Understanding the Language of Information Literacy

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Abstract

Understanding the language of information literacy is necessary for the effective use of library resources. The results of a recent study indicate that undergraduate students lack such an understanding, and the authors recommend that librarians, working with faculty, reassess information literacy terms (Schaub et al., 2017). This article examines what is involved in reassessing these terms by drawing on several ideas from the philosophy of language, which provides a foundation for grasping the semantic challenges librarians face in educating users. Any reassessment of information literacy terms should recognize their ordinary and specialized use and aim for the holistic expression of core concepts, however complex they may be.

Introduction

Semantic or meaning holism is a theory of knowledge. There are many varieties of the theory, but the basic idea is that we do not know things in isolation. It is also a very old idea, having first appeared in Plato's *Theaetetus*. In that dialogue, Socrates asks a series of questions about how we understand the world around us. He has us consider a wagon, or something concrete, and he has us consider words, which are abstract. In both examples it seems clear that, while wagons are comprised of timbers as words are of letters, we neither know a wagon or words by their constituent parts. Rather, we know them as wholes – wholes that interact in complex ways with the parts of which they are composed.

According to Schaub, Cadena, Bravender, and Kierkus (2017), something very much like sematic or meaning holism is essential to the effective use of library resources among undergraduate students. However, the acquisition of the meaning of terms that are associated with information literacy, such as *source*, *database*, and *peer review*, remains difficult to determine, as the study shows that library instruction would seem to have little to no influence at all. This is an important finding; chiefly because the authors report that by the time students reach their senior year, their proficiency with these terms would suggest some formal influence on the part of librarians and yet, as this study demonstrates, "library instruction does not significantly enhance student understanding" (p. 291). It is also important because both library instruction and library use have been positively correlated with academic achievement (ACRL, 2016a; Haddow & Joseph, 2010; Massengale, Piotrowski, & Savage, 2016; Soria, Fansen, & Nackerud, 2013). These findings, taken together, suggest that students seem capable, on the one hand, of grasping a particular set of ideas that form the requisite concepts of research on their own while, on the other, suggest that library instruction and use are value-added components to student success. This makes for some confusion. Even less clear is whether the information literacy terms the students seem to understand are known in isolation or as conceptually integrated, part of the complex whole of academic libraries.

The goals of this paper are continuous with the Schaub et al. study, mainly in that it is critical to assess whether the language of a discipline is understood and, if it is, to what extent it is possible to draw conclusions about that understanding. The authors suggest that the difficulties associated with comprehending information literacy terms be addressed (i) by informing teaching faculty of the issue, (ii) by reassessing the language

librarian's use in consultations and in the classroom, and (iii) by creating a glossary of information literacy terms for inclusion with course materials. These are good suggestions, but the main focus of this paper will be in examining the implications that come with (ii) or reassessing the language of information literacy. What is involved in such a reassessment, and to what extent can the philosophy of language help in that endeavor? With the Schaub et al. results as a basis, this paper will outline several difficulties that emerge when a reassessment of library language aims to accommodate an understanding of information literacy in more general terms, as doing so is a threat to holism. Rather, the differentiations language allows are essential to the kind of success we strive for in *any* teaching where conceptual integration remains the overarching ideal. The motivations for embracing the complexity of the language of our discipline quite likely form the basis for the reassessment Schaub et al. proscribe, given their commitment to holism. The paper concludes with two reasons for adopting this kind of complexity, both of which ought to be considered uncontroversial.

An Overview of Schaub et al.

Threshold concepts in information literacy rely on a set of terms used by librarians and teaching faculty (ACRL, 2016b). The degree to which students understand these terms is essential to their becoming information-literate. If a student is information-literate, then her conceptual grasp of libraries has, in effect, crossed a threshold and is never quite the same again.

The idea for the study began while the authors were writing and editing lesson plans related to teaching information literacy threshold concepts. The language of

information literacy is also, to some degree, the language that teaching faculty regularly use in course syllabi. By measuring how well students grasp these terms, the authors sought to develop more effective integration practices both in the library and across campus. Drawing on 14 commonly used information literacy terms, the authors distributed a survey to a random sampling of 400 undergraduate classes at Grand Valley State University, a comprehensive state-supported school with an undergraduate enrollment of 21,235 students. Apart from demographic questions, the students were asked if they had previous library instruction and to select the correct definition of common library terms. 773 responses were collected with Freshman and Senior respondents leading across class levels, 207 and 209 respectively.

