



Bias, Power, and Epistemic Authority in the Dewey Decimal Classification System

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Abstract: The Dewey Decimal Classification (DDC) system is critically reviewed in this paper using the intersecting perspectives of bias, power, and epistemic authority. Although DDC has traditionally been one of the most popular and useful knowledge-organizing tools, it was shaped by the philosophical, cultural, and historical beliefs of its designers - most especially, Western, Christian, and Enlightenment epistemologies. This study identifies the presence of hierarchical, Eurocentric, and gendered biases in the system that determines the visibility and legitimacy of various knowledge traditions through an analysis of its foundations in the works of Bacon, Harris, and Dewey. The paper also examines the manner in which power is exercised in classification choices affecting user experience as well as power to determine what is deemed as knowledge. The paper with the help of epistemic stance puts forward a greater understanding of the ideological forces behind DDC and the necessity of an inclusive, pluralistic, and context-specific reforms. In conclusion, the analysis can be used in the current discussions of how to develop equitable knowledge-organization systems that are reflected by the diversity and complexity of global epistemologies.

Keywords: Bias, Power Dynamics, Epistemic Authority, Dewey Decimal Classification, Knowledge Organization

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INTRODUCTION

Although Dewey Decimal Classification (DDC) is a practical and utility-based system, the design and the way the DDC system understands knowledge is highly philosophical in nature. The DDC traces its philosophical foundations to the work and the influence of a number of important thinkers, among them Francis Bacon, William Torrey Harris, and Melvil Dewey himself.

The famous English philosopher and statesman, Francis Bacon (1561-1626) contributed greatly to the intellectual space that informed the formation of the DDC. A system of organization and classification of human knowledge Bacon offered, in one of his treatises, namely, the Advancement of Learning (1605) (Bacon, 1605). His system of classification rested on the powers of the human mind: memory, reason, and imagination.

The pragmatic spirit of the age was appealed to by Bacon in his conception of a universal system of knowledge, based on empiricism and the search after practical knowledge, and in its turn formed the basis of later attempts at classification. His focus on a systematic organization of knowledge as a source of human development and growth was a significant point in the further development of other philosophers, including Melvil Dewey. (Coburn, 1900).

William Torrey Harris (1835-1909), an American philosopher and educator who was the United States Commissioner of Education between 1889 and 1906 was another major influence on the DDC (Harris, 1892). Harris was a leading member of the St. Louis philosophical movement, which attempted to bring together the concepts of German idealists, including Hegel and Kant with the pragmatism of American philosophers like William James and Charles Sanders Peirce.

The focal point of the philosophical works by Harris was the concept of the so-called unity of knowledge, which presupposed that all forms of knowledge are interlocked and that they could be arranged in a coherent structure (Harris, 1892). This notion of a single hierarchical ordering of knowledge served as the inspiration behind the classification system developed by Dewey where he sought to express the relationships and interrelations between various subject areas (Wiegand, 1998).

The developer of the Dewey Decimal Classification system, Melvil Dewey (1851-1931), was strongly imbued with the philosophical trends of his own period, especially the pragmatic and progressive movements in American thought. The realization of the DDC was based on the idea that knowledge must be structured and available to all, and that this approach would help to promote the democratic values of the time. (Wiegand, 1998).

The DDC approach to the organization of knowledge was influenced by Dewey and his understanding of the utility of libraries and that information retrieval was important in libraries. The DDC was a way of democratizing knowledge and, for ALA proponents at the time, it empowered individuals by educating them and allowing them to become more self-directed (Wiegand, 1998).

Some of the philosophical foundations of DDC join up with the epistemological presuppositions of its founders, especially in their different orientations concerning the nature and organization of knowledge. The hierarchic decimal organization of DDC presupposes a belief in knowledge's division and categorization into separate domains of knowledge and sub-disciplines (Olson, 2002). This presupposition is consistent with the philosophical traditions of rationalism and empiricism which considered knowledge something that could be classified and distributed into categories with confidence.

