, information, knowledge, and wisdom—are not only habitually used but are indispensable in a wide variety of domains. Setting them together in a single formula invites one to ask what the inverse or opposite not only of knowledge but of all levels of intellectual phenomena sharing the domain of knowledge would be. The DIKW hierarchy is a good place to start this investigation since knowledge must be understood in the context of data, information, and wisdom, along with other terms sometimes found in discussions of this hierarchy, such as "understanding," "intelligence," and "enlightenment." To give a single expression for this entire set of concepts counter or antithetical to those on the side of knowledge, I propose to extend the term *nonknowledge*, which means an absence or want of knowledge, to encompass not only ignorance but stupidity, unreason, folly, error, misinformation, and more. The adumbrations of knowledge into these other processes, it is hypothesized, have counterparts on the negative side.

By aggregating heretofore disparate and disconnected inquiries, this study provides a new perspective on the problem. The concept of nonknowledge appears not to have arisen in the information science literature (although Machlup [1980] raises—and then promptly dismisses—the possibility of "negative knowledge"). Moreover, the only subdivision of nonknowledge to be treated by an information scientist is ignorance (Ozog 1979), and that only slightly.

The study also tests the boundaries of concepts of knowledge. After all, the notion of a "universe of knowledge" is central to academic thought in general, and to the library and information professions in particular (Miksa 1992). Could nonknowledge reside outside this universe? How would we gain intellectual access to it? How, if at all, should it be labeled or identified to distinguish it from valid knowledge?

The identification of nonknowledge as delegitimized or invalidated knowledge raises questions about the hegemony of knowledge. Chatman (1996) discerns an information barrier between those in power (and others who identify with the "insider" viewpoint) and the "information poor," who define information from a different perspective and who perceive themselves as outsiders, devoid of access to helpful resources. The notion that what counts as legitimate knowledge is determined by institutional bases of power and authority and imposed on others is associated with the theories of writers such as Michel Foucault (e.g., 1965, 1976), which have resulted in a large-scale paradigm shift from modernism to postmodernism. In this theoretical framework, knowledge claims and their validation or discredit are contests whose outcomes may be determined by the power of interest groups rather than by objective truth, which is probably unknowable. The problem of nonknowledge in relation to postmodern theory will be addressed in the conclusion, which will be included in part two.

3.0 Introducing the concept of nonknowledge

The term 'nonknowledge' is found in some academic writing but not in common parlance. However, it is not a new word. *The Oxford English Dictionary* (2nd edition, 1989) which defines 'non-knowledge' as "want of knowledge," provides a citation dating as far back as 1503 in the *Rolls of Parliament*: "For the serche and non knowledge of their severall Tenures." More recently, in 1898, the word was used in the *Westminster Gazette*: "His non-knowledge of the customs of the country led to a very funny situation."

The term does not appear in any American dictionaries consulted by the author.

Because of the term's clumsiness (which somehow seems fitting), one might prefer to substitute the less awkward constructs 'unknowledge' or 'antiknowledge,' both of which suggest a strenuous opposition to knowledge rather than its mere absence. Both terms yielded results in Internet searches conducted by the author in February 2008. The word 'unknowledge' seems to have been coined by G. L. S. Shackle, an expert on decision-making, and it appears in the titles of a few works on economic uncertainty. There is also a "blog" with the Internet address www.unknowledge.com. However, the preponderance of the term 'nonknowledge' in the recent scholarly literature (Gross 2007, Japp 2000, Kenner 2006, Bataille 2001, Featherstone 2002) suggests that this term has been established in academic discourse. With this literary warrant in mind, I want to introduce the word and concept of nonknowledge to the discipline of information science, but not without adding my own spin.

Matthias Gross (2007) finds the origin of the term 'nonknowledge' in scholarly writing in a translation by Kurt H. Wolff of a 1908 tract by the German sociologist Georg Simmel, who had used the term *Nichtwissen*. Thenceforth, according to Gross, the term's first appearance in a scholarly journal was in an article by the American anthropologist Robert F. Murphy in 1964, but it was rarely used by sociologists writing in English until the 1990s, and even then, mainly by those who, like Gross himself, are native speakers of German.

Gross has done the most to expound upon and sharpen the concept of nonknowledge. He places nonknowledge in the context of knowledge versus ignorance or certainty versus uncertainty, aiming to determine the socioeconomic effects of states of nonknowledge in planning, decision-making, and the assessment and management of risk. His notion of nonknowledge is precise but limited. He contrasts nonknowledge (which he defines as knowledge about what is not known but taking it into account for future planning) against various other terms that are opposed to knowledge: ignorance, negative knowledge, extended knowledge, and nescience. Gross uses the concept of nonknowledge to understand gaps in knowledge, not extending its application beyond that, not even to include error.

Unmentioned by Gross is the work of the French existentialist philosopher Georges Bataille, who used the term *non-savoir*. A selection of translations by Annette Michelson of Bataille's writings was pub-lished in 1986 in the avant-garde, radical leftist literary journal *October* (named after an Eisenstein film), with the collective title, *Georges Bataille: Writings on Laughter, Sacrifice, Nietzsche, Un-Knowing*. Among the articles was "Unknowing: laughter and tears" (Bataille 1986), which claims that nonknowledge can be an incredibly enriching experience. Bataille's writings on the subject were later compiled by different translators, Michelle and Stuart Kendall, in a volume called *The Unfinished System of Nonknowledge* (Bataille 2001).

