

6-2021

## The Library Language Game: Information Literacy through the Lens of Wittgenstein's Language Games

Kathleen A. Langan

Western Michigan University, [kathleen.langan@wmich.edu](mailto:kathleen.langan@wmich.edu)

Follow this and additional works at: <https://pdxscholar.library.pdx.edu/comminfolit>



Part of the [Information Literacy Commons](#)

Let us know how access to this document benefits you.

---

### Recommended Citation

Langan, K. A. (2021). The Library Language Game: Information Literacy through the Lens of Wittgenstein's Language Games. *Communications in Information Literacy*, 15 (1), 104–118. <https://doi.org/10.15760/comminfolit.2021.15.1.6>

This open access Perspective is distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License \(CC BY-NC-SA 4.0\)](#). All documents in PDXScholar should meet [accessibility standards](#). If we can make this document more accessible to you, [contact our team](#).

# The Library Language Game: Information Literacy Through the Lens of Wittgenstein's Language Games

Kathleen A. Langan, Western Michigan University

## Abstract

Labeling information is a precarious and risky enterprise. Catalogers have the task of fitting unique concepts within established and rigid language frameworks while also minimizing personal bias. The way information literacy librarians interact with labeled information also influences how users interact with information. Labeling moves beyond the role of categorizing; it also contributes to meaning making and knowledge building. Wittgenstein's *Philosophical Investigations* serves as a philosophical footing to illustrate how the labeling of things, in this case information, shapes the way we give things meaning. Critical librarianship and philosophy of information theory add to the discussion by considering how personal perspective, power, and bias to manipulate the game of naming information that takes place in the information literacy classroom. This paper is an invitation for librarians to reflect upon the relationship between labeling and how all users of information engage with labels and subsequently create meaning and knowledge.

*Keywords:* cataloging, information literacy, Wittgenstein, critical information literacy, philosophy of information

## ***Perspectives* edited by Stewart Brower**

Langan, K. A. (2020). The library language game: Information literacy through the lens of Wittgenstein's language games. *Communications in Information Literacy*, 15(1), 104–118.

Copyright for articles published in *Communications in Information Literacy* is retained by the author(s). Author(s) also extend to *Communications in Information Literacy* the right to redistribute this article via other scholarly resources and bibliographic databases. This extension allows the authors' copyrighted content to be included in some databases that are distributed and maintained by for-profit companies. All other rights of redistribution are licensed by *Communications in Information Literacy* under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0).

## The Library Language Game: Information Literacy Through the Lens of Wittgenstein's Language Games

“Every word has a meaning.” (Wittgenstein, 1958, p. 2)

On August 3, 2019, two mass shootings took place in the United States. The first occurred in El Paso, Texas, and a mere 13 hours later the second occurred in Dayton, Ohio. On August 5th, 2019, *The New York Post* editorial board intended to publish its daily edition with the following headline, “President Trump, America is scared and we need bold action. It's time to... ban assault weapons” (Viser, 2019). Instead, the *Post* editorial board issued that edition with a headline that read, “President Trump, America is scared and we need bold action. It's time to... ban weapons of war” (New York Post Editorial Board, 2019).

Figure 1: Intended *New York Post* Headline from August 4, 2019 “Ban Assault Weapons”



Figure 2: *New York Post* Headline from August 5, 2019 “Ban Assault Weapons”



It is understood that both “assault weapons” and “weapons of war” refer to the same *thing*, the semi-automatic style rifles that have caused the most fatalities and injuries in mass shootings in the United States between 2009 and 2019 (Everytown for Gun Safety Support Fund, 2020). Relabeling “assault weapons” to “weapons of war” is not simply an editorial change of words, it is an epistemological shift in how the reader is guided to understand and contextualize the semi-automatic assault weapon. The meaning of the *thing* is forcibly shifted by the new label. This reissue of the *New York Post* headline underscores the importance of labeling and how labeling shapes the way we think about not only things but the world around us. The reissued headline also illustrates the power held by those who

label, name, and often organize information. For the discipline of information sciences, that thing is information. Further, the relationship between labeling and meaning serves as a pedagogical reminder to those who teach information literacy that labeling is essential to effective access to and retrieval of information. The way information literacy librarians interact with labeled information also influences how others interact with information, potentially shaping meaning making and knowledge building. Power and privilege differentials are also revealed in the way we label information. This paper reflects upon the philosophical connection between the acts of labeling, organizing, and retrieving information and the subsequent acts of knowledge building and meaning making. It is an invitation for librarians to reflect upon the relationship between labeling and how the users of information engage with labels and subsequently create meaning and knowledge. The philosophical problem treated in this paper is how the praxis of information literacy is inherently dependent upon the epistemological implications of labeling of information. Critical librarianship and philosophy of information theory add to the discussion by considering how personal perspective, power, and bias manipulate the game of naming information that takes place in the information literacy classroom.