But the philosophical foundations of DDC have not been free from critique and examination. Postmodernists and critical theorists have criticized the presupposition of classifying information universally and objectively, by stating that knowledge is situational, contextual and produced by power dynamics. (Foucault, 1972; Olson, 2002). Critics have claimed that the DDC represents the thoughts and biases of the creators and therefore may not sufficiently represent alternate thoughts and bodies of knowledge. Furthermore, the DDC has been accused of bias and promoting Eurocentric viewpoints regarding some subjects including religion, gender, or race (Olson, 2002; Furner, 2007). Those critiques have continued to spark debate over the years and potential redefinitions and reformulations of the DDC have occurred to make it more inclusive of the different bodies of knowledge and epistemologies. And despite these critiques, the philosophy of the DDC remains a legitimate area of inquiry and consideration in academic circles. Advocates have claimed that the DDC is a continued success and continued use of the system is proof of the timelessness of the principles it is based on as well as practical method of organizing knowledge (Wiegand, 1998). Furthermore, it has been argued that the philosophical underpinnings of the DDC need to be examined and rethought to make the framework more relevant and inclusive in an

increasingly global and pluralistic society. (Olson, 2002; Furner, 2007).

As the conversation surrounding knowledge organization systems continues to expand, our understanding of the philosophical underpinnings of the DDC will be increasingly useful for considering its possibilities and limitations, as well as avenues for recontextualization and enhancement. In conclusion, the philosophical roots of the DDC remain primary to its history and its continued impact on the organization and access of human knowledge.

THE DEWEY DECIMAL CLASSIFICATION (DDC) SYSTEM: AN OVERVIEW

The Dewey Decimal Classification (DDC) is one of the most widely studied and most influential systems of organizing knowledge in the world. Melvil Dewey first created the DDC in 1876, and has become an important part of organizing library collections, and has had a significant influence on organizing and accessing knowledge (Dewey, 1876).

The DDC is basically a hierarchical system of classification where all knowledge is broken down to ten major groupings represented by digits 0-9. These broad categories are further broken down to more specific topics by using the decimal notation. The system of decimal notation allows an extensive and detailed classification of materials, and every extra digit adds more specificity and detail. (Mitchell, Vizine-Goetz, Hickey, & Pollock, 2006).

The ten main classes of the DDC are:

Table 1: The Ten Primary Categories of the Dewey Decimal Classification

Class Number	Broad Subject Area	Description / Scope
000	Computer Science, Knowledge & Systems	General works, encyclopedias, bibliographies, library & information science, journalism, and computing.
100	Philosophy & Psychology	Systems of thought, logic, ethics, metaphysics, paranormal phenomena, and human mental processes.
200	Religion	World religions, sacred texts, theology, religious history, and comparative religious studies.
300	Social Sciences	Sociology, anthropology, statistics, political science, economics, law, public administration, education, and customs.
400	Language	Linguistics, specific languages, grammar, dictionaries, and philology.

500	Natural Sciences & Mathematics	Mathematics, physics, chemistry, astronomy, earth sciences, paleontology, biology, and botany.
600	Technology (Applied Sciences)	Medicine, engineering, agriculture, home economics, management, and manufacturing.
700	Arts & Recreation	Visual arts, architecture, sculpture, painting, music, and performing arts, sports, and games.
800	Literature	Poetry, drama, fiction, essays, speeches, and literary criticism from various languages and regions.
900	History & Geography	World history, ancient history, geography, travel, and biography of historical figures.
<i>Source: Adapted from Dewey Decimal Classification, Edition 23 (2011).</i>		

At each major category, there are additional smaller categories under it in decimal notation. As an example, in 300 courses (Social Sciences), when I have 330, that is economics, and 333 is natural resources and energy that course in particular (Chan, 2007).

Flexibility and adaptability to the DDC system is one of its greatest strengths. The system is constantly updated and revised in accordance with changes in knowledge, and to suit the new subject or discipline. The DDC Editorial Policy Committee, comprised of librarians and subject-matter specialists, is responsible for reviewing and updating the categorization system on a regular basis. (Mitchell et al., 2006).

Auxiliary tables and notes are also included in the DDC and allow further subdivision and specification of subject areas. These contain geographical subdivision tables, literary form division tables, and standard subdivision table of topics such as history, biography and bibliographies (Chan, 2007). This extensive web of subcategories allows for a particularly detailed and granular categorization of materials.

In addition to libraries, the DDC also has a wide range of additional applications, including bookstores, publishers, and online catalogues. Its popularity has led to a degree of consensus regarding knowledge organization in various organizations and platforms, allowing for information sharing and cross-platform

interoperability. (Mitchell et al. 2006).