For Bataille, nonknowledge appears to be a spiritual process of shedding knowledge to release oneself from the chains of rationality. He argues for the value of liberating the mind from knowledge and the confinements of any form of cognitive structuring as opposed to unmediated experience. Humans are reminded of their capabilities for such nonknowledge when they laugh and when they cry. Bataille's writings suggest a sort of rebellion against the modern world, a return to primitive basics, and a critique of modern life, foreshadowing postmodernism. Clearly, nonknowledge in Bataille's sense is not an unalloyed negative. Bataille's sense of nonknowledge seems to bear little resemblance to Gross's; perhaps the original translator's translation of "*non-savoir*" as "unknowing" better conveys Bataille's meaning than does "nonknowledge," as the Kendalls translate it. However, the meanings are not completely different, and Bataille's sense of the word 'nonknowledge' is not unique to him, regardless of the translation.

Nonknowledge in this sense can lead to creativity and originality by inducing artists and writers to channel their unconscious thoughts, as happened in the surrealist movement. Apart from this, nonknowledge triggered other modernist movements that reflected the Zeitgeist in questioning reality and the meaning of existence in reaction to a sense of the world becoming less intelligible. The early 20th century crisis in understanding the world and reality led to despair but also inspiration. Fragmentation occurred in cubism, abstract art, stream-of-consciousness writing, the use of chance, etc. (Federman 1993). Discussing the writings of Samuel Becket, Walter Abish, Thomas Pynchon, and Alain Robbe-Grillet, for example, Federman (1993, 9) has written, the more we read, "the less we seem to know," adding that many contemporary avant-garde novels "make a shamble of traditional epistemology." New fiction, according to Federman, invents its own reality in the "pursuit of nonknowledge," cutting itself off from referential points with the external world. The irrational and absurd can be a

creative force in other domains as well, such as existential philosophy and the theatre of the absurd. 'Nonknowledge' as used by Bataille and Federman does not mean ignorance as much as irrationality and absurdity, or irrationalism and absurdism if you prefer, since these views can be built into philosophies of life and art (Weightman 2002).

As used in this essay, 'nonknowledge' is a broad category covering not only Gross's and Bataille's usages and the spectrum between them but extending even further to comprehend each factor in the DIKW paradigm. Given that knowledge is understood to be connected hierarchically in a system of identifiable levels of complexity, synthesis, and refinement, there is a need for a concept that unites all the processes and phenomena that counter these linked ideas, and 'nonknowledge,' an already existing word not yet clearly defined, serves well, I suggest, as a cover term for the entire category. I further suggest that the insight gained by viewing these phenomena as interrelated levels or phases of nonknowledge can contribute to models for bibliographic organization, not because nonknowledge coheres as a unified domain but because it is present in many if not all recognized domains of "knowledge."

4.0 Opposite, meaning what?

Central to this investigation are notions of opposition or polarity, which are essential in information organization. By opposite I mean the reverse, antithesis, contrary, or negation of the terms in the data-information-knowledge-wisdom paradigm. Now a term can have more than one opposite. To take a common example, 'man' can be opposed by 'boy,' 'woman,' or 'beast,' among others. It is useful to be aware of the multifaceted nature of opposition. Indeed, there are several kinds of polarity or antinomy, involving oppositeness, complementary, tension, hierarchy, dialectics, and more. The problem of antinomy, or polarity, is far from straightforward, as indicated in treatises by Bahm (1970) and Needham (1987) devoted to the topic.

Antinomy is a crucial aspect of vocabulary control in cataloging and indexing. Lancaster (1972, 73) views antonyms as "terms that represent different viewpoints on the same property continuum, such as SMOOTHNESS and ROUGHNESS, RESISTANCE and CONDUCTIVITY." This is because "a user interested in one aspect will usually be interested, by implication, in the other." Antonyms such as 'hardness' and 'softness,' 'dryness' and 'wetness,' or 'accuracy' and 'er-

ror,' are reciprocals and complements, and are best treated as quasi-synonyms. Others, such as 'rest' and 'motion,' or 'organic' and 'inorganic,' are "unequivalent and diametric opposites." Yet others are reversals, such as 'potential' and 'counterpotential.'

Because of the complex associations of many words from centuries of use, identifying true antonyms for them can be a difficult matter even when obvious, commonsense opposites exist from words being paired together in ordinary discourse. Consider 'pleasure.' The conventional view is that the opposite of 'pleasure' is 'pain.' But Rachels (2004, 248) shows that the two supposed opposites are not opposite in all ways and therefore cannot be considered true opposites:

> 'Pleasure' includes the greatest array of positive experiences, but 'pain' ordinarily means "physical pain" and thus excludes anxiety, humiliation, terror, and so on. 'Pain' excludes some bad physical experiences as well, such as itches, aches, and exhaustion .... Hedonists often stipulate 'pain' to mean "the opposite of pleasure," but some confusion will result from this, especially as more and more philosophers of cognitive psychology use 'pain' in the ordinary way.

In a similar vein, Bos thinks that viewing stupidity as the polar opposite of wisdom is simplistic, and describes stupidity's relationship to knowledge as "unfathomable" (2007, 145), adding, "To be wise often entails a certain dose of stupidity, and stupidity seems to have wisdom as well" (Ibid., 147). Agreeing with such an assessment, Boxsel (2003, 30-31) considers stupidity "an independent quality with a logic all its own." It is "not the converse of intelligence; it is the converse of a lack of stupidity, while intelligence is the converse of a lack of intelligence."