The authors found that previous exposure to library instruction ranged from 59.09% (Sophomore), to 62.79% (Junior), to 70.73% (Freshman), and to 71.155% (Senior). Regarding the 14 information literacy terms, comprehension ranged from a high of 87.1% for the term *citation* to a low of 22.3% for the term *stacks*. No statistically significant association emerged, according to the authors, between a student's understanding of a term and whether or not they had received library instruction. An analysis of each term (citation, bibliography, keyword, full text, abstract, database, peer review, journal, catalog, open access, subject heading, scholarly, source, stacks) revealed that, while library instruction had no discernible impact, as students advanced toward graduation they more frequently identified the correct meaning of a given term, although this finding was not consistent for all terms. In particular, the terms *peer review*, *journal,* and *scholarly* appeared resistant to both library instruction and class level.

The authors suggest that the substantive grasp and use of information literacy terms in a manner consistent with the threshold concepts with which they are associated can only occur when all participants understand the meanings of those terms, which implies a holistic stance. The results of the survey suggest that both library instruction and the language we use in describing the practice of information literacy require careful reflection, mainly in their perceived impact. The authors conclude that many librarians quite likely assume too much when attributing understanding of information literacy terms to college students and sketch three strategies, enumerated in the introduction above, for addressing the problem.

Literature Review

Schaub et al. rightly note that much of the library literature devoted to language meaning and use is concerned with website usability as it relates to the information seeking behavior of students. However, the barriers that jargon or technical language impart certainly predate website usability studies and are not limited to librarianship. Naismith and Stein (1989) focused on the language that librarians use in reference interviews and in library handouts, two practices that remain with the profession. They found that students misunderstand roughly 50% of library terms. Mount (1966) observed that the degree to which a reference transaction is successful depends largely on whether or not the library terms are understood. Similarly, Nicholson (1958) found that librarianship relied heavily on abbreviations and acronymic language and that this reliance shifted in magnitude depending on the context. The contextual nature of jargon, according to Fenske (1986), is not only widespread among librarians, but it should also be taught in

library schools in order to enhance the future working conditions of librarians and the users they are likely to assist, in this case health professionals.

More recently, Taylor (2008) described an effort by business librarians and teaching faculty in creating a business vocabulary workshop with the goal of fostering greater critical awareness of both the discipline and the tools necessary for accomplishing specific objectives. Several studies place similar emphasis on the importance of the integration of meaning. Coffey and Lawson (2002) chose to localize the issue to library administrators and found that when making decisions that bear on the understanding of technology terms, it is essential to avoid assumptions that suggest a common ground when such terms are being used and to instead pursue a spirited line of questioning until both meaning *and* use of technology terms are fully understood. Adedibu and Ajala (2011) surveyed over 2,000 undergraduates at Ladoke Akintola University of Technology in Nigeria. They found that students desired greater clarity of library language, whether by definition in class or in handouts. In addition, the students indicated that library language could be more accessible or user-friendly, thus reducing the need for explaining the meaning of a resource or service. After noticing hundreds of unclaimed printouts of article abstracts, Imler and Eichelberger (2014) narrowed their study to the meaning of *abstract*, a decidedly library term, and *full-text*, which is, arguably, a more accessible, user-friendly term. The authors found that 75% of the undergraduates surveyed could correctly identify the meaning of *full-text* (50% for the term *abstract*), but only 25% of the study participants could correctly retrieve the full-text of an article across several different databases, which suggested less of an issue with language and more so with database design. Candido (1999) argued that library language, far from obscuring

meaning, remains both legitimate and necessary, precisely because it has the capacity to communicate exact meanings while simultaneously inculcating newcomers to a discipline. Hutcherson (2004) limited his observations to newcomers – freshman and sophomores who had completed a seven-week library skills course – and found that students had greater difficulty in recognizing library language (Boolean logic, bibliography, controlled vocabulary, truncation, descriptors, abstract, article, and citation) than other, more commonly used terms (plagiarism, copyright, table of contents, editor, call number, and journal) that are associated with library work.

The existing research does not cohere into ready perspective, mainly because the approaches seem only tangentially concerned with semantic holism. This is likely due to the ineluctable tie of the meaning of a term, on the one hand, and the use it inspires, on the other. A recent study by Calvert (2015) considered the relative worth of some information resources, in this case a discovery service, against their perceived use. Concerns about usability, distinguishing among material types in a results lists, and general information overload in a typical search are all factors that can drive down discovery service use. Meadow and Meadow (2012) analyzed discovery service transaction logs and found that most users continue to rely on less sophisticated search techniques while conflating a discovery service with more specific requests, such as library hours. What do users expect of a discovery layer whose manner of description is *find it* or *search everything*? The answer to this question is largely speculative, but the surfeit of usability testing in the library literature suggests that a focus on the meaning of such phrases as *find it* or *search everything* is necessary. A primary driver of search success involves the language that governs the resources offered by libraries. Such

language requires a proper fit between the user and the resource. In the next section, some consideration will be given to several core ideas in the philosophy of language concerning meaning and use.