Despite its popularity, and its continued updating, the DDC classification system has faced a certain amount of criticism. There are concerns among some academics and librarians about inherent biases and cultural presuppositions within the DDC system. For example, some have voiced concerns about where some of the subject headings are located in the DDC hierarchy on the grounds that the decisions may reflect the worldviews and values of the individuals who created classifications (Olson, 2002).

The DDC has faced critiques regarding its treatment of marginalised or non-western knowledge traditions, with some critics going as far as to accuse the system of not doing enough to accommodate and showcase other ways of knowing and valuing knowledge (Furner, 2007). These criticisms have led to a series of conversations and efforts to address potential biases and include and represent different knowledge systems in the DDC.

Nevertheless, the DDC is a powerful and impactful knowledge organizing system, and the impact it has on the value and delivery of knowledge can simply not be overstated. That it continues to be relevant and continue to be used is a statement of its adaptability as well as the groundwork that has taken place in developing and enhancing the system to meet shifting needs of libraries and information seekers (Mitchell et al., 2006).

There are many new opportunities and challenges that are probably going to present themselves to the DDC because of its continuously shifting knowledge landscape. Ongoing development and critique of the epistemological basis and cultural assumptions of the DDC will be key in ensuring that it remains adaptable to change and relevant as an inclusive tool to help organize and access global knowledge. (Furner, 2007; Olson, 2002).

BIAS OF THE DEWEY DECIMAL SYSTEM OF CLASSIFICATION.

There are numerous criticisms against the use of Dewey Decimal Classification (DDC) in that it incorporates cultural, religious, and historical bias into its design. The system was developed in a rather Western and Christian environment in the late nineteenth century which is why it represents the worldview and intellectual priorities of the creators. As an example, Christianity receives a significant and thorough subdivision in the 200s, and the subdivisions of other religions, e.g. Hinduism, Islam, Buddhism, Sikhism and Indigenous belief systems, are condensed into much fewer subdivisions. Such imbalance indicates the existence of a kind of the order of knowledge, where Western ideas are in a central stage, and the other traditions of the world are placed at the periphery as less significant or less complicated. The given structural bias influences how the library users see information and perceive cultural diversity.

Gender and social bias of DDC have also been criticized as being part of the early versions of this test. Historically, women have not been incorporated equally into larger academic categories, but rather the content about women was put in narrow or peripheral categories like, 396 - Woman Position, suggesting that men were the neutral category in most topics. This practice of classification strengthened social beliefs of that era and undermined the contribution of women in various fields such as science, politics, and even literature. In the same way, same sex or LGBTQ+ were formerly categorized in outdated or stigmatizing terms, limiting the visibility and strengthening the negative social standards. These illustrations demonstrate

that classification systems do not merely organize information they also represent and recreate cultural values.

Although the framework of the DDC is still being updated and revised, some elements of bias still affect it. There are reforms where editors aim to increase the coverage of the world religions, incorporate women and gender studies in all fields and rectify terms that are old or discriminatory. Nonetheless, the very framework of DDC continues to bear the traces of its Western-centricity, i.e. so that non-Western knowledge regimes are not always characterized by the same level of thoroughness. The DDC will continue to develop as scholars, librarians and information professionals struggle to be more inclusive and equitable in their approach to cataloging. However, it is also a reminder that no system of classification will ever be quite neutral, and will always reflect the cultural, social and historical contexts under which it was developed.

POWER IN THE DEWEY DECIMAL CLASSIFICATION SYSTEM.

The Dewey Decimal Classification (DDC) system illustrates the way power is in play with knowledge organization and presentation. Made within a particular cultural and historical background the system favors some sets of worldviews, primarily Western, Christian, and Eurocentric, providing them with specific categories and structural salience. The choice of areas to expand and the ones to compress is not a neutral process, but rather a manifestation of the intellectual ability of the group that decided on the classification. In this respect, DDC gets used as a device where mainstream cultures proclaim their powers over what is important, central, or worth documenting in details.

The influence of power can also be observed in the fashion in which DDC influences user experience and shapes trends in accessing knowledge. Once some subjects get further classification, they become less difficult to find, research and comprehend whereas marginalized topics are concealed under general or ambiguous categories. Such a delicate art of visibility can support the social stratification. Take the case where Christianity is reduced to many subclasses yet other religions are lumped together, the user will absorb the notion on the subliminal level that Christianity is more complex or central. DDC, therefore, has a symbolic power to control how users perceive and navigate information and the way in which information is appreciated.