Let us note that in this brief discussion, stupidity has already been contrasted against knowledge, wisdom, and intelligence. The subject has already become confused. Therefore, while admitting that exact opposites for complex terms such as 'knowledge' and its corollaries may not exist in English, let us attempt a first cut to find the terms or concepts that most closely resemble opposites of terms in the knowledge hierarchy.

5.0 The first cut

An initial attempt to find opposites of terms in the knowledge hierarchy yields the following results.

Data	Absence or want of data; Missing data
Information	Misinformation; Disinformation; Error
Knowledge	Ignorance
Wisdom	Folly; Stupidity

Notice there is no single term for the opposite of data. On further reflection, however, it is possible to posit as an opposite of 'data' the term 'garbage' (or 'rubbish'), based on the computer science bromide, "Garbage in, garbage out," meaning that computers will process "bad" data in the same way they would "good" data, producing worthless results. Indeed, the definition of 'garbage' in *Merriam-Webster's Collegiate Dictionary* (11th ed., 2003) includes "inaccurate or useless data." The definition in the same dictionary of the related term 'trash' includes "empty talk, nonsense." Such data do not lead to information, knowledge, and wisdom, and by this criterion, 'garbage' qualifies as a counterpoint to 'data' within the DIKW model. But the use of either of these terms, or the British equivalent 'rubbish,' to refer to the opposite of data could be misleading because these are specialized, extended meanings of the terms and not their primary meanings. The fact that data are of low quality or even worthless or meaningless does not disqualify them from being data. Therefore it is not a true opposite.

'Information' has three opposites, ranging from 'error,' a mistake made inadvertently or in ignorance, to 'misinformation,' wrong information or a false account of intelligence received, to 'disinformation,' defined in *The Oxford English Dictionary* (2nd ed., 1989) as "the dissemination of deliberately false information, [especially] when supplied by a government or its agent to a foreign power or the media, with the intention of influencing the policies or opinions of those who receive it." The first term connotes something about which the perpetrator is unaware, the second is something of which a person is conscious and knowledgeable (though the transmission of misinformation could still be inadvertent), and the third suggests not only awareness but volition and strategic coordination in deception.

The quality of intention is crucial in differentiating errors from other fallacies as well as from misinformation. Reason (1990, 5) classifies and specifies the intentionality of actions based on the following criteria, framed as questions with yes or no answers: Was an action directed by some prior intention? Did it proceed as planned? Did it achieve its desired end? Reason's comprehensive psychological analysis of human error provides a full breakdown and analysis of all the possible types and forms of errors.

Of all the terms in our schema, 'knowledge' seems the easiest for which to find a clear, single opposite, namely, 'ignorance.' 'Knowledge,' of course, is about as intricately complicated and multifaceted as a concept can be. There is no question that the meaning of knowledge is culturally and linguistically relative, determined by factors such as notions of the sources of knowledge, the legitimization of knowledge, the audience or public of knowledge, the categorization of knowledge into domains, invented versus discovered knowledge, tacit versus explicit knowledge, and more (Elkana 1981). In his three-volume magnum opus, *Knowledge: Its Creation, Distribution, and Economic Significance*, Machlup devotes over 100 pages in volume one (Machlup 1980) to an enumeration of the classes and qualities of knowledge. By "qualities," Machlup refers to notions of truth, beauty, and goodness as applied to knowledge, along with distinctions such as wanted versus unwanted knowledge and special kinds of knowledge such as forbidden or restricted knowledge.

Pertinent to the discussion at hand is a brief chapter entitled "Notions of Negative Knowledge." Machlup (1980, 144-152) identifies several candidates that may be termed negative knowledge: erroneous knowledge, which has been disproved and suspended; obsolete knowledge, which has lost relevance; alternative knowledge (unproved theories or claims); demoted or rejected sciences; controversial knowledge claims; questionable knowledge; vague knowledge; superstitions; illusive knowledge; and excluded possibilities and negative predictions. Several of these categories seem to overlap significantly. For example, alternative knowledge based on unproven or improvable claims seems identical to questionable knowledge. Controversial knowledge claims may be either "alternative" or "vague," in Machlup's terms. Machlup ultimately argues against the idea of negative knowledge altogether, saying that each proposed kind of antithesis to knowledge fits into some kind of knowledge or another. But he does not consider ignorance, a term that does not even appear in the book's index. As examined by Gross (2007), the concept of ignorance forms a core from which to develop a more elaborate concept of nonknowledge.

Two opposites of 'wisdom' are 'stupidity' and 'folly.' The terms seem synonymous on initial examination, except that 'stupidity' connotes lack of intelligence, or mental capacity, as well as lack (indeed the inverse) of wisdom. This double meaning leads to problems in library classification and subject headings. In this sense, the quaint-sounding

'folly' is more precise and less ambiguous than 'stupidity.'

Emerging from the above initial analysis is a separation of error and folly, with folly being a more entrenched form of compounded errors, just as wisdom involves a synthesis or compounding of knowledge. But while it may be tempting to suggest that nonknowledge mirrors the DIKW hierarchy, reflection shows that this is not the case. Errors can ensue even with the presence of accurate data, and misinformation and disinformation proceed not from a want of data but from distorting or incorrectly communicating information or knowledge.