### **Wittgenstein's Language Games: Naming, Labeling, and Knowledge Building**

Wittgenstein's (1958) *Philosophical Investigations* addressed the relationship between language, the physical world, how an individual's interaction with language and the physical world creates meaning and understanding. Wittgenstein's proposition is that words name things, and that language is the vehicle by which one knows something. Further, the meaning of a word is relational to and dependent on contexts and rules. Without contexts and rules, a word loses meaning. Wittgenstein called these interactions "language games" (p. 4). Participants in the language game must understand the rules and contexts in order to fully understand the meaning of a word in order to know how to use it correctly. Wittgenstein described the moment when language games break down as the moment when "language goes on holiday" and when language goes on holiday, "philosophical problems arise" (p.19). Language on holiday can include moments when contexts are not understood and when rules are not followed. Philosophical problems hinder the ability to make sense of the world or the potential to create new knowledge.

Naming and labeling objects are two different acts in the language game. Labeling means to adhere to an established concept. Naming is when a label is invented. Wittgenstein (1958) wrote:

Naming appears as an occult connection of a word with an object. —And you really get such an occult connection when the philosopher tries to bring out the relation between name and thing .... And here we may indeed fancy naming to be some remarkable act of mind, as it were a baptism of an object. (p. 19)

Throughout the text, Wittgenstein uses the word “slab” to demonstrate the differences between naming and labeling. The first time a builder uses the word “slab” is to label a slab a slab. The act of labeling assigns meaning. Labeling is different from naming. Naming happens with subsequent uses of the word “slab.” The builders adhere to the established label and meaning of the object.

Other than the distinction between naming and labeling, there are no definitive set of rules or contexts for language game, and language games can become more elaborate. The most primitive language game is when a word is bestowed on a concept or thing (naming). The language game is successful when participants are able to understand and infer meaning. As they succeed, games progress and evolve and so do the rules and contexts. For example, a builder sees a slab and calls out “slab!”. That same builder calls out “slab!” to another builder to name it, applying meaning and establishing context. The next time a builder is to yell out “slab!”, it could be that yelling “slab!” merely refers to the object itself or it could carry additional meaning. Yelling “slab!” could imply new meaning, which could be for the second builder to bring the first builder a slab. The game is considered successful and can evolve if the builder and the assistant understand the rules and contexts of the language games. The referential and implied meaning of “slab!” also creates risk in the language game and is where language could potentially go on holiday.

A language game could break down when players do not understand the meaning, the inferred meaning, or if a thing is mislabeled. Wittgenstein “worries about language as an enormous risk, and permanent challenge for the construction of knowledge” (Saldahna, 2014, p. 297). Risk happens in the act of labeling. Risk can be in the simple distinction between the acts of labeling and naming. If labels are incorrect, or do not exist at all, and if the rules and the contexts of labeling and naming are not understood by all participants, then the language game fails at some level. A failed language game also stalls the protentional for new language games and new meaning making. In returning to the reissued *New York Post* headlines, one could suppose that the editors did not want language to go on holiday, and the act of reissuing the headline was an attempt to remove any misunderstanding or risk.

How we use labels is equally important as the labels themselves. Timmons (2006) wrote that “the central role of language, is not determined by a relationship with the physical world, but by usage. Language is not one thing, but a multiplicity of practices” (p. 20). How we use language also contributes to meaning making and new knowledge. Saldahna (2014) also emphasized the process of language games and described knowledge as “an endless walk through contexts and contextualizations, ... conferring upon an individual or his social group direct importance in the construction of sense for the world that surrounds it” (p. 297). Context builds upon context. Language games build upon language games. Knowledge builds upon knowledge.

