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# Knowledge Growth as Facilitated by Libraries and Librarians

JOHN M. BUDD
University of Missouri, EUA

his essay is intended to present some ways by which libraries can assist in fostering knowledge growth. A number of observations will be offered, but many questions will be posited as well. In short, the essay does not pretend to have answers to all possible questions that may be related to knowledge growth. In order to accomplish the goals of the essay, several philosophers and their positions will be invoked; this is not to say that all positions will be treated equally, or will be agreed with. That said, the matter of knowledge and knowledge growth is both a philosophical and a practical one, so philosophers' work will have to be addressed. At the outset, the most fundamental issues related to knowledge will have to be tackled.

A starting point for consideration is offered by Robert Audi, who states, "A false belief is not knowledge. A belief based on a lucky guess is not knowledge either, even if it is true... What is not true is not known" (emphasis added) (Audi 1995, 215). The first question to be asked is, what are the implications for libraries of all types? "All types" of libraries is mentioned because knowledge growth, here, is by no means limited to scientific or scholarly knowledge (although those kinds of knowledge growth are important and are

reliant upon libraries and librarians and their contributions). The building of knowledge on the parts of individuals (pertinent to public libraries and librarians) and especially students (pertinent to school and academic libraries and librarians). It should be said, while Audi's words could be interpreted as referring to topics such as fake news and alternative facts, those topics will not be covered in depth here. One additional comment is that of Fred Dretske, who says that such things as disinformation and misinformation are no more *forms* of information than rubber ducks and decoy ducks are *forms* of ducks (Dretske 1981). These comments will suffice for the present time.

The next step has to be the act of defining knowledge (since we have just addressed what knowledge is not). The somewhat folk definition holds that knowledge is justified, true belief. While this may suit colloquial purposes, a more complete definition is needed. Keith Lehrer offers a technical definition: "S knows that p if and only if (i) it is true that p, (ii) S accepts that p, (iii) S is completely justified in accepting that p, and (iv) S is completely justified in accepting that p in some way that does not depend on any false statement" (Lehrer 1990, 18) There are two features of Lehrer's definition that require more attention. One is the matter of justification. Philosophers are about what constitutes justification for beliefs, some saying that there are foundational grounds (including empirical grounds as foundational). Foundationalist beliefs depend on non basic beliefs being justified by basic ones. Some philosophers are of the opinion that things like coherence theories of justification offer more effective reasoning; that is, there are no justifying basic beliefs, but knowledge is a coherent set of reinforcing beliefs. The issue of justification raises some particular questions for libraries and librarians:

- Should librarians be engaged in a justification process when providing services to community members?
- If there is a policy of neutrality (that of making no judgments regarding content), does that run counter to the growth of knowledge?

- Is there an ethos that should guide professionals in making decisions (in general)?
- What then must we do?

The questions are not rhetorical; they require consideration if the profession is to take knowledge growth seriously. Librarians must think about the ways the collections, access mechanisms, and services can provide justification for beliefs.

Another major element of the definition is truth. If anything, truth is more complicated than justification. It must be noted that truth and justification are related; the one sometimes depends on the other for its legitimacy. While there is not space here to delve deeply into the nature of, and quest for, truth, some treatment is necessary. The principles of truth have been stated succinctly by Burgess and Burgess, and their forms can serve us as effective in libraries:

- (1) To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it's is, and of what is not that it is not, is true [borrowed from Aristotle].
- (2) *Truth is agreement of thought with its object* [borrowed from Descartes and Kant].
- (3) Realist or correspondence theory: *A belief is true if it corresponds to reality.*
- (4) Idealist or coherence theory: *A belief is true if it coheres with other ideas.*
- (5) Pragmatist or utility theory: *A belief is true if it is useful in practice* (emphasis in original) (Burgess and Burgess 2011, 2-3).

These elements do not exhaust the possibilities for definitions of truth, but they can suffice for the present purposes. Richard Kirkham links truth and justification, so that we can see clearly the connection: "theories of justification answer questions like, for any given proposition (or belief or sentence, etc.), when and how are we justified in thinking that the proposition is probably true?" (Kirkham 2005, 25) In this we can see the relationship between justification and truth.