Some Relevant Ideas from the Philosophy of Language

When we attend to the language we use it is often in an attempt to make ourselves better understood. Doing so entails a belief that words matter in ways that clarify the ideas we aim to capture. It is not difficult to imagine, in ideal conditions, that the words we use can achieve an emergent quality, where an understanding develops that is somehow greater than the words used to express it, but which could not occur without the words themselves. But, if pressed to describe ideal conditions and to give an account of their satisfaction, then what might such conditions look like? As mentioned earlier, Plato would have it that words are tied up with the world in such a manner that meaning cannot be isolated from the whole or complex of which they are composed.

Consider the strong commitment that language places on how we understand the world. When we use words we are, in effect, making claims on the world – claims which the world *must* satisfy. This is a rather straightforward way of characterizing the relation between language, on the one hand, and reality or the world, on the other. But, why *must* the world satisfy our linguistic claims? For no other reason than most, if not all, of us tend to use words that we believe are an accurate representation of the very world those words aim to capture. Words have the added value of context dependence, and their semantic utility depends largely on reasonable application and cooperation among language users. The same strong commitment that defines our beliefs in the purpose of

language must contend with another indefatigable force – its ordinary, everyday usage. It is quite useless to employ a term that is known only to oneself or a handful of others. This is widely viewed as an argument against the possibility of what Wittgenstein (1958) called a *private language*. The insistence that the ordinary use of a term is what that term means is considered to be the central idea behind Ordinary Language Philosophy, which originated in the late 1940s at Oxford University. For those sympathetic to this idea, the ordinary use of a term not only fixes the meaning of that term, but it also furnishes an argument against using that term in unusual ways. To put this another way, if one's theory of x is at variance with ordinary usage, then the concept qualifying x has been misidentified. Ordinary Language philosophers, largely following Wittgenstein's lead, sought to dispel the propensity of language to mystify, mainly by urging other philosophers to write in everyday language and not rely on terms whose meaning cannot be discerned by ordinary users.

Putnam (1973) recognized the need for some ordinary terms to be fixed by a special subset of users. Known as the division of linguistic labor, the idea is that, for any given language, the necessary and sufficient conditions for some terms require identification by this special subset – experts in a particular area – whose recognition is widely accepted within the entire linguistic community. The theory yields a surprising result, actually, for it confers on all language users (i) a presupposition concerning the existence of specialized or technical terms, and (ii) a reliance on a special subset of language users in identifying terms that contribute to an enhanced understanding of the world. Putnam's main focus, here, is that, in some matters, what qualifies as x is not what ordinary speakers know, but, rather, what qualifies as x is what can be decisively

determined by an expert in that area. Technical language need not be reserved for science, though this was Putnam's original use of the idea. Many people make use of scientific or technical terms in their everyday language, and the idea is that such terms function in a manner similar to the intent of ordinary language philosophy as their meaning has been fixed by a subset of speakers whose authority shares the same satisfaction conditions as ordinary users.

The theory of the division of linguistic labor is motivated by the structured cooperation involved in any language, if we set aside obvious nefarious uses. Grice (1975), notably, developed the Cooperative Principle, which establishes the idea that our use of language flourishes when certain conditions, Grice identifies four of them, are observed. Maxims of Quantity, Quality, Relation, and Manner represent, for Grice, ideal opportunities for making ourselves understood, chiefly by being informative, being true, being relevant, and avoiding obscurity. Tomasello (2003, 2008), among others, has put Grice's ideas to work in developmental and cognitive psychology, with the aim of explaining more than just the cooperative nature of language but also how it is initially acquired. For competent speakers within any language community, Grice's Cooperative Principle is meant to be efficient. Language, after all, is a helpful endeavor. The time needed to understand one another is significantly reduced when Grice's maxims are kept at the fore, and special subsets of terms are equally sensitive to Grice's approach, particularly the maxims of Relation and Manner. Efficiency is lost, however, when terms for which we have an understanding are recast. Subtleties of this kind present considerable challenges to young children, who need, ideally, increased contact time in order to fully grasp the meaning and use of a term. This is an important point, which will

be taken up in more detail later. For now, it seem reasonable to infer that ideal conditions for understanding a language are somewhat rare, largely because the effort involved in creating and maintaining those conditions is costly. For example, it is well established that ideal conditions for learning a first language draw on the joint visual attention of a speaker and a listener, both of whom follow the appropriate verbal and nonverbal cues while sustaining eye contact. Part of the appeal of Grice to developmental psychologists has to do with identifying measurable elements, such as gaze and gesture, which, arguably, satisfy a theory of meaning. Of course, it is often an unsustainable exercise in practice to consistently apply the proper maxim during first language acquisition, in addition to matching and preserving gaze. But, is it unsustainable for competent members of a linguistic community? Given how Grice construes meaning, the task should be a straightforward undertaking.