6.0   Further extension of the nonknowledge concept

Beyond the notions just mentioned, it is possible to extend the concept of nonknowledge to the area (or areas) of unreason. Since the term 'folly' itself already conveys a form of unreason, we can include concepts involving a turning away from reason, logic, and knowledge as forms of "meta-folly." Such an extension is justified by the literature: Federman (1993) and Bataille (1986, 2001) both apply the notion of nonknowledge to the irrational. I prefer the word 'unreason' to the more common 'irrationality,' since the latter term can mean irrational behavior as opposed to the deliberate and intentional shrugging off of knowledge and rationality. It is only the latter process that Bataille recommends as nonknowledge. In *The Age of American Unreason*, Jacoby (2008) bemoans anti-intellectual attitudes, growing ignorance, and a sense that knowledge does not matter to people. Though she does not define 'unreason,' her usage also encompasses superstition and gullibility.

The terms proposed here as falling within the domain of nonknowledge are 'unreason' and its synonym 'irrationality'; 'absurdity,' 'ludicrousness,' 'meaninglessness,' and 'nonsense.' To the extent that knowledge depends on sense and meaning, their direct opposites, nonsense and meaninglessness, should fall in the category of nonknowledge.

Absurdity and ludicrousness are further articulations or refinements of nonsense and meaninglessness into philosophies or theories rejecting the comprehensibility of knowledge and a serious or scholarly approach to knowledge. In other words, they reject the premises of a system of organizing ideas from data through information and knowledge to wisdom. Disorder and chaos have figured in some explanatory scientific models and through metaphorical extension

these concepts provide conceptual tools for explicating modern art and drama (Demastes 1998).

If there is a unity of knowledge, as suggested by the various scholars cited by Miksa (1992), a review of the literature shows a similar unity of, or at least an interconnection between, the modalities of nonknowledge.

7.0   The accommodation of nonknowledge in library catalogs

Having articulated an expanded concept of nonknowledge, how would it be specified in a system for organizing knowledge, most specifically in a library and its catalog? Libraries after all are repositories of knowledge and information, even wisdom; and certainly the works in libraries contain data. Moreover, libraries are organized through classification and use subject analysis as expressed in headings to provide access to materials. The question is: where in such an institution would one find ignorance, stupidity, and other forms of nonknowledge, or at least knowledge about such nonknowledge? Addressing this question enables us to examine the contours of knowledge, especially in the context of library and information science. Focusing on the problem from the position of libraries and bibliography only sharpens the paradoxical nature of the inquiry about the place of nonknowledge in a system for organizing knowledge.

How then is nonknowledge organized or managed in library collections? To find the answer we must use not free vocabulary but Library of Congress Subject Headings (LCSH). It is possible to compare all terms relating to concepts on the 'knowledge' side of the equation, translate them into LCSH by providing the preferred term for concept, and provide their nearest possible opposites in LCSH. These are presented in Table 1 not to suggest that they are exact, complete, airtight, or ultimate binary opposites, but only approximate opposites, the best acceptable choices available in the English language, heuristically useful in finding information in a library. As in section 4 above, alternative opposites are provided when appropriate. A further note: In the discussion that follows Table 1 and throughout the remainder of the paper, I refer to the subject headings and call numbers, both Library of Congress (LCC) and Dewey Decimal (*DDC*), of the bibliographic records of certain books. These were located by using OCLC WorldCat during research for this paper from February to June 2008.

Knowledge	Nonknowledge
Awareness	Ignorance (Theory of knowledge)
Certainty	Uncertainty
Common sense	Common fallacies
Comprehension	Error; Curiosities and wonders; Uncertainty
Concepts	Common fallacies
[Data]	[Absence or want of data]; [Missing data]
Depth (Philosophy)	Comic, The; Absurd (Philosophy)
Facts (Philosophy)	Error; Errors; Errors, Scientific; Common fallacies
[Information]	Common fallacies; Disinformation; Errors
Information, Disclosure of	Deception
Intellect	Stupidity
Knowledge, Theory of	Ignorance (Theory of knowledge)
Learning and scholarship	Ignorance (Theory of knowledge); Stupidity
Logic	Folly; Stupidity; Fallacies (Logic); Error; Errors
Meaning (Philosophy)	Meaninglessness (Philosophy)
Meaning (Psychology)	Absurd (Philosophy)
Rationalism	Irrationalism (Philosophy); Magical thinking
Reason	Folly
Reasoning	Errors; Folly
Reasoning (Psychology)	Errors; Stupidity
Sense (Philosophy)	[Nonsense]
Skepticism	Credulity
Thought and thinking	Ignorance (Theory of knowledge)
Truth	Deception; Impostors and imposture
Wisdom	Folly; Stupidity

Table 1. Library of Congress Subject Headings for Knowledge Subjects and Nonknowledge Counterparts

Several things need to be pointed out about this table. 'Data,' 'information,' and 'knowledge' all lack subject headings, although 'Knowledge, Theory of' is a subject heading, as are 'Knowledge management' and 'Information science,' along with some terms not perti-

nent to the present discussion, such as 'Information retrieval' and 'Data reduction.' ('Knowledge' is also a subdivision under names of individual persons, e.g., 'Orwell, George, 1903-1950 – Knowledge – History,' referring to Orwell's knowledge of history). On the nonknowledge side, the absence or want of data lacks a term in English and therefore has no subject heading. ('Garbage' in a sense is the opposite of 'data,' but not fully or clearly enough to suffice as an opposite, as explained above.) Not that the lack of data is a meaningless notion for scholars. Indeed, Jacklin et al. (2006, 3), describing their research on children in public care, state that the "lack of data was itself a very powerful finding, and that understanding the baseline from which we work is a very necessary first step for professionals in developing supportive systems for pupils who are looked after."