Lastly, power under DDC is manifested in the individuals or parties to update and revise the system. Whereas the classification is constantly being changed according to the needs of OCLC and other professionals in libraries, structural decisions are mostly taken by the institutions that are located in the Western settings. This centralization of power restricts the various types of global involvement and strengthens the already existing knowledge organization power bias. Although recent campaigns seek to make the system more inclusive, the very system is informed by the people who traditionally had the power to dictate categories, place value and create intellectual order. Consequently, DDC demonstrates how the classification systems may institutionalize power - not merely determining the way information is categorized, but also what knowledge will be authorized.

THE CONCEPT OF EPISTEMIC AUTHORITY AND ITS RELEVANCE TO DDC

The idea of epistemic stance is emerging as a critical position from which to analyse and critique

knowledge organization systems such as Dewey Decimal Classification (DDC). An epistemic stance can be identified as the assumptions, beliefs and values about the nature of knowledge that underlie the structure, content, and use of a classification system (Furner, 2007).

At its simplest, the idea of epistemic stance acknowledges that knowledge organization or knowledge organization systems are not neutral or objective reflections of knowledge but in fact, are very biased by the epistemic positions, world views and cultures of the people who constructed them (Olson, 2002). That acknowledgement has many implications for the ways we analyse and critique the DDC and other classification systems.

The DDC is arguably one of the most widely adopted knowledge organization systems, one that represents a certain epistemic stance as a product of the prevailing philosophical, social and intellectual currents when it was developed. Melvil Dewey, who developed the system has based it on the pragmatic and progressive movements of the late 19th century as well as existing notions about the universality and hierarchical nature of knowledge. (Wiegand, 1998).

The DDC offers a number of assumptions and priorities that articulate its epistemic position. In the first place, it can be characterized as an act of belief-as in the domain of knowledge and that it can be classified into domains and subdisciplines which can be taken to represent a rationalist and empiricist epistemological school (Olson, 2002). This presumption is the foundation for what continues to exist as the hierarchical and decimal structure of the DDC that orders knowledge in a hierarchy of categories and subcategories.

Members of the DDC Editorial Policy Committee include both librarians and subject specialists and they are tasked with the ongoing maintenance of the DDC including the periodic reviews and in some cases, updates of the material contained therein (Furner, 2007). This has resulted in considerable comments about the potential bias and Eurocentrism of the DDC system particularly with respect to non-Western bodies of knowledge, and represent marginalized perspectives and commentaries related to topics including religion, gender and race (Olson, 2002; Furner, 2007).

Moreover, the epistemic stance of the DDC, as a member of the family of classification systems, is related to its self-evident principles and goals around pragmatism, efficiency and access. (Wiegand, 1998). This is evident in the concept and execution of the DDC system that seeks to collectively represent the values of the ease of use, ease of retrieval instead of methods that would be more precise or elaborate approximations of knowledge.

The epistemic stance framework has offered a way to meaningfully critique DDC and other specifying knowledge organization systems and highlighted the extent of biases, assumptions, and power relations that are built into the structure and contents of these systems. This critique has initiated some series of heated debates and attempts to reform and reposition the DDC to better accommodate the different epistemological and knowledge systems available in his globalized, complex, plural world.

For example, some writers have suggested additional representation of non-Western and indigenous knowledge traditions within the DDC in opposition to Eurocentrism (Nakata & Langton, 2005). Others have also advocated for the inclusion of feminist and postcolonial approaches that highlight how biases

based on gender and race may be ingrained in the categorization of some subject areas (Olson, 2007).

The concept of epistemic stance, as it relates to language and terminology and subject-headings, has likewise opened the way for a reconsideration of the use and relevance of language and terminology in the DDC as these might utilize stereotypes and bias in terms of the emphasis or exclusion placed on the representation of marginalized systems. (Furner, 2007). Revision and update of the terms and subject headings used by the DDC have attempted to foster increased inclusiveness, accuracy, and sensitivity to multiple viewpoints and identities.

Notably, the acknowledgement of the epistemic position of the DDC has also led to debates of the necessity of alternative or supplementary knowledge organisation systems that better reflect and support different epistemological traditions and worldviews (Nakata and Langton, 2005; Olson, 2007). Such alternative methods can include participatory design methods, local knowledge systems, or alternative non-hierarchical knowledge representations, where traditional classification regimes are questioned in order to challenge assumptions and biases conveyed by traditional classification regimes.