According to Grice (1957), our notion of meaning takes two forms: natural and nonnatural. Natural meaning is exemplified by how things *are*, such as *smoke means fire* or *those bumps mean measles*. That is, for Grice, one aspect of meaning – natural meaning – is quite metaphysically real. Smoke *means* fire quite independently of us or, in other words, natural meaning is not dependent on us for its existence. Statements such as *smoke means fire* and *those bumps mean measles* make for significant contrast when considered alongside other statements, such as *those three rings on the bell (of the bus) means that the bus is full*. This is another of Grice's examples. The contrast we draw here is between those things whose existence and nature are fully independent of all perceivers (*smoke means fire*) and those things whose existence and nature are to some extent dependent on those who perceive them (*those three rings on the bell (of the bus) means*

that the bus is full). For Grice, then, perception-independence is natural while perception-dependence is nonnatural. Taken a step further, the satisfaction conditions we attribute to someone are correct if and only if that person responds or acts in accordance *not* with what is said or done, but in their *proper recognition* of the meaning the speaker or actor means to convey. As with Plato, Grice is aiming for thoroughgoing holism in a theory of meaning, which involves far more than the words themselves. If words are to attain the level of meaning they are capable of attaining, then they must accompany actions that are recognizable and measurable.

In what follows, specific results from Schaub et al. will be discussed alongside the preceding philosophical positions. Language requires a strong commitment of its users if a robust, holistic meaning of the world is desired. The basis for understanding what is involved in a reassessment of information literacy terms demands a similar commitment.

Applications

Librarians, like most professionals, are typically far too immersed in their discipline to be explicit about the terms governing it, but, in the unique context of our teaching, we face added difficulties. A single-session grounding of research skills that makes concurrent use of a special subset of terms, such as *peer-review, journal, scholarly,* and *source*, very likely exacerbates the bounds of the division of linguistic labor, which instead requires a degree of "structured cooperation" (Putnam, 1973, p. 706) between our students and us. Cooperation of this kind, enumerated in several applications below, will be explored.

First, it is necessary to consider that the challenge of understanding the language of information literacy originates in beliefs students hold from prior association with

some terms. The focus of this section will be on whether the cooperative effort should aim to clarify terms or replace them. The second application extends the clarify or replace model. Casual scrutiny reveals that undergraduate students are quite resistant to grasping some information literacy terms despite library instruction, and that adversity of this kind is largely what elicits a reassessment of the terms themselves. However, in this section, the main idea will be to examine our contact time with students and propose that, in order for structured cooperation to take hold, a critical shift in the usage of information literacy terms be adopted. Third, by examining the shared motivations for embracing the complexity of the language of our discipline, it is possible to draw some conclusions about the Schaub et al. findings. Each application constitutes a means by which to grasp several difficulties that afflict otherwise cooperative communicative exchanges, be they in librarianship or any other discipline. Rather than abstractly pronounce how things are, philosophy, in this analysis, will be utilized for a pragmatic understanding of the meaning and use of words.

Clarify or Replace

The language of information literacy attempts to render the world of academic libraries by assigning words to the content of that particular experience, one that involves, namely, our beliefs about the experience of using academic libraries for educational and research objectives. To understand the real challenge with the Schaub et al. findings, we need to understand that, for our students, the language of information literacy proposes conditions for the satisfaction of beliefs or concepts that are likely *inconsistent* with the world, in this case the library, we are attempting to describe. Consequently, in our

teaching, we impose satisfaction conditions for beliefs or concepts that may be unavailable to students.