## The Philosophy of Information and Library Language Games

The theoretical footing that links Wittgenstein to the praxis of information literacy is found in the philosophy of information. Floridi (2002) described the philosophy of information as:

the philosophical field concerned with (a) the critical investigation of the conceptual nature and basic principles of information, including its dynamics, utilisation, and sciences, and (b) the elaboration and application of information-theoretic and computational methodologies to philosophical problems. (p.137)

Floridi identified a space, the infosphere, where all interactions on the retrieval, access, and organization of information take place. The infosphere is defined as the ecosystem that involves all aspects related to information (Van der Veer Martens, 2015). The infosphere is

the encyclopedic macrocosm of data, information, ideas, knowledge, beliefs, codified experiences, memories, images, artistic interpretations, and other mental creations into a global *infosphere*. The infosphere is the whole system of services and documents, encoded in any semiotic and physical media, whose contents include any sort of data, information and knowledge ... with no limitations either in size, typology, or logical structure. (Floridi, 1999, p. 8)

The infosphere includes the artifacts of information themselves, the intelligent players, human or artificial, and the beliefs and meanings held toward information encoded in labels. It is in the dynamic, contextual, and referential aspects of the infosphere that closely link information literacy to Wittgenstein’s language games and build the connection from labeling to knowledge building. The infosphere is where the labeling of information is central to how users interact, interpret, and add meaning to information and central to how we teach information literacy.

In the library context, information has the potential to become knowledge when it has been named and labeled and only if those labels carry meaning for the participant in the library language game. Knowledge comes from the relationships, contexts, and groupings built around the naming and labeling of information. Understanding and sense making is constructed by the labeling of individual information items and the grouping of information items into broader groups. The complicated relationship between information, the act of labeling, and the potential for meaning and knowledge building is threatened not only when considering the various types of information that need to be labeled and organized but also when considering the multiple participants in the library language games.

Dretske (1981) emphasized that information must come from reliable channels and are deemed reliable sources critical to the process of knowledge building (p. 16). Those reliable channels could be human or computational agents who impose or interact with labels. A certain amount of burden is placed on librarians to sufficiently label and organize information. A certain amount of trust is afforded to the algorithms and interfaces used to interpret and sort labels. The risk is that, if not done correctly, information seekers might not be able to retrieve information and information might not be elevated to knowledge. Library language games are also at the mercy of information retrieval systems and how different labels of information act in the infosphere (Noble, 2018). Information is commodified, packaged, and resubstituted only with the strategic and organized use of labels for information retrieval systems. At times, the act of labeling information gives power to the cataloger and privileges the computational agents while undervaluing the role of the information seeker in the library language game.

## Cataloging as Language Game

For the purpose of this paper, cataloging is broadly described as the act of organizing information and the epistemological bridge between the labels we give things, how that information acts in the infosphere, and how those labels are perceived by users. This definition is not meant to be comprehensive but instead meant to identify commonalities in the act of organizing knowledge. The practice of cataloging information for the infosphere can be distilled to two basic labels. The first label is the call number (a broader label of context, grouping an information item in relation to the other information items). The second label is the subject heading (details about the specific information item). Labels carry meaning specific to an item and in relation to other items. Each label situates the singular

item into broader grouping while also distinguishing it from the other items in that group. These labels are the rules and contexts of the library language games that information seekers must understand. Sometimes these rules are visible to participants; sometimes they are not. This simplified explanation of cataloging intentionally ignores the invisible labels such as metadata or the distinction between copy and original cataloging. The focus is that the structure of the library language game is inherently linked to Wittgenstein's concept of labeling and relational meaning.

Cataloging is meant to provide structure and standards for the labeling process so that the integrity of those relationships remains intact and stable. Naming and labeling information are needed to create "structure to control the diverse chaos of knowledge" (Olson, 2002, p. 22). The importance lies in the inherent contextual relationship among the various labels as a way of imparting meaning to the information object, which can then lead to knowledge. As Olson (2002) noted, "Naming is the act of bestowing a name, of labelling, of creating an identity. It is a means of structuring reality. ... Naming information, then, is not simply representation of information, but is also the construction of that information" (pp. 4, 6). Thus, language is the vehicle for meaning, and the act of labeling information is the bestowing of meaning. The label imparted by the cataloger on to the information concept identifies the concept. The power of labeling also leads to the power of mislabeling. Human agents in the library language game knowingly or not bring personal perspectives to the library language game, thus shaping the rules and context and creation of new knowledge.