'Nonsense,' the counterpoint to 'Sense,' also lacks a heading. The subject matter is treated in classification as an aspect of literature, 'Nonsense literature,' rather than philosophy, psychology, linguistics, or information science, even though the topic of nonsense has attracted some attention in its own right (see Stewart 1979). Steiner (1982, 93) has gone as far as to assert that nonsense has become "one of the greatest themes and modes of modern literature," as a result of the "self-containment theory of art" that follows logically from a philosophical concept of language as a system of intrinsically arbitrary signs.

Library of Congress Subject Headings distinguish between 'Error' and 'Errors.' The two terms are thesaurally distinct, belonging to different sets of broader and narrower terms. 'Error' is subordinate to 'Belief and doubt'; 'Knowledge, Theory of'; 'Relativity'; 'Truth'; and 'Truth and falsehood.' 'Errors' is the preferred term for mistakes, and is related to the term 'Fallability.' The scope note for 'Errors' states, "Here are entered general works on errors, including errors of judgment, observation, etc." 'Error,' in other words, means error in the abstract, or generalizations about error, while 'Errors' is used for specific errors. An example of a work cataloged with the subject heading 'Error' is *How We Know What Isn't So: the Fallibility of Human Reason in Everyday Life* by Thomas Gilovich (1991). An example of a work cataloged under 'Errors' is *Oops: 20 Life Lessons from the Fiascos that Shaped America*, by Martin J. Smith and Patrick J. Kriger (2006).

A further distinction emerging from subject headings is between errors, misconceptions, and deliberate trickery (the promulgation of misinformation). A misconception is an erroneous notion or presump-

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tion on the conceptual level rather than a simple mistake. The 1999 edition of LCSH contains the heading 'Errors, Popular' as a preferred term for blunders, popular misconceptions, misinformation, mistakes, popular mistakes, and popular error. This term itself is subordinated to 'Credulity' and 'Errors.' However, the preferred heading was later changed to 'Common fallacies.' 'Common fallacies' subsumes 'Misinformation' and 'Misattributed information.' The latter two terms appear not to be synonymous with 'common fallacies,' because misinformation may not be widespread at all and because 'fallacy' suggests error at the level of information processing rather than the truth or falsity of the information. Nevertheless, this distinction is lacking in LCSH, resulting in *The Dictionary of Misinformation* by Thomas Burnam (1975) having the subject heading 'Common fallacies.'

In this second, more detailed, analysis, 'Folly' and 'Stupidity' both appear, often together, as opposites to terms on the knowledge side of the chart. It is difficult to find the conceptual difference between them, as it is to differentiate among 'Reason,' 'Reasoning,' and 'Reasoning (Psychology)' on the knowledge side of the equation. The thesaural structure is quite confusing. 'Reasoning' is the most specific of the terms, subordinated under 'Reason,' itself a narrower term under 'Thought and thinking,' as is 'Reasoning (Psychology).' But 'Reason,' unlike the other terms just named, is also hierarchically subordinate to 'Intellect.' In any case, our concern here is with the nonknowledge side. 'Folly,' as noted above, lacks the potentially confounding association 'stupidity' has with mental deficiency; hence 'stupidity,' not 'folly,' opposes 'intellect' and anything within that conceptual or semantic category. For both terms to appear as subject headings suggests that the terms are used differently in the literature.

Another subject heading found in the bibliographic records of some works on stupidity is 'Mental efficiency,' which refers to cognitive ability as measured in tests. This expression sounds as antiquated as 'Mental hygiene,' which has been eliminated from LCSH. No entries for 'mental efficiency' appear in either the *APA Dictionary of Psychology* (2007), *The Dictionary of Psychology* by Raymond J. Corsini (1999), the PsycINFO® thesaurus online (EBSCO Host Research Databases, accessed May 12, 2008), or the *Thesaurus of Psychological Index Terms* (11th ed., 2007). However, it is still current in the psychological literature, as indicated in Capizzi's 2007 Ph.D. dissertation relying on a measurement of mental efficiency devised in 1993 by the Dutch psycholo-

gists Fred G. W. C. Paas and Jeroen J. G. van Merriboer (see Capizzi 2007). The term was popular in the psychological literature in 1911, when Arnold Bennett's self-help book, *Mental Efficiency and Other Hints to Men and Women*, appeared. The counterterm is 'Mental deficiency,' exemplified in the book, *Mental Deficiency: The Changing Outlook*, edited by Ann M. Clarke and A. D. B. Clarke (1958). That term has been replaced by 'Mental retardation,' even though the expression 'Mental deficiency' still appears in classification schedules. The heading 'Mental efficiency' eliminates the prior heading (maintained until 1978), 'Inefficiency, Intellectual,' as redundant, since 'efficiency' and 'inefficiency' are nothing but "different viewpoints on the same property continuum" (Lancaster 1972, 73). Despite this revision, 'Inefficiency, Intellectual' was actually replaced as a subject heading by 'Stupidity.'