Much of the language of information literacy consists of terms whose meaning has been distorted just enough to create difficulties in understanding not only how academic libraries are structured, but also how they are used. Terms such as *peer-review, journal, scholarly,* and *source* are examples, among others, cited by Schaub et al. that demonstrate significant denotative tensions between competing authorities in the educational lives of students. For example, "like *peer-review*, *journal* is a term that has more than one meaning. To students, journaling may have been a common practice in their K—12 experience, so their understanding of the term may be as a diary or activity log" (Schaub et al., 2017, p. 289). The difficulties, here, stem from an alternative language, the language of information literacy, having been co-opted prior to its traditional introduction in the context of libraries. *Peer-review, journal, scholarly,* and *source* are also examples of the division of linguistic labor at work, but in a capacity that, at worst, negates the structured cooperation we strive for in library instruction while, at best, provides enough of a scaffold for college and university students to eventually grasp their novel meanings, though not as a result of any educative effort on the part of the library. Perhaps, then, it is somewhat unsurprising that, "notwithstanding these difficulties, there did appear to be substantial statistical evidence to suggest that understanding of this terminology improves as students advance through their college careers" (p. 289). It seems clear that students come to us with certain information literacy terms already fixed by prior association, which must then be re-cast in order for new understandings to take hold. For some information literacy terms, such as *peer-review,*

journal, scholarly, and *source*, it is critical for librarians to acknowledge that their ordinary use has been long designated, which results in a pattern of unusual application during library instruction, where those very same terms are being presented in a manner quite inconsistent with their designated meaning and more in line with Putnam's division of linguistic labor. This effort of re-casting, then, requires an understanding of the language of information literacy in a way not generally recognized among librarians. In other words, the division of linguistic labor is meant to assign a specific linguistic status to certain objects, experiences, or thoughts. The theory is not well suited, however, to countermanding ordinary language, which, in the instance just described, often occurs during library instruction. If this is correct, then the structured cooperation language requires for meaning to take hold in any substantive sense appears absent. To evaluate what cooperative effort may be suited to this worry, two possibilities – clarification or replacement – will now be discussed.

Suppose we start by saying that clarification of information literacy terms only attempts to outflank the problematic features of ordinary language, which are themselves beyond the control of academic librarians. This claim is motivated, at least in part, by the generality of some information literacy terms. Say, for example, I kept a journal while I was growing up. Would it be reasonable to assume that when I learn that academics have journals, too, they are similar to mine? How incongruous would it be, then, to learn that academic journals are for public inspection, for use by anyone, and not, say, the private musings of faculty or researchers? Clarification, in this instance, entails an admission that the ordinary use of a term means something else entirely, something more than a mere distortion or misunderstanding. It would not be unreasonable to further argue that it is

difficult to accept clarification as a viable approach in the reassessment of information literacy terms, mostly because it is, at least to some degree, representative of our current approach to library instruction and, if we are to carefully consider the results of the Schaub et al. study, the efforts spent clarifying terms are then desultory in principle. In addition, the structured cooperation necessary for languages to function properly is not limited to special subsets of terms but is already underway in ordinary use, where terms such as *journal* and *source* operate according to established beliefs or concepts. What is remarkable to consider, if we focus on the particular finding that the understanding of information literacy terms *improves* as students advance toward graduation, is the amount of time it would seem to take for this achievement. This will be further discussed in the next section, but this finding inspires reflection and should mobilize our intuitions about the grip of ordinary language.

A second option, replacement, involves the full embrace of the division of linguistic labor and Grice's maxims of Relation and Manner. The difficulties outlined above provide us with good reason for accepting the conditions that warrant special subsets of nonnatural terms. Consider, for example, speaking with a carpenter about some work to be done on the second story of your house. You are attempting to explain what gives you concern but find it unusually difficult to describe precisely where you mean since you cannot, being on the ground, effectively point to the given area. The carpenter senses the problem and offers a solution by explaining that the area is comprised of soffit and fascia boards, thus allowing you both to now distinguish the work in a more precise manner. In this example, the carpenter belongs to a subset of language users who have identified the utility of special terms that can be recognized by any language user, but

only when the conditions warranting such recognition are necessary. Many, many such

terms exist, but we need not know them all; we only need to know that subsets of

language users know them and that, if we so choose, we could seek out their meaning.

This is an inherent feature of language that we come to recognize as we become more

adept in using it – special words exist in order to express beliefs about the complexity of

the world, both as it is given to us and also as we construct it. Libraries, like houses, are

constructed by us and benefit from the emergent qualities that specialized languages

harbor for those willing to plumb the required depths. What Schaub et al. show is the

need for special terms whose utility is equivalent to your conversation with the carpenter

about the work done on your second story. The terms *soffit* and *fascia* ensure the scope of

the work in a manner that is consistent with the constructed, empirical world our

language describes. And, while the terms *journal* and *peer-review* may have once had the

desired effect of *soffit* and *fascia*, it is reasonable to conclude, given how those terms are

now used, that we need some linguistic replacement for library concepts and the beliefs

those concepts entail. What those replacement terms should be falls outside the scope of

this paper, but it seems rational to suggest that a wide discussion of library terms in

general, and information literacy terms in particular, is needed.