The DDC has been revised and updated many times, to take into consideration some of these issues, but the idea of epistemic stance still indicates that we need to reflect on our system critically and be ready to rethink and adapt it to changing epistemological views and cultural conditions.

Since knowledge organization systems are instrumental in determining the nature in which knowledge is accessed, interpreted and disseminated, it is becoming more important to examine and question their epistemic positions. Accepting and attending to the underlying assumptions and values, which are present in the DDC and other classification systems, will allow us to achieve more inclusive, representative and equitable systems of classifying and accessing human knowledge.

Finally, the epistemic stance as an idea can be a formidable methodological instrument in analysing the implicit biases and authority structures that exist in knowledge organization systems, and it can also be used to envision and design more pluralistic and inclusive models of knowledge and epistemology, as embodied in human knowledge.

- **The influence of epistemology on knowledge organization systems**

Together with knowledge organization and mapping, the epistemologies or theories representing the research literature and terms employed in the research must also be defined. Epistemology, the sub-discipline of philosophy dealing with the nature, origin, and boundaries of knowledge, has an immense impact when it comes to the development and use of knowledge organization systems. These systems that seek to organize and model human knowledge are naturally influenced by the assumptions and beliefs that underlie what knowledge is and how one attains knowledge and how one is supposed to organize and share the knowledge that they have.

To define epistemology in a nutshell is how we know. Although it is a large component of the knowledge organization concept. According to Tennis (2008), epistemology is also a tool to give criticism to common sense approach. The word Epistemology was first used by James Fredrick Ferrier (1808-64) in the philosophy of Britain.

According to Lacerda Araujo, (2012), epistemology can be defined as the field (of philosophy) that deals with knowledge, and more particularly scientific knowledge, its origin, its standards, its validation methods, its extent and exclusion. The central issue in epistemological investigation is whether we know how to define and justify knowledge. Various epistemological schools of thought have given different answers to this question, with rationalism being the most logical school giving preference to the use of reason and a priori knowledge as the main source of knowledge, and empiricism, which is the most logical school, giving preference to sensory experience and observation as the main source of knowledge (Steup, 2005). Such epistemological positions have important consequences when it comes to designing and implementing knowledge organization systems. An example of this would be a rationalist approach that places greater importance on logical and deductive organization of knowledge, with greater focus on hierarchical organization and absolute separation of subject areas. An empiricist approach, by contrast, might emphasize more the inductive method and the adaptive nature of classification schemes to new observations and empirical results. (Gnoli, 2020).

Constructivism is another influential epistemological approach that assumes knowledge to be a dynamic construct made by social, cultural and historical situations (Talja, Tuominen, and Savolainen, 2005). This perception throws doubt on the idea of a universal and objective system of classification because the very process of placing knowledge in order is perceived as a subjective and value-based process that depends on the worldviews and biases of the people or communities in question.

Other forms of epistemology, such as feminist epistemologies, have criticised the existing models of knowledge organisation as being Andro centrically biased, and therefore perpetuating and reinforcing patriarchal regimes of power (Olson, 2007). These have prompted calls to make classification schemes more inclusive and representative, factoring in and respecting a variety of perspectives, especially those of groups that are marginalized or underrepresented.

The epistemological perspectives of postmodernism and poststructuralism have also had an impact on knowledge organization systems in a significant way. These perspectives allow knowledge to be seen as not stable and universal, but rather as fluid, contextual and socially constructed (Radford and Radford, 2005). This epistemological stance has led to critical examinations of the power relations and ideological assumptions on which systems of categorizing are based and which claim to be neutral and objective.

Epistemology has an impact on knowledge organization systems not only today in terms of their theoretical dimensions, and in their use and utility. The act of assigning categorization systems and the use of the systems in libraries or archives and other information repositories can have significant implications in considering how knowledge is accessed, interpreted, and knowledge is shared. (Furner, 2007).

For example, when one classification system is adopted, it may favour one approach or perspective of knowledge at the expense of another. The subjects can be positioned in the hierarchy of a system that may reinforce or challenge the power structures and epistemology (Olson, 2002). Additionally, classifications systems and their paradigms and language may reinforce or dismantle stereotypical biases, and construct perspectives from which knowledge can be interpreted. The greater awareness of epistemological implications associated with knowledge organization systems has led to ongoing attempts to produce alternative or supplementary methods that are similar to the many epistemological traditions and positions.