The latter term does not appear at all in the either the *Dictionary Catalogue of the Library of Congress* (1928) or *Library of Congress Catalog: Books: Subjects* until the 1960-1964 edition. *Classified Library of Congress Subject Headings* (1972) provides the reference "*STUPIDITY* **SEE** INEFFICIENCY, INTELLECTUAL." Books on the subject were accommodated in LCC in the BF (Psychology) subclass with the call number range BF435-7. *Subject Keyword Index to the Library of Congress Classification Schedules, 1974* maintains that call number range but lists the subject heading as 'Stupidity (Psychology),' a heading inconsistent with that shown in the dictionary catalogs. But in 1979 the heading was changed to 'Stupidity' and the numbers BF 435-437 were dropped from the classification schedule for the B-BJ ranges published that year. From that year on, works on the subject, especially those written from a psychological standpoint, have been assigned a position of "general works" under the category of "Intelligence. Mental ability. Intelligence testing. Ability testing," corresponding to the call number BF431. The range for this subject category in recent editions of *Library of Congress Classification Schedules*, is BF431-3, followed by the note, "Mental deficiency, *see* RC569.7+." This note addresses the ambiguity caused by the use of the term 'stupidity' in previous literature to refer to mental deficiency.

8.0 The compass of nonknowledge

The following section reviews the literature of the various domains of nonknowledge and shows the links and interconnections between them. The goal is

to make nonknowledge a bibliographically useful umbrella concept by showing the positions occupied by nonknowledge in the universe of documentary knowledge.

8.1 Stupidity

The small but very interesting body of literature on stupidity can usefully serve as the focal point for an examination of the bibliographical organization of nonknowledge, since it brings out the most complex problems and provides an entryway to the other categories. Although it is an extremely obscure publication, *Understanding Stupidity* by James F. Welles (1986) is central to the literature on the subject. Welles, whose academic background is in zoology, examines stupidity from historical, psychological, sociological, anthropological, and political angles. Welles considers stupidity ubiquitous and all-encompassing. His comments on the consequences of the Renaissance suggest the tenor of his viewpoint: "There was stupidity in exploration, stupidity in invention, stupidity in statecraft, medicine, art, and war. Stupidity emanated like a burst of miasma from the stale closet of theology into the chaos and confusion of daily life. Whereas until this age, only Monks had been misinformed, Gutenberg's press made it possible for everyone to be provided with misleading information" (1986, 147).

Welles finds it remarkable that psychologists and historians have paid so little attention to stupidity, concentrating their research on knowledge, intelligence, and rationality instead. "Considering how little intelligence and how much stupidity there is in the world, really it is incredible that this imbalance in the literature has existed for so long" (Welles 1986, 29-30). On reflection it is understandable that research of all kinds, being intellectual work, carried out often in an institutionalized way by academically inclined persons, would foreground knowledge and intellectualism more generally, possibly resulting in blinders concerning nonknowledge. But Welles thinks these blind spots signify taboos on stupidity as a legitimate object of study. Welles's little-known book is important because it examines stupidity in and of itself rather than from the perspective of any individual discipline.

Writing in 1986, he cites only one book on the subject in English, Walter Pitkin's *A Short Introduction to the History of Human Stupidity* (1932), which he says is misnamed, since it is really about idiocy, meaning that in Welles's view it is about mental retardation.

Pitkin's odd, rambling book, which is very long (574 pages) despite its title, confounds the concept of stupidity as nonknowledge (related to ignorance and error) with that of mental deficiency ("dulness" [sic]). This distinction has commonly been blurred in earlier literature, as is the case in two German works cited by Welles, Leopold Löwenfeld's *Über die Dummheit: Eine Umschau im gebiete menschlicher Unzulängliekeit* (*On Stupidity: A Look at the Domain of Human Incompetence*, 1909), a classification of expressions of stupidity based on poor intellect and character (an excerpt of which appears in English translation, with commentary, in Bergler 1998, 165-167) and Max Kemmermich's *Aus der Geschichte der menschlichen Dummheit* (*From the History of Human Stupidity*, 1912), which Welles (1986, 31) describes as "a Teutonic cure for insomnia."

The designation of stupidity has long been tangled up with questions of mental ability because of the strong conceptual link between intellect and the *capacity for knowledge*. This connection concerns learning, or education (Marcum 2006). A current television quiz show matching adults against children is called *Are You Smarter than a Fifth Grader?*, not *Are You More Knowledgeable Than a Fifth Grader?* Viewers are presumed to understand that the point of the game is not to measure overall intelligence but knowledgeability: the mental store of facts, information, skills, and concepts learned in school. Paradoxically, educational systems, which promote knowledge and intellect, are also deeply entangled with stupefaction and can be held responsible for aggravating stupidity, as in the administration of tests (Bos 2007; see also Ronell 2002, Garcia 1997). Tests, both those on quiz shows and in education and elsewhere, are dreaded by those being tested because they expose stupidity--a form of humiliation on which the television show capitalizes.

The need to differentiate stupidity from low intelligence has been recognized by writers at least as early as Robert Musil in 1937 (see Musil 1990). The acceptance of this distinction by mainstream psychologists can be seen in the 2002 publication of *Why Smart People Can be So Stupid*, edited by Robert J. Sternberg, which looks at the problem from a contemporary research perspective in experimental and personality psychology. 'Stupidity' as the term is used in recent psychology refers to errors in judgment and reasoning resulting in "irrational behavior." "Irrationality" in this sense has also been approached by Mele (1987) from the perspective of contemporary analytic philosophy, using theories of action and intentional-

ity (central topics in the field) along with self-control (a topic rarely treated in recent philosophy) and self-deception.