Of course, it does not follow that replacing one term for another assures that

structured cooperation will unfold in a holistic manner. Rather, it challenges anyone who

would hold that all an understanding requires is the definition of a term. Such an

explanation must overcome the lack of any sort of recognition – here, in the Gricean

sense of the word – that the meaning of a term has been understood. Providing definitions

and glossaries, as recommended by several authors (Adedibu & Ajala, 2011; Naismith &

Stein, 1989; Schaub et al., 2017), while helpful, are not indicative of structured

cooperation and constitute, quite generally, an isolative learning practice. In the next

section, the clarify or replace proposal will be widened to include some consideration of

the length of time needed for holistic learning experiences to take hold.

Contact Time

Ideal conditions for learning the language of information literacy, based on what we've

already discussed, would introduce novel terms in a manner consistent with Grice's

Cooperative Principle, but it isn't entirely clear how much contact time is needed for

proper understanding to take hold, particularly, as is the case with many requests for

library instruction, if the research need is somewhat distant. Grice (1957) relies on

examples where imminent action is required. So long as the meaning that is conveyed

received the proper recognition, it is unclear how contact time might be a factor. Without

it, Grice would likely attribute problems of meaning to the maxims used to express our

intentions.

As it happens, when Grice is applied to language acquisition, as a number of

researchers in this area have done, then the process by which a first language unfolds can

be largely acknowledged as a nonnatural undertaking. Aiding this enterprise, infants are

primed to grasp linguistic and perceptual invariances until about 7 years of age (Kuhl,

2000, 2004). And while language acquisition remains an open question, it is fundamental

to note that once this critical period for learning a first language has been exhausted, the

theoretical processes for grasping meaning are even less settled. Thus, if we cannot

achieve ideal conditions for instances where nonnatural meaning can be nurtured through

mobilizing Gricean maxims or measurable psychological insight, then we are left with those experiences that *actually* provoke a proper recognition of the meaning of some term or other. Those experiences are what we've been calling ordinary language and the division of linguistic labor. While we can certainly learn language absent these ideal conditions, it is not unlike understanding information literacy terms absent library instruction. Now, Schaub et al. report that, for several terms, comprehension increased with class standing: 65.7 percent of seniors (43.7 percent of freshmen) correctly identified the meaning of *journal*; 77.9 percent of seniors (42.0 percent of freshmen) correctly identified the meaning of *peer-review*. There are two ideas worth developing here, and both require careful consideration of contact time.

The first idea involves a series of responses that are considerably proactive. Librarians can take significant campus-wide steps in directing how information literacy terms ought to be understood. Schaub et al. emphasize the importance of educating teaching faculty on the results of their study in addition to creating glossaries of terms for widespread use. Part of educating our teaching colleagues might include proposed language for syllabi where library resources are required for coursework. Guided language is already common practice in higher education for a range of student services as well as emergency purposes. A syllabus, however, isn't a glossary, but an opportunity to introduce students to academic language. When students seek the meanings of those terms, ideally from librarians, they will have exchanges of a Gricean sort where the proper recognition of the term in question can be adequately discerned. Such an exchange ought not to be reduced to a series of definitions within a syllabus. This response may well seem surprising, but the misuse of terms students already encounter in their syllabi

can be interpreted as a failure to incentivize the division of linguistic labor against

unneeded obstacles. One such obstacle is relying too much on a glossary-based approach.

Another response involves signage. For some time, academic libraries have been

replacing specialized terms with general ones for broader consumption. *Help Desk* for

Reference Desk, *Information Services* for *Reference Services*, and *Access Services* for

Circulation Services to name a few. These replacements will not be discussed in detail

here, but they suggest that the beliefs governing the experiences of library users required

a shift in the semantic relations by which services are both identified and, ultimately,

delivered. Following the recommendations of Schaub et al., however, the language of

information literacy would undoubtedly extend to signage if the goal is a sense of a

cooperative structure that remains consistent in the many venues students encounter these

terms. A third response that addresses a needed shift in our contact time with students

might involve changes to library instruction programs, particularly to the periods prior

and post session. Consider, for example, if requests for library instruction sessions were

to involve, as a matter of program strategy, multiple points of student contact where an

emphasis on the language of information literacy assumes a central role. Course

management systems are a primary means of communicating with students on many

campuses, and librarians have been pursuing this means of information exchange at