### **Perspective and Bias of the Information Seeker**

Participants carry personal perspectives into the act of interpreting and labeling information. Floridi (2004) identified three perspectives with which to look at information: information *as reality* as "ecological information", *about reality* as "semantic information", and *for reality* as "for instruction, like genetic information" (p. 560). These three perspectives could also be identified as different types of bias in that the perspectives stem from perspective, experience, and cognitive dissonance. When labeling and interpreting information artifacts, such as books, the risk of bias emerges by all participants in the labeling game, cataloger and information seeker alike, potentially upending the library language game and interrupting new knowledge building. Information seekers in the infosphere are builders yelling "slab!" thinking they know how to play the library language game. For the library language game to be successful in the infosphere, information seekers need to be privy to the particular contexts and rules used to label and organize information.



Some players have more experience than others, and others just may be more skilled at playing the game. Regardless, information seekers are prescribed normative rules that often privilege the labeler over the information seeker, inviting discord due to personal bias in the game of labeling.

Information seeking relies on a language that is social and interactive. The process trusts that the personal conventions and norms of the labeler are put aside while simultaneously acknowledging the multiplicity of experiences of the information seeker. Pohlhaus and Wright (2002) wrote:

One must use a language that is given by the society in which one learns one's native language, and this society can decide more or less at whim what it will recognize as a valid claim. The individual is thus thoroughly determined in what she can say, even about herself, by the conventional society. (p. 809)

The relationship and the social position of players in a language game also impact how labels are understood. As Pohlhaus (2002) observed, “The social position of the knower is epistemically significant; where the knower is socially positioned will both make possible and delimit knowledge” (p. 285). Social positions and social structures can dictate knowledge building.

Since labeling with subject headings and call numbers is an epistemological act, cataloging practices put the burden on librarians to sufficiently organize information so that it may be elevated to knowledge and in a way that is ethically inclusive. It also places a condition on the act of labeling because labeling something is to impose a condition of correctness (Travis, 2006, p. 21). That condition of correctness is for the individual item but also for the whole of the group.

For example, the Library of Congress Subject Heading “Illegal Aliens” is a label that carries and assigns particular socio-political reality on to a particular group of people. This label imposes a colonialist label on a person’s identity. In 2014, students at Dartmouth College challenged this subject heading, and although the Library of Congress agreed to change the label in 2016, as of May 2021, the heading remains in place due to political pressures to keep the label consistent with the language used in federal law. (Library of Congress, 2016; Lo, 2019; Peet, 2016). Changing the label “illegal aliens” is a threat to the status quo to those who adhere to that particular vision of the world.

Changing the label from “illegal alien” to “asylum seeker” or “undocumented immigrant,” for example, immediately shifts the perspective and forces sense making and knowledge building toward a particular direction. Words are part of wholes. Information artifacts are part of the whole of knowledge. The whole takes into consideration the information seeker, in addition to the labels and labelers. As Saldahna (2014) argued, “We never can think of the construction of knowledge without observing the practices of appropriation of the users’ knowledge” (p. 301). Correctness and meaning should not be done in isolation or without the help of the information seeker at some level. But what is that level of involvement and what does it look like, particularly in an information literacy classroom?

### **Individualism and Autonomy of the Cataloger**

Judgment is always at play in word choice for labeling and naming. Principles guiding those choices are problematic, however, for catalogers. Van der Veer Martens (2015) argued that if a cataloger has no experience or perceptual knowledge of a concept, then that librarian cannot adequately or appropriately label and organize those concepts. A cataloger builds on the predecessor’s experience. Once the structure of a classification has been built, then all cataloging practices are referential. Spender (1985) contended:

All naming is of necessity biased and the process of naming is one of encoding that bias, of making a selection of what to emphasize and what to overlook on the basis of a strict use of already patterned materials. (p. 104)

The subject headings almost fetishize or take a cult-like approach to concepts and ideas. The culture and the community of the library language game deprioritizes equality. “Equal treatment is not a requirement of order” (Olson, 2002, p. 22). Instead, consistency is deemed more important in cataloging than correctness of the label (Olson, 2002, p. 34).