Another element of knowledge, according to some philosophers, is the reliability of our beliefs. Colin McGinn writes that to say a "person S is globally reliable with respect to a range of propositions is to say that S can discriminate truth from falsehood within that range of propositions" (McGinn 1999, 9). [As we will soon see, reliabilism also applies to conceptions of social epistemology.] Under one idea of reliabilism, beliefs are caused by reliable cognitive processes. A reliable cognitive process is one that produces a high percentage of true beliefs (perception, memory, and testimony are elements of a reliable cognitive process). [Somewhat related to reliabilism, I will admit that I am a realist. Among other things, I am committed to believing that there is a world that exists independent of our thoughts. That said, there are entities—of human creation—like texts and documents that require interpretation. Part of the realism holds that we humans are capable of sharing interpretations. Reliability is one factor in this realism; coherence is another factor.]

There are numerous paths to knowledge, as the above definitions indicate. The paths frequently point to ways to apprehend what statements or beliefs can count as signifying states of knowing. One example of an alternative (and this is an alternative that deserves considerable attention) is the critical realism program of Roy Bhaskar. His idea builds upon the traditional realist on, and is opposed to reductionism (for instance, reduction to the structure of a claim) or positivism (specified either in linguistic or empirical evidence). According to Bhaskar, critical realism is a navigation between what he calls "naïve realism" (a faith in everything having a simple, realist explanation) and idealism (including empiricism, positivism, and relativism). Critical realism, for Bhaskar, is a fitting conceptual and practical stance for the social sciences, as well as for the natural sciences; its breadth is sweeping and embraces human action as well as natural phenomena. Critical realism is grounded in an ontology—a new ontology that takes into account the combination of the world's existence and human perception of the world, which is real. There are social conditions that relate the reality to the perceptions. This notion raises another question:

Are libraries part of those perceptions? Are libraries and librarians participants in the program of critical realism?

Bhaskar elaborates on his points: "Knowledge follows existence, in logic and in time; and any philosophical position which explicitly denies this has got things upside down." (Bhaskar 1997, 17) For libraries and librarians we can draw an inference: Thinking about access and service follows the ontology of the institution and the community. This means that the library is a reality, has a being, which must be recognized as a means to knowledge growth. The reality extends to the services and to the very communities serviced by the library. Accepting the ontological reality of libraries is essential for the service imperative of libraries (and by librarians) to assist people with evaluation of propositions and claims and with the development of justified, true beliefs.

We are now situated with the background of knowledge, its definitions, and some conceptions of theories, to delve into the principal thesis of this essay. The theory of social epistemology is, perhaps, the most efficacious for librarians to adopt for themselves and for their libraries. If social epistemology (SE) can be consolidated into a single question, that question would probably be: How do we make sense of the (social) world? That question is actually too simple, though, since intellectual and social authority have to be given foremost consideration. There are social and cultural relationships that influence the answer to the fundamental question, and the matter of social control (i.e., in whose interests is control exercised—the many or the few?). In order to apply SE to libraries one feature of social life must be acknowledged: there may be agonistic (argumentative, aggressive, strained) relationship among differing groups. There needs to be mechanisms to resolve to agonism if knowledge is to emerge and develop.

Steve Fuller, a sociologist of science, asks a pointed question at the outset of his book, *Social Epistemology* (the first edition of which was published in 1988): "How should the pursuit of knowledge be organized, given that under normal circumstances knowledge is pursued by many human beings, each working on a more or less well-defined body of knowledge and each equipped

with roughly the same imperfect cognitive capacities, albeit with varying degrees of access to one another's activities" (Fuller 2002, 3). The sociologist in Fuller is evident in his question; the human activities are more prominent than are the epistemological ones. Fuller attempts to answer his own question: Knowledge growth depends on sociological considerations, and includes a normative character that transcends the individual-based epistemology in favor of a more collective-based one. A scientist, Fuller maintains, has knowledge to the extent that colleagues acknowledge that scientist's work and its validity. In this conception, the group acceptance is of utmost importance. Hypothetically, if a scientist posits an idea based on her research, but the community ignores it, she does not have knowledge. In more general epistemological terms, this answer of Fuller's is problematic; it does not allow for contributions that do not have an impact. And it must be accepted that the absence of acceptance may be due to the non-paradigmatic nature of the scientist's work (Thomas Kuhn 1970).