varying levels of involvement for quite some time (Edwards & Black, 2012; McManus et

al., 2006; Paganelli & Paganelli, 2017; York & Vance, 2009). While these systems lack

the structured cooperation that both Grice and Putnam see as necessary for meaning to be

established, they are nonetheless, like syllabi, opportunities to relativize and systematize

technical language. Short assignments, both before and after library instruction sessions,

that require exploration and use of information literacy terms, have the benefit of increasing the awareness that, say, the term *journal* refers to a publication that communicates the ideas and practices related to a particular professional activity. It should be emphasized that the contact time we *do* have with students ought to recognize those aspects of linguistic behavior, such as ordinary language and the division of linguistic labor, that are already in place. Importantly, a critical shift in our contact time with students does not necessarily mean longer, or more than one library instruction session, but it could very well mean a combination of novel or familiar efforts.

The second idea is more speculative. Since a significant number of students, according to Schaub et al., are learning the language of information literacy as they advance in class standing, and with little to no involvement from the library, then should we focus our efforts elsewhere? Library instruction, so this argument goes, would seem to have little, if any, impact and other factors, such as the structured cooperation already at work in the division of linguistic labor, appear to impart far greater influence on understanding information literacy terms. Furthermore, with library instruction programs we are attempting to replicate a complex set a processes that students seem to figure out on their own, perhaps in a way that resonates beyond any classroom experience we can offer. Perhaps it is reasonable to ask: Why do we persist in library instruction when we see a limited percentage of students anyway, and when nearly 78% of seniors grasp *peer-review* without our assistance? Whether we take such an argument seriously or not, it is clear that libraries are not the sole venue where information literacy terms are used and, given the high percentage of advanced students that grasp several of the key concepts of library research, the holistic epistemology of the higher education experience would

appear to be doing precisely what it should – providing for what is sometimes referred to as a web of belief where the connectedness between beliefs not only amounts to what it means to know something, but it also renders that connectedness inscrutable to the learner (Quine, 1960). Thus, the many venues that contribute to a student's grasp of information literacy terms result in an experience that cannot be directly understood by any formal means but which emerges from the contact time associated with a college or university education.

Complexity – Two Approaches

Special subsets of terms allow for a richer understanding of the world around us. This is not merely the nonlinguistic consequence of language, where we grasp something over and above what is said; rather, when we use special subsets of terms we exploit the affordance language grants in most any cooperative pursuit.

Schaub et al. suggest that reassessing the language of information literacy may result in an increased understanding of how to use an academic library. When students grasp the individual terms informing a larger concept the conditions for an emergent comprehension – semantic or meaning holism – are not "set" so much as anticipatory of the transformative experience of which language is a part. We have already addressed the strong commitment language places on how our beliefs are formed and some of the implications that come with clarifying or replacing terms as a way to enhance or even change our perspectives. We've also considered how long it would seem to take for the division of linguistic labor to take hold, as a significant number of undergraduate seniors appear to grasp key information literacy terms. In this section, the central idea is that, in

order to grasp the complexity that accompanies what it means to be information or research literate, we must recognize that any simplification or generalization of library terms is a threat to the benefits associated with a holistic approach.

Let's begin by assuming it is uncontroversial that the special subsets of terms libraries in particular and academia in general have long used, such as *abstract*, *bibliography*, *peer-review*, and *journal*, are not in themselves complex. The division of linguistic labor, as well as Grice's Cooperative Principle, provides a strong theoretical foundation for the utility of some terms whose special capacity is to *simplify* language use and comprehension. Rather, it is the multiple meanings with which some information literacy terms are associated that create much of the unnecessary complexity. Schaub et al. bring forth a number of important difficulties that show a need to attend to language, but their insight that some information literacy terms have already been fixed by prior experience is particularly incisive. And, while it is not clear what the authors contend by a reassessment of information literacy terms, it seems apparent that adopting a strategy of simplification, in effect choosing other terms students recognize in order to express the meaning of some idea, creates undue complexity and offers no near or long term gains. Simplification, here, is something quite different than clarification, which we discussed earlier. In choosing simpler, more familiar terms we compound the problem we're trying to ameliorate by detaching the meanings from other familiar, fixed terms and, in their place, re-establish the new understandings we hope to impart. As a strategy for reaching students, simplification of information literacy terms does not obviate the unmistakable circularity of this approach. Here, complexity does us no favors as it is tied to misappropriations of language.