Labels can be seen as generalities attached to information that users need to be prepared to rely on or understand. To rely on these generalities is risky. Generalities ignore the uniqueness of information objects. Yet, the player is primed and conditioned to recognize and rely on those generalities when they should be suspicious and question them and ask where those generalities come from and how they relate to other information objects.

Meaning and perspectives change over time. Relational meaning can change by values, ethics, culture, bias, age, or gender. In the early days of cataloging, Dewey (1922) stated:

Different librarians, or the same librarian at different times, class (sic) the same or similar books in widely different places. Where one man did all the work for many years, there was a degree of uniformity; but even then there was danger (sic) of looking at the same book at different times from different viewpoints, thus causing (sic) confusion (sic). When the daily press (sic) is full (sic) of one phase (sic) of a subject, tendency is strong to class all books on this subject from current viewpoint; and next year, if a different side of this same subject is before the public, there is same tendency to class books from new viewpoint, thereby separating similar books and bringing together books on different phases. (p. 11)

Olson (2002) observed that Dewey's use of the terms "viewpoint" and "phases" recognized bias in cataloging. (p. 34). Elfreda Chatman (1996) explored the concepts of bias through the framework of outsiders and insiders, "that things can only be understood by other insiders" (p. 194). Being an insider or outsider positions the individual in a place of exclusivity or privilege, creating inequitable barriers or access to information. Naming information requires background training and favors those information seekers who are insiders to the process of labeling, which often they are not. At minimum, information seekers should be educated on the complex systems of labeling and naming information in a way that challenges them to question the labels and how they shape the world around us.

### **Critical Library Language Games**

Critical race theory (CRT) provides a theoretical structure to understand how labeling has failed the researcher interacting with information. CRT defines race as a sociocultural construct born from power and privilege that exerts oppression on others (Delgado & Stefancic, 2017, p. 9). This power and privilege can be carried out in the act of labeling. From CRT emerges critical librarianship and critical code studies. These are the theoretical lenses with which to study power and privilege in language choice for cataloging. Recent scholarship on bias, power, and risk in labeling information has studied race, gender, sexual identity, and politics (e.g., Billey & Drabinski, 2019; Cridford, 2019; Noble, 2018; Olson, 2007). These scholars have addressed the ways in which labeling and organizing information in library information retrieval systems carry bias and privilege either information or user. We already saw the example of the Library of Congress Subject Heading "Illegal Aliens" and the bias attached to that label. The recent robust scholarship of critical librarianship has diligently addressed how and when power and privilege of labeling

happens. Prior knowledge is afforded to those in the classes of power and privilege and dictate and control the exclusivity and inclusivity in the library record.

## Labeling and the Praxis of Information Literacy

If the act of labeling ideas shapes how someone understands the world, then it could be argued that in an information literacy setting, the act of labeling information shapes how to teach others to interact, interpret, and use information. The premise is that for a successful information seeking game, information has to be labeled accurately, and the rules and contexts of the game have to be understood by all participants. Without these aspects in place, the language game of information seeking will be less successful. Information seekers will not be able to interact with or interpret the information and, therefore, not be able to build knowledge. A beginner player in the information seeking game may be limited to uttering “slab!” having leapfrogged the initial play of the game. This leap is where information literacy finds its foothold. How can information literacy identify where those users have leapfrogged, and how can we build a stronger pedagogy with this in mind? Literacy should be measured by progress, not by mastery.

When considering information literacy, it is helpful to think about how language games prepare users for how they interact with information. The way a user interacts with the labeling of information is ultimately a way to prepare them for the interaction with the actual information item. Labeling, therefore, prepares the information seeker in building new knowledge. Travis (2006) presented a scenario that illustrates a transfer of information as a step toward building knowledge. This transfer of information is analogous to progress and not mastery. In Travis's scenario, Ghislaine a small girl appropriates two different words to mean “to go outside.” First, she uses the word “shoe” to mean to go outside. The next time she wants to go outside she uses the word “shodding” instead of shoe to mean to go outside. She inadvertently transfers meaning from one incorrect label to another incorrect label, requiring the participants in her language game to transfer understanding along with her. Ghislaine's language game puts understanding and knowledge at risk because the language game requires other participants to adequately interpret the new label. This scenario reflects how individual perspectives shape language games. It also reflects how an information seeker in the infosphere might assert personal judgment on the process. Those who teach information literacy need to be aware of personal bias and judgment and how to teach self-awareness. It is particularly important when labels have the potential to carry more drastic implications with more charged labels, such as with the two versions of