Welles defines stupidity in terms of maladaptive responses to change. In stupidity, the response to changing conditions is either insufficient, usually because of self-deception and the tendency to stick to known ways of thought behavior, or the opposite: an overly drastic and radical response that is not informed by data. The failure to recognize change that requires response arises from the stupid tendency to insulate oneself from information about changes, which could help one devise an adaptive response. Although this conceptual approach begins with a psychological if not ultimately biological framework, Welles views stupidity not just as an individual phenomenon but a larger cultural and social phenomenon which has been a major component of history, serving as a crucial analytical lens.

The difference between stupidity and ignorance, for Welles, lies in the adaptiveness or functionality of not heeding available information. In ignorance, unlike stupidity, a socially and psychologically adaptive mechanism is at work in blocking the information from penetrating the cognitive system. In stupidity, the failure to absorb and process information works against one's best interest. (The quality of separating out what one does not want or need to know from other unknown or unknowable information also figures in the categories of nonknowledge considered by Gross [2007] and his predecessors.) Welles's discussion enables us to sharpen the differentiation between ignorance and stupidity: while ignorance may be seen to have some socially useful benefits (see Moore and Tumin 1949), stupidity appears to lack such virtues (but see Bos 2007).

Welles identifies a moral dimension of stupidity as it affects decision making and judgment. Humans have moral responsibility for their judgments and decisions, and stupidity can affect judgment and the decision making process. An entirely separate study by Garcia (1997) makes the identical point about stupidity's moral dimension. In what must be the first doctoral dissertation ever written about stupidity (apart from those that use the word to mean mental retardation), Garcia, an educationist, develops a line of reasoning originating in the theories of John Dewey, who believed that morality plays a fundamental role in intelligence. Garcia's argument is exactly the same as Welles's: humans have responsibility in making choices, so by avoiding responsibility, people *choose* to be stupid. Furthermore, Garcia finds stupidity in

political institutions and political behavior, in political ignorance and apathy, and "when false, or deluded, but strongly held political knowledge becomes an inflexible belief structure" (1997, 74).

Unmentioned by either Welles or Garcia is Paul Tabori's *The Natural Science of Stupidity* (1959). For Tabori, stupidity is the quality of not thinking well despite having a fully functioning brain. Similar to Pitkin's (1932, 3) statement that stupidity underlies ignorance, ill will, and "errors rooted in institutions," Tabori asserts that stupidity predates and presupposes ignorance.

Tabori's survey of the forms of stupidity covers cruelty to animals, short-sightedness in the agricultural use of soil (environmentally stupid practices), war, fashion, prejudice and intolerance, bigotry, snobbery ("bluenoses"), hero worship and the herd mentality, and bureaucracy. He devotes a chapter to the pomposity of titles, (e.g., Acting Assistant Doorkeeper of the U.S. Senate), forms of address, required attitudes of circumspection and deference, the absurdity of court ceremonial, etc.

He also considers folkloric beliefs, which might be labeled folk wisdom by some, to be a mode of stupidity characterized by wishful thinking. For example, the notion that grapes fed on gold and grew organically into gold was once popular throughout Europe. Citing reports of and theories about this phenomenon perpetuated by educated individuals and published in learned journals as recently as the 18th century, Tabori concludes that such alchemy was not merely an error. Rather, "the whole legend was nothing but the wish-dream of stupidity, the feverish play of greed-infected brains" (1959, 30).

Tabori further concludes that stupidity has its origins in the fear of knowledge, and in doubt and ambivalence about it. This notion is similar to Welles's definition of stupidity in terms of overreaction or underreaction to change, and also calls up censorship and the banning and burning of books. Tabori attributes both conformity and antisocial behavior to stupidity. With such a broad range of factors cited either as the cause or result of stupidity, it is no wonder he sees stupidity as omnipresent and unending, a view later expounded by Welles.

More recent commentators, such as Ronell (2002) and Boxsel (2003), are less gloomy but find stupidity an important topic nevertheless for philosophical and intellectual speculation. Ronell's book falls into the domain of cultural criticism and analysis. Subjecting the matter of stupidity to intense scrutiny through literature, philosophy, psychology, and culture, she

opens up and analyzes topics that are somehow hidden in the surface of life, since stupidity in her view is untheorizable and always beyond the boundaries of discourse and inquiry. Not only have philosophers failed to deal with the problem of stupidity, she argues, but philosophy itself exemplifies the height of stupidity—not in its arrogance, pomposity, or ponderousness, but in its very manner of examining subjects, by living in enigmas and beginning investigations "in a mood of stupefaction." She continues (2002, 68):

> There would be no philosophy without this abjected and largely repressed condition of its possibility. One could even pursue the point further by observing that the more successfully repressed philosophy is, the closer it comes to the core stupidity. Who has not recognized certain philosophical assertions as being stupid in the end? Arguably, there is nothing more stupid, finally, than Hegel's "absolute knowledge"—a state or projection that, utterly untenable, would require knowledge to be immanent, finally, to itself. Fundamental stupidity has not really been upgraded to the level of a problem . . . . On some level, then, stupidity has no legitimate status in our discursive encounters.