Examples include systems of indigenous knowledge organization (Nakata and Langton, 2005), user-centred and participatory design approaches (Feinberg, 2007), and non-hierarchical or rhizomatic representations of knowledge (Lara, 2016).

Because the constantly changing nature of knowledge suggests that epistemology must be a primary area of investigation and discussion for knowledge organization systems, it is important to critically review the epistemological frameworks on which these systems are based, and to try to determine forms of inclusive and representative methodology, in order to guarantee equal access to knowledge and promote intellectual diversity and pluralism.

It is in the spirit of finding various epistemological positions, and the dialoguing potential between different forms of knowledge, that we can attempt to design better knowledge organization systems that not only represent the complexities and richness of human knowledge, but also its situatedness and contextuality.

- **The need of DDC's epistemic authority**

Although widely used, and still relevant, the Dewey Decimal Classification (DDC) system has suffered mounting criticism and has been argued to warrant a critical review of its underlying epistemic position. Epistemic stance is described as the implied assumptions, beliefs and values associated to knowledge that legitimise the organization, contents and uses of a classification system (Furner, 2007). This need to consider critically the epistemic stance of the DDC is influenced by a number of factors including, philosophical, epistemological and sociocultural factors.

Among the major motives behind a critical analysis is the acknowledgment that knowledge organization systems (such as the DDC) represent not neutral or objective depictions of knowledge but are rather influenced by the views, cultural background, and power structures of their creators (Olson, 2002). Melvil Dewey's DDC is based on the epistemological assumptions and intellectual trends of its time, which were largely informed by Western, Enlightenment values and a sense of universality and hierarchy of knowledge.

But these core assumptions and values have been questioned by postmodern and critical theorists who claim that knowledge is always circumstantial, contingent and subject to power relations (Foucault, 1972; Olson, 2002). The critique provided has suggested a re-evaluation of the DDC's epistemic stance, which risks reinforcing bias, marginalizing other paradigms of thinking and maintaining the status quo.

A potential problematic aspect is that the DDC's epistemic stance could be Eurocentric and exclude knowledge practices of non-Western and indigenous knowledge (Nakata & Langton, 2005). First, the very structure of the system and its classification decisions are made based on a specific cultural and intellectual paradigm that may not represent nor support a range of epistemologies and worldviews. There are biases which need to be identified and removed, if we wish to make the DDC as inclusive and sensitive to other knowledge systems as possible.

A second problematic aspect that can be examined in detail using a critique is that the DDC does show statements around gender, race and other intersectional identities (Olson, 2007). These topics when positioned in the DDC hierarchy and classifications can support negative stereotypes, prejudice and discrimination. A critique can explore how the epistemic stance of the system shapes how these subjects

have been represented and framed, and suggest the ways in taking a more inclusive and respectful stance.

In addition, the vocabulary and language used in both the subject heading and classification schemes in the DDC have been criticized for fostering biases, endorsing outdated or otherwise offensive terms and not representing alternative identities and worldviews. (Furner, 2007). A problematic analysis can help pinpoint the problematic use of language and terminology, and provide suggestions on how to name and describe subjects in a more inclusive and sensitive language.

The additional reason why a critical analysis of the DDC epistemic position is needed is because the world of knowledge has been shifting recently and new interdisciplinary, intersectional areas of study have risen (Tennis, 2012). The old and traditional systems of classification, such as the DDC, may not function in the new and emerging domains of knowledge that put into question the rank and boundaries set by the older systems of classifications. A critical analysis of the DDC in representing and structuring the newly emerging areas of knowledge will uncover areas of epistemic inconsistency had by the DDC. Furthermore, increasing use of Internet technologies and the dissemination of information in the online space has been leading to new standards and ways to organize and establish knowledge (Gnoli, 2020). The changeable and dynamic nature of digital information may require a more organic and dynamic classification method than established and older information classifications like the DDC. We can critically evaluate the appropriateness of the DDC's epistemic position in the digital age, and explore alternative or complementary methods of structuring and retrieving knowledge in web-based environments. In addition, the growing exploration of user-oriented and participatory knowledge organization systems calls for a critical evaluation of the epistemic position of the DDC. (Feinberg, 2007). Knowing the biases and assumptions embedded in the system also means that we can involve the distinct user communities and their knowledge culture and worldview, in the design and later applications of, classification schemes.