the *Post's* headlines. Another interpretation of this scenario also shows how the personal labeling and individual preference can often be more successful. Ghislaine's personal preferences makes her labeling more successful than if labeling would have been if done by someone else. The same is true for the labeling done by the information seeker in the infosphere. The information seeker will use labels that adhere to their personal preferences and perspectives of the world around them. Their individual perspectives may be more accurate to their reality but is not as successful when used in the infosphere.

Labels have always evolved in the library language game. How we talk about information, and how we label information should not be excluded from information literacy. It is helpful for librarians who work in information literacy to recognize that

as engaged, skilled, critical communities of practice, libraries and their practitioners are in fact in a unique position to be able to reflect on the effects of contemporary cataloguing, offer resistance to oppressive applications, and develop and implement alternative methods that are responsibly and ethically deployed, sensitive to users' needs for privacy, and responsive to the necessity for continuous re-evaluation and change. (Cridford, 2019, p. 79)

Pohlhaus (2002) stated that "understanding knowledge as always formed within the relations of a particular community leaves open the possibility of new members entering that community by forming relations within it" (p. 292). Those relationships are formed through continued acknowledgement of the limitations carried by labels and by naming. Mindfulness and diligence in regard to the currency of labeling information is a way for instruction librarians to stay connected to how others think about information and give it meaning and be critical participants in the language game of information literacy.

## Conclusion

In the discipline of library and information sciences, the concept of language on holiday invites a philosophical discussion on how activities such as cataloging, organizing, seeking, retrieving, and adding meaning to information are all highly dependent on the successful labeling of information. The primitive example of yelling "slab!" is a way to describe the very basic interaction between information seeker and the catalog record in a library retrieval system. What is not shown is that behind that record is the assistant, the cataloger who is assigning and labeling artifacts. Wittgenstein's language games provide a framework for

understanding how language games become increasingly complicated in the information seeking process, in the construction of building new knowledge, in the privilege given to the labeler, and in the overlooked role of the information seeker. There is a tendency to default to a more primitive language game similar to “slab!” when labeling and organizing information for our users. In doing so, language goes on holiday, and labeling becomes an exclusive, biased endeavor that hinders information finding and limits the construction of new knowledge. For instruction librarians, it isn't about changing the label, it is about changing how we think about labeling for the purpose of teaching, how we interact with our students in the information literacy classroom, and how we teach reflective information seeking. Additionally, instruction librarians need to find a way to engage students to be critical thinkers not only about the information with which they are interacting but with the process of searching, including the choice of words they use and find in the infosphere. The editors of the *New York Post* did not want language to go on holiday and did not want philosophical problems to arise. When the *Post* relabeled “assault weapons” to “weapons of war,” the change reset the rules and context of the language game readers were playing. It is a tragic example, but it serves as a reminder that the act of labeling information ultimately shapes how we interact and interpret information and ideas for the purpose of knowledge building. Archaic and sometimes pejorative labels have hindered the knowledge building process. The end goal is not to fold a philosophical discussion into an information literacy classroom explicitly. Instead, we should teach students to be mindful of how information is organized and be aware of the games we are asking them to play. The praxis of information literacy is highly dependent on how information is labeled. How users interact with those labels is the space where instruction librarians find their footing.