Fuller also speaks to the social acceptance of claims and propositions and describes who adopts the claims:

- (A) those who were motivated to propose the claim in the hope that they might benefit from its acceptance [motivators];
- (B) those who actually benefit from the claim's acceptance [benefiters];
- (C) those who make use of the claim in the course of proposing knowledge claims [*users*] (Fuller 2002, 12).

The conception is a kind of pyramid that signals levels of development and acceptance. [Fuller's suggestion is not dissimilar to the suggestion of Everett Rogers (2003) and the development and adoption of technology.] The statements by Fuller indicate, as he admits, that he is drawn to, among other things, Foucault, behaviorism, and rhetoric, all of which share the ultimate end of producing knowledge that leads to results. This is an odd mixture of influences, though, with behaviorism seeming to be something of an outlier. Speaking personally (and as a realist), I reject behaviorism as false and falsely conceived. However, elements of Foucault (particularly his historical

analysis) and rhetoric (especially as analyzed as speech acts) are consonant with the realist beliefs.

To summarize Fuller's SE, his claims depend heavily on the exchange of information. The term originated within librarianship with Margaret Egan and Jesse Shera. When they coined the term "social epistemology," they said that it entailed "production, distribution, and utilization of intellectual products" (Egan and Shera 1952,126). Their conception concentrated on the actions that take place in libraries, more than the knowledge-based work of librarians. As such, theirs is more of a sociological program than a purely epistemological one (and, so, is not unrelated to that of Fuller, although it took Fuller several years to acknowledge the work of Egan and Shera). In part, the sociological tradition over the last several decades has depended upon the sharing of information so that it can be evaluated, accepted, or discarded. Another desideratum in SE over the years has been the ignoring of the work in our field of Patrick Wilson (1977). In 1977 he wrote Public Knowledge. Private Ignorance, which could be considered the first full-length work on SE. Wilson focuses on cognitive authority in his work, and this emphasis has close ties to another SE program.

Alvin Goldman, who takes a philosopher's viewpoint, has a different take on SE. He writes, "An epistemic system is a social system that houses a variety of procedures, institutions [including libraries], and patterns of interpersonal influence that affects the epistemic outcomes of its members (emphasis added)" (Goldman 1999, 8). Goldman stresses the institutional roles in the formation of SE for a number of reasons. Not the least of which is that institutions that include education, museums, libraries, and law are sources of evidence, claims, propositions, and (as will be covered momentarily) testimony. All of these are social institutions, bodies that depend upon society for establishment, maintenance, and verification. Goldman further says, "In what respects is social epistemology social? First, it focuses on social paths to knowledge... Second, social epistemology does not restrict itself to believers taken singly...Third, instead of restricting knowers to individuals, social epistemology may consider collective or corporate entities...

as knowing agents" (Goldman 1999, 129). Another question that arises related to these thoughts is whether libraries should be fostering SE in the ways Goldman envisions. This is a question to be taken seriously. We could say that libraries are indeed social institutions, but the contribution to epistemology needs to be examined carefully.

As is stated above, evidence is a major factor in SE. According to Goldman, evidence is possessed by an epistemic agent and is constituted by social elements. Communication by others is a primary source of evidence in SE. This can be print on a page, images on a screen, or what people say (their opinions on matters, that have some backing that is veritistic, or truth bearing). An example of the veritistic component has to do with interpretation of the news that is reported. To what extent do these news reports and commentators foster true beliefs? Do libraries assist with the interpretation, and, if so, to what extent and in what ways? Goldman advocates for what he refers to as "social veritistic epistemology," where there is a normative purpose of evaluation practices and beliefs along truthbased lines which have knowledge consequences. Libraries and librarians must be concerned with the knowledge consequences that will have an impact on a community. This said, even as libraries are themselves SE-related institutions. There are other questions that librarians should take time to consider: Where does knowledge begin, with belief or with truth (the question seems to be a chicken-and-egg type of predicament)? Which beginning typifies libraries' operations regarding collection management, access, and services?

To return to a previous point, social sources of knowledge can include many processes and interactions. One of the principal sources is testimony. This means more than simply accepting what people say, but assessing how discoveries are made, means of examination, structures of messages, and communication of meaning. [This notion even applies to an extent to Fuller's program; the scientific community has a say in what passes for knowledge.] Libraries may be among the most prominent sources of testimony, although it may be said that the testimony is largely indirect. The

collections and the access mechanisms embody what people say. Goldman reminds us, though, that the speaker may be reporting truthfully or may be distorting the message. Again, we can consider news reporting and commentary. Does the library have a responsibility to distinguish among speakers' motives? Should librarians become cognizant of speakers' ends, as well as the means they use to communicate? These questions actually get to the heart of the purpose of many libraries. Perhaps more to the point, these questions get to the matter of policy and the authoritative guidance that purport to lead libraries. Should we question association (American Library Association) policy, and what should be the bases of the questioning?