Appearing about the same time as Ronell's book is *The Encyclopaedia of Stupidity* by Matthijs van Boxsel (2003). (Boxsel first published his project in serial form, in Dutch, beginning in 1986, and a complete edition of his *Encyclopedie van de Domheid* was first published in that language in 1999.) Boxsel's book is not really an encyclopedia at all despite its title, but rather an assemblage of short chapters forming a pastiche or mosaic, following no discernable sequence or organizing structure. Like Ronnel's book, it is experimental in format. Though scholarly in tone, it does not use any bibliographical apparatus, and covers such pop culture figures as Bugs Bunny and Sylvester Stallone along with "serious" writers and artists. Like Ronell too, Boxsel examines the riddles and paradoxes of stupidity. "Stupidity is unfathomable; it can only be defined negatively, by contrast with another quality or as a defect .... Stupidity is a frontier we invariably miss—only in retrospect do we realize that we have crossed it" (Boxsel 2003, 29). On the definition and cultural significance of stupidity, he writes, "Stupidity is the talent of acting unwittingly against your own best interests, with death as the ultimate consequence. On the one hand, stupidity poses a threat to our civi-

lization; on the other, stupidity is the mystical foundation of our existence" (p. 31).

Crucial to the investigations of both Ronell and Boxsel is the Austrian novelist Robert Musil's 1937 lecture "Über die Dummheit" ("On stupidity"), which appears in English translation in the collection of his writings published as *Precision and Soul* (1990). Musil was an early commentator to distinguish sharply between mental deficiency and stupidity, and was the first to argue for the study of stupidity as a serious and legitimate topic. But he cannot pinpoint the essence of stupidity, and considers it incomprehensible and inexplicable. To call something "stupid" is "the lowest level of judgment that has not crystallized enough to be formulated, a criticism that is still completely undifferentiated, which feels that something is wrong but is not able to indicate what. Use of [this epithet] is the plainest and worst self-protection there is" (Musil 1990, 278). We may not know what stupidity is, but we all know that it is an insult, a term of abuse.

This insight reveals much about the literature purportedly on stupidity: stupidity is something disliked by the person who calls it stupid. Rather than defining stupidity and critiquing it analytically and rationally, the identifier of stupidity piles up examples of instances of stupidity. The stupidity is supposed to be so obvious that it needs no further explanation. This can be seen in the books political commentators write about their ideological enemies: *Rush Limbaugh is a Big Fat Idiot and Other Observations* by Al Franken (1996) is rejoined by *Al Franken is a Bucktoothed Moron and Other Observations* by Joseph Mauro (1997). *Stupid White Men—and Other Sorry Excuses for the State of the Nation!* by Michael Moore (2001) is countered by *Michael Moore is a Stupid White Man* by David T. Hardy and Jason Clarke (2004). *Surrounded by Idiots: Fighting Liberal Lunacy* by Mike Gallagher (2005), versus *Bush-whacked: Chronicles of Government Stupidity* by Leland Gregory (2005). Additionally, the politics of the adversary is accused not of stupidity but of treating the citizenry as stupid in *They Think You're Stupid: Why Democrats Lost Your Vote and What Republicans Must Do to Keep it* by Herman Cain (2005). Finally, the collective intelligence of the public itself is challenged in *Just How Stupid Are We: Facing the Truth About the American Voter* by Richard Shenkman (2005).

The indictment of stupidity is used by the left and right wings of the political spectrum to vilify and shame each other. Even though many of the books are intended as satire, it is possible to view the attri-

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bution of stupidity in others as a defense mechanism (Bergler 1998). The phenomenon of both sides accusing each other of being stupid makes it difficult to get to the truth of the matter. Such name-calling, which goes beyond politics into all realms of opinion and taste, creates an appearance of ridiculousness and immaturity. Burt (2005-2006, 30) sees the effect as "an advanced Orwellian double-speak in which the stupid masquerades as the smart, the zealot as the skeptic."

9.0 Conclusion to part one

If knowledge can be thought of as the control, mastery, and integration or synthesis of information, leading to wisdom, then nonknowledge can perhaps be seen as resulting from one or more breaks in this chain. Some possible causes of these breaks are the failure to integrate information, the misapprehension of information causing it to be misread, and a lack of access to information.

A rather complex vocabulary adheres to nonknowledge, and it seems possible to discern a hierarchy from simple to more compound, complex, and entrenched modes of nonknowledge, even though it does not form a perfect causal chain. Nonknowledge can be identified and specified with subject headings. Terms associated with knowledge at all levels can usually be matched with approximate counterparts in the domain of nonknowledge. Thus, a taxonomy and nomenclature of nonknowledge can be outlined and described.

Yet in a significant sense nonknowledge is not a domain at all but an aspect or facet of the knowable world. The "lack of boundaries marking off the stupid" noted by Burt (2005-2006, 11) applies to all categories and forms of nonknowledge, which inhabit all the same domains as those presumably guided by data, information, knowledge, and wisdom: society, politics, warfare, science, art, literature, and popular as well as academic culture. Nonknowledge cannot effectively be quarantined.

The second part of this essay, which will appear in a later issue of *Knowledge Organization*, will cover the concepts of folly, errors, common fallacies, and unreason. It will contrast the literature *about* the various areas of nonknowledge to works *of* nonknowledge, including propaganda and fraud, and conclude with a discussion of larger theoretical and paradigmatic contexts as well as a consideration of cognitive authority in comprehending nonknowledge and the responsibilities of libraries in providing access to manifestations of nonknowledge.

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