In principle, it is true that the interpretation of language is always fallible, or at least uncertain. From our perspective as library educators we recognize that opportunity for confusion amongst our users remains a singular issue as libraries and collections continue to evolve. No complex organization is immune to this type of fallibility or doubt, however. The upshot is that the protean nature of language tolerates precisifications, and complex organizations, if they are to be properly understood, demand them. The terms *soffit* and *fascia*, as we've seen, satisfy demands not met by more general terms. These terms, and others like them, differentiate when complexity *demands* differentiation. When the authors ask, as they do in the title of their paper, if students understand the language of information literacy, it appears to imply a special sort of skepticism, which will be briefly examined.

The authors doubt that students understand information literacy terms and, when it turns out they *do* understand several key terms (albeit as seniors), the doubt isn't so much abated as it is re-established in the form of an examination of the terms themselves, be it as a reassessment or a widely distributed glossary. The special sort of skepticism stems, perhaps, from the authors doubting the sources from which the students are learning the language of information literacy; that is, even though the students are grasping key terms, there would seem to be some lingering uncertainty as to the provenance of that learning, and, importantly, whether or not it is holistic. The notion of fallibility is the likely cause of this special sort of skepticism, encompassing, as it does, concerns about knowing both the source of student learning and the depth it entails. This is a valid concern, even if the authors reject the analysis. The point, here, is that in acknowledging the complexity of libraries we make a tacit assumption about the

language used to differentiate its requisite concepts and the source from which that differentiation originates. It is uncontroversial that the language used to describe complex organizations like libraries be anything less than the special subsets of terms we currently find ourselves using, such as *abstract*, *bibliography*, *peer-review*, and *journal*. It is equally uncontroversial that librarians value their educative role. Taken together, what can be drawn from this analysis is that we are significantly advantaged by embracing the complexity of teaching the language of libraries, primarily because, in doing so, we considerably lessen the degree of fallibility associated with the source and depth of student understanding.

Conclusion

What is involved in a reassessment of information literacy terms? Simplification is not a viable mechanism for reassessment, as it would very likely obtrude on the meanings of terms that have already been fixed by ordinary language. There are similar problems with clarification, for students are then obligated to learn competing conceptions of terms, thus further destabilizing semantic or meaning holism. A goal of this paper has been to illuminate some of the issues central to adopting and discerning the meanings of terms, not only by highlighting Ordinary Language Philosophy but also by applying the division of linguistic labor and Grice's Cooperative Principle to the problem. These theories provide us with the analytical tools for making decisions that require careful attention to language.

Schaub et al. recommend that librarians "clearly define" information literacy terms and "work with faculty to reinforce" that effort (p. 292). Before we take steps to

clearly define information literacy terms, however, we need to remain mindful of how those terms already operate in the world and whether new terms are warranted. Perhaps this ought to form the basis by which we work with faculty, whose partnership we are seeking anyway, in ensuring a holistic understanding of the language of information literacy.

In identifying the potential implications that come with examining how the meanings of terms are understood, librarians are faced with several issues. First, it is difficult to reconcile that the structured cooperation indicative of holistic understanding may be beyond what traditional library instruction can offer. What happens to our educative role if we accept that the manner by which the division of linguistic labor works is more substantive, more effective than what we can accomplish in the unique context of our teaching? This question merits further investigation. Perhaps, then, it is our educative and teaching relationship with students that needs reassessment and not so much the language of information literacy, which students come to understand as a matter of sociolinguistics. Do we focus on a growing demand for one-on-one consultations? Do we innovate small-scale teaching in our learning commons and in our library group study rooms? Do we aim for an infusion of information literacy concepts across the curriculum by advocating that certain courses carry library-specific student learning outcomes? Do we make concerted efforts to stimulate interest in reference desk visits? Any one of these suggestions speaks to our educative and teaching relationship with students. And, in each one, there are viable means by which to gauge the proper recognition of information literacy terms. If anything, in identifying the implications of examining these terms, librarians must accept the admittedly uncomfortable thought that our teaching does not

appear to capture the holistic understanding otherwise gained in the due course of higher education.

Suppose, then, we accept the analysis that philosophy of language offers, and that something like the division of linguistic labor appears to explain how technical terms afford more precise and, ultimately, holistic understandings of the relationship between the library and a given discipline. It seems reasonable to propose that the language of information literacy be introduced in the earliest stages of education, whenever libraries become prominent in the academic lives of students. These terms, like other technical terms students learn from elementary school onwards, are an integral part of education; they bind ideas across many grade levels in a cooperative manner. Encountering these terms early, and if they are used consistently, ensures an *ordinary* understanding that, once established, significantly reduces the need to clarify, replace, or simplify the associated meanings.

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