Ultimately the need for an epistemic critique of the DDC comes from the understanding that knowledge organization systems are neither a tool, nor reflect a simply asocial reality, but instead are a representation and reproduction of specific epistemic systems, cultural bias, and patterns of power. As we critically examine the epistemological assumptions and values implicit in the DDC and other systems, we can identify the ways in which it could be improved in relation to inclusivity, representation and relevance in a changing and more diverse knowledge environment.

Critique can lead us to revisions, developments and alternatives or supplementary approaches that are more congruent with varying epistemological frameworks, other knowledge cultures, and the challenges of a globalized and pluralistic world. Ultimately, we need to examine the epistemic position of the DDC so that we can embody more just, inclusive and representative modes of organizing and accessing human knowledge.

CONCLUSION

To sum up, when discussing the aspects of bias, power and epistemic authority in the system of Dewey Decimal Classification (DDC) it is important to note that knowledge organization is never neutral yet profoundly influenced by the cultural, philosophical and epistemological beliefs of its authors. The DDC is based on Western Enlightenment principles and built on a system of authority and universalism, which has

historically favored some worldviews over others, namely Christian, Euro-centric, and patriarchal ones. The basic framework of the DDC, despite the fact that the revisions made throughout its history have tried to solve the unfairness of the representation of religions, gender, race, and non-Western epistemologies, indicate the set of influence of its nineteenth-century origins. Power functions under the table in the system by defining visibility, accessibility and legitimacy of knowledge to innovate dominant intellectual traditions and limit other perspectives. Based on the epistemic stance, it is easy to see that the classification systems such as DDC only reflect and replicate social values and ideology hierarchies. Thus, it needs to continuously critically interact with its epistemic authority, one that is both pluralistic and participatory as well as culturally sensitive in its knowledge organization practices. It is only in this reflection and constant reform that the DDC may become more inclusive and equitable and become able to reflect the diversity of knowledge in the world during the twenty first century.

References

1. Dewey, Melvil. (1876). *A Classification and Subject Index for Cataloguing and Arranging the Books and Pamphlets of a Library*.
2. Chan, L. M. (2007). *Cataloging and classification: An introduction* (3rd ed.). Lanham, MD: Scarecrow Press.
3. Olson, H. A. (2002). The power to name: Locating the limits of subject representation in libraries. Kluwer Academic Publishers. <https://doi.org/10.1007/978-94-015-9884-7>
4. Furner, J. (2007). Dewey deracialized: A critical race-theoretic perspective. *Knowledge Organization*, 34(3), 144-168.
5. Bacon, F. (1605). *The advancement of learning*. London: Henrie Tomes. (Original work; modern editions also available, e.g., Oxford University Press, 2000).
6. Wiegand, W. A. (1998). The "Amherst method": The origins of the Dewey Decimal Classification Scheme. *Libraries & Culture*, *33*(2), 175–194
7. Furner, J. (2007). Dewey deracialized: A critical race-theoretic perspective. *Knowledge Organization*, 34(3), 144–168.
8. Tennis, J. T. (2008). Epistemology, theory, and methodology in knowledge organization: Toward a classification, metatheory, and research framework. *Knowledge Organization*, 35(2-3), 102-112.
9. Radford, G. P., & Radford, M. L. (2005). Structuralism, post-structuralism, and the library: De Saussure and Foucault. *Journal of Documentation*, 61(1), 60–78. <https://doi.org/10.1108/00220410510578014>
10. Nakata, M., & Langton, M. (Eds.). (2005). *Australian Indigenous Knowledge and Libraries*. Sydney: UTS ePRESS. <https://doi.org/10.5130/978-0-9802840-1-0>
11. Feinberg, M. (2007). Hidden bias to responsible bias: An approach to information systems based on Haraway's situated knowledges. *Information Research*, 12(4), paper 320. <http://informationr.net/ir/12->

4/paper320.html

12. Lara, M. (2016). Toward a pluralistic epistemology in knowledge organization: Digital challenges and opportunities. *Knowledge Organization*, 43(8), 609–622. <https://doi.org/10.5771/0943-7444-2016-8-609>
13. Gnoli, C. (2020). Knowledge organization and its role in democracy. *KO: Knowledge Organization*, 47(5), 397–403. <https://doi.org/10.5771/0943-7444-2020-5-397>