## References

- Billey, A., & Drabinski, E. (2019). Questioning authority: Changing library cataloging standards to be more inclusive to a gender identity spectrum. *TSQ: Transgender Studies Quarterly*, 6(1), 117–123. <https://doi.org/10.1215/23289252-7253538>
- Chatman, E. A. (1996). The impoverished life-world of outsiders. *Journal of the American Society for Information Science*, 47(3), 193–206. [https://doi.org/10.1002/\(sici\)1097-4571\(199603\)47:3%3C193::aid-asi3%3E3.0.co;2-t](https://doi.org/10.1002/(sici)1097-4571(199603)47:3%3C193::aid-asi3%3E3.0.co;2-t)
- Cridford, T. J. (2019). Cataloguing, knowledge, and power. *Journal of Radical Librarianship*, 5, 61–83. <https://journal.radicalibrarianship.org/index.php/journal/article/view/41>

- Delgado, R., & Stefancic, J. (2017). *Critical race theory: An introduction* (2nd ed.). New York University Press.
- Dewey, M. (1922). *Decimal classification and relativ index for libraries and personal use: In arranging for immediate reference books, pamphlets, clippings, pictures, manuscript notes and other material*. (11th ed.). Forest Press.
- Dretske, F. (1981). *Knowledge and the flow of information*. MIT Press.
- Everytown for Gun Safety Support Fund. (2020, November 21). *10 years of mass shootings in the United States*. <https://everytownresearch.org/maps/mass-shootings-in-america-2009-2019/>
- Floridi, L. (1999). *Philosophy and computing: An introduction*. Routledge.
- Floridi, L. (2002). What is the philosophy of information? *Metaphilosophy*, 33(1-2), 123–145. <https://doi.org/10.1111/1467-9973.00221>
- Floridi, L. (2004). Open problems in the philosophy of information. *Metaphilosophy*, 35(4), 554–582. <https://doi.org/10.1111/j.1467-9973.2004.00336.x>
- Library of Congress. (2016, March 22). *Library of Congress to cancel the subject heading “illegal aliens.”* <https://www.loc.gov/catdir/cpsol/illegal-aliens-decision.pdf>
- Lo, G. (2019). “Aliens” vs. catalogers: Bias in the Library of Congress subject heading. *Legal Reference Services Quarterly*, 38(4), 170–196. <https://doi.org/10.1080/0270319X.2019.1696069>
- New York Post Editorial Board. (2019, August 4). The Post urges Trump to take action on assault weapons. *The New York Post*. <https://nypost.com/2019/08/04/the-post-says-ban-assault-weapons-now>
- Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. New York University Press.
- Olson, H. A. (2002). *The power to name: Locating the limits of subject representation in libraries*. Kluwer Academic.
- Olson, H. A. (2007). How we construct subjects: A feminist analysis. *Library Trends*, 56(2), 509–541. <https://doi.org/10.1353/lib.2008.0007>

- Peet, L. (2016, June 13). Library of Congress drops illegal alien subject heading, provokes backlash. *Library Journal*. <https://www.libraryjournal.com/?detailStory=library-of-congress-drops-illegal-alien-subject-heading-provokes-backlash-legislation>
- Pohlhaus, G. (2002). Knowing communities: An investigation of Harding's standpoint epistemology. *Social Epistemology*, 16(3), 283–93. <https://doi.org/10.1080/0269172022000025633>
- Pohlhaus, G., & Wright, J. R. (2002). Using Wittgenstein critically: A political approach to philosophy. *Political Theory*, 30(6), 800–827. <https://doi.org/10.1177/0090591702238204>
- Saldanha, G. S. (2014). The philosophy of language and knowledge organization in the 1930s: Pragmatics of Wittgenstein and Ranganathan. *Knowledge Organization*, 41(4), 296–303. <https://doi.org/10.5771/0943-7444-2014-4-296>
- Spender, D. (1985). *Man made language*. Routledge.
- Timmons, S. (2006). Wittgenstein's language games as a theory of learning disabilities. *Nursing Philosophy*, 7(1), 20–22. <https://doi.org/10.1111/j.1466-769X.2006.00245.x>
- Travis, C. (2006). *Thoughts footing: A theme in Wittgenstein's Philosophical Investigations*. Clarendon Press.
- Van der Veer Martens, B. (2015). An illustrated introduction to the infosphere. *Library Trends*, 63(3), 317–361. <https://doi.org/10.1353/lib.2015.0006>
- Viser, M. [@mviser]. (2019, August 4). *Tomorrow's front page of the New York Post, a Murdoch-owned Trump favorite, is powerful. So was the one 18 months earlier*. Twitter. <https://twitter.com/mviser/status/1158222911821496320?s=20>
- Wittgenstein, L. (1958) *Philosophical investigations* (G. E .M. Anscombe, Trans.). Blackwell.