Goldman writes, "In its simplest form, justificational reliabilism says that a belief is justified if and only if it is produced (and/or sustained) by a reliable belief-forming process or sequence of processes. For a testimonial belief to be justified it suffices that the general process of accepting the report of others mostly yields truths" (Goldman 1999, 129). Goldman's statement is reminiscent of the requirement of cognitive authority presented by Patrick Wilson. His words also suggest an assumption: Everyone who is not impaired is capable of reliable cognitive processes. Why, then (we can ask), do people hold beliefs that are false? An answer that arises is that people have commitments to beliefs (that may even include cognitive dissonance) that are not supported by evidence, including veritistic testimony. The consumer of evidence and testimony has certain responsibilities, even though they are not always met. There is a pervasive need for evaluation on the part of the consumer (or library user). In this way the consumer exercises some control over content, by means of selection, choice, attention, etc. Ideally, the consumer has broad interests and awareness so that she can become open to testimony or other SE sources of content. It must be admitted that attention can be narrow and limited, though.

The foregoing discussion of SE and especially testimony raises even more questions relating to libraries and librarians. Libraries are sources of SE content, so:

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- How should libraries select and manage content?
- How should libraries and librarians present content to their communities?
- Is all testimony equal (this is not so according to the tenets of veritistic SE)?
- What services should exist in libraries?
- How must librarians prepare themselves to provide services in an SE context?

These are not intended to be simple questions; in fact, they should lead professionals to challenge the authority and history of librarianship. Before the questions can be answered, however, a bit more must be said about background and means to provide answers.

For some of the background, we can turn to the thinking of historian Fernand Braudel. Braudel was influenced by, among others, Lucien Febvre and Marc Bloch. He states, "for me, history is the total of all possible histories—as assemblage of professions and points of view, from yesterday, today, and yesterday. The only error, in my view, would be to choose one of these histories to the exclusion of all other" (Braudel 1980, 34) While Braudel never considered SE, his admonition is related to veritistic testimony; judgment must be made of the possibilities so that an efficacious interpretation can be made. Braudel's words suggest a proposition: For knowledge to grow and develop, and to be vibrant, libraries must continue to be "records" of what is said and written. Also required is a body of professional librarians who embrace this purpose and that is committed to the longue durée, the extended view of the history of all fields and disciplines. In other words, there must be an expansive choice available and the wherewithal to make selections. The short view, as opposed to the longue durée, is intensely problematic, as Braudel notes. "[I]n exclusively observing the narrow confines of the present, the attention will irresistibly be drawn toward whatever moves quickly, burns with a true or false flame, or has just changes, or makes a noise, or is easy to see" (Braudel 1980, 37). Braudel's warning is a wise one; what are the implications of his words for libraries?

Once again, the present state of news comes to mind; the historical view is essential to adopting the *longue durée*.

For individual and collective knowledge to grow there must be in place the social elements that allow for the judgment of justification and veritism. Much of the popular media feed only the short view. Libraries are essential for the development of knowledge through the assessment of what is said and written. This essay is intended to prompt all readers to contemplate what SE can offer to the future of libraries—in combination with the imperative of taking into account the longue durée. At the heart of the suggestion offered here is that the ultimate goal of informational use is the quest for truth. The goal is avowedly controversial, but it is in keeping with the spirit and letter of SE. In the interest of correcting an earlier statement of mine, I must say that I previously have written, "The library does not inherently or necessarily provide a reliable process [to knowledge]. A major component of the process is not the library's, it is the individual's" (Budd 2004, 365) By employing SE, however (thanks to Fuller and, especially, Goldman), the component is not just the individual's, it is also the group's.

What libraries and librarians offer, is has been stated, is the "record." This embodies the long view. The potential for assessment of claims, propositions, evidence, and conclusions resides within the library, within the vital assistance of librarians. By these means, members of a discipline or a community can determine the veritism and reliabilism of the stated claims. One might say that the library is at the center of knowledge growth.

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