

Culture and Classification: An Introduction to Thinking about Ethical Issues of Adopting Global Classification Standards to Local Environments

Wan-Chen Lee

Information School of the University of Washington, Box 352840, Mary Gates Hall,
Ste. 370, Seattle, WA 98195-2840, U.S.A., <leew23@uw.edu>



Wan-Chen Lee is a PhD student at the Information School of the University of Washington, where she received her MLIS degree in 2014. Her main research interest is culture and classification, which includes classification schemes comparison and issues concerning globalization and localization of classification schemes.

Lee, Wan-Chen. **Culture and Classification: An Introduction to Thinking about Ethical Issues of Adopting Global Classification Standards to Local Environments.** *Knowledge Organization*. 42(5), 302-307. 24 references.

Abstract: Ethical issues arise from adapting standardized classification schemes to local environments. Research affirms mutual influences between culture and classification schemes, however, there are various conceptions of culture. Before diving deeper into discussions on designing a culturally sensitive model of classification and providing ethical information services, it is critical to clarify how culture is defined in the literature. In order to gain a deeper understanding of how scholars view the concept of culture, we review, compare, and aggregate discussions on culture from two bodies of literature: knowledge organization and anthropology. Based on the review, we then propose a working definition of culture for knowledge organization research. This definition points to areas of further research concerning culture, ethics, and knowledge organization.

Received: 1 July 2015; Accepted: 2 July 2015

Keywords: culture, classification, schemes, ethical issues, manifestations

1.0 Standardized Classifications Raise Ethical Issues

Adoption of standardized classifications such as the *Dewey Decimal Classification (DDC)* has been a dominant practice in many regions. The incentives of adoption include reducing individual institutions' development and maintenance cost, and accelerating cataloging. However, besides benefits, some ethical challenges often emerge when libraries adopt standardized classification schemes. That is because schemes like *DDC* export cultural assumptions, which in turn affect those cultures that import these schemes. Research has shown that culture influences knowledge organization (KO) in ethical ways. Culture has been listed as one of the four semantic warrants of classification theories and systems by Beghtol (1986). Warrant, as defined, justifies the assumptions and decisions made by classification-

ists. Beghtol proposes cultural warrant based on the perspective that classification is a cultural artifact, which reflects diverse cultural contents. Along with this perspective, classification schemes developed and applied in different cultural regions may represent and contextualize the same subject differently. López-Huertas (2008) affirms this by comparing knowledge representations and organizations of gender studies in Spain and Uruguay. She also compares classifications of musical instruments in three cultural regions: the West (what she calls the Occidental region), the Indian subcontinent (Hindu), and Eastern Asia (López-Huertas 1997; 2013). She identifies how cultural context affects terminology, concept identification and naming, categorization, focus of themes, and citation order. Classification schemes based in different cultures include and exclude different concepts. This results in ethical challenges

concerning representation and prioritization. The influence between culture and classification schemes is mutual. Classification schemes and subject description standards like *Library of Congress Subject Headings (LCSH)* can reinforce or marginalize culture(s) by including or excluding cultural perspectives. Olson (2000) examines *LCSH*, and points out that *LCSH* is based on U.S. centered mainstream perspectives, which may not represent the whole of lived experience. In addition, both Olson (2000) and Mai (2013) point out the underlying values of warrants, and the myth of pursuing neutral and universal classification scheme and subject description. In the multi-cultural world, the exclusion of non-mainstream perspectives is an ethical challenge. Olson (2000) suggests that we accommodate the dynamic changes of both content and relationships of subjects to standards like *LCSH*. Mai (2013) advocates for developing domain/practice based ethical classifications, which value culture and context. This complements Furner's (2007) critical race theory analysis of the *DDC*. By allowing subject description changes to reflect cultural differences, people who share different cultures can experience less of a sense-making gap, and librarians can provide more ethical and equitable access to information.

2.0 Culture in Knowledge Organization and Anthropology

Previous research has addressed cultural issues in KO, and emphasized the importance of culturally sensitive knowledge organization (Tennis 2013). It is critical to clarify how culture is defined in the literature. We review the KO literature and the literature of anthropology to gain a deeper understanding of how scholars view the concept of culture. The review is organized into different families of definitions. We consider culture as 1) nationality or geographic region, 2) context, 3) collective phenomenon, and 4) human-made part of human environment.

As mentioned, López-Huertas (2008; 2013) defines culture along national or geographical boundaries. Similarly, Hofstede (1994) and Steinwachs (1999) talk about national culture. National culture is considered one layer of culture which people often refer to when conducting intercultural comparisons, or promoting cooperation among nations. Both Steinwachs and Olson (2000) finds national culture disputable in that national borders do not always correspond to boundaries of societies. However, distinguishing culture by nationality is often considered the easier, and sometimes the only feasible way for data collection.

Taheri et al. (2014) treat culture as context. In their work, they refer to Islamic culture and Iranian culture, and claim that culture influences attitudes and concepts. Geertz (1973) defines culture as context as well. It is a system of symbols, in which symbols can be thickly described. As a

point of criticism, Everett (2012) thinks Geertz's definition overlooks the dynamic and evolving nature of culture.

Some treat culture as collective phenomenon. This family of definition has two core tenets: 1) it is assumed that individuals learn culture from other members of the same group, and 2) culture distinguishes group members from non-members. Some authors explicitly emphasize the two tenets in their definitions. Beyond that, authors disagree. Kluckhohn (1944), Tylor (1958), and Hofstede (1994) think culture is civilization. They approach culture from a progressive perspective, and view culture as a scale with civilized and ignorant as extremes. Goodenough (1971) regards culture as rules, guides, and expectations of behaviors that reside in people's minds, while Steinwachs (1999) sees culture as predisposition and judgment of behavior.

Menou (1982) defines culture as the human-made part of human environment. He distinguishes two types of culture: objective/material culture and subjective/non-material culture. Subjective/non-material culture consists of "code of signs and meanings which shapes the individual and social perception of the universe" (Menou 1982, 122). It influences people's cognition. Menou lists some traits of subjective/non-material culture: values, stereotypes, etc. Objective/material culture is further divided into artifacts and observable patterns of human activity. Some examples of artifacts include settlements and housing, or language. Menou also provides examples of observable patterns of activity, which include family structure and norms. The list seems to imply that observable patterns of activity are the underlying infrastructures with different levels of influence and restriction on members of the society. Menou's definition covers some core components of culture which other scholars integrate to their definitions (Hofstede 1994). One of Kluckhohn's definitions claims that culture is "that part of the environment that is the creation of man," (Kluckhohn 1944, 17) which comports with Menou's definition.

3.0 Manifestations and Elements of Culture

We have looked at different families of definitions of culture. It is clear that culture is multifaceted. Like Geertz (1973) says, while we want to study culture, we can only study what is observed and described. In order to study culture, scholars tend to identify and examine manifestations of culture, which are not only easy to observe, but indeed the only thing we can observe (Goodenough 1971; Kluckhohn 1944). These observations, and our interpretations of them, allow us to study the proxies for culture, and thereby develop and compare definitions, models, and theories. Manifestations are key to this work. The following section will introduce and compare the manifestations as well as the elements (i.e., proposed sub-

sets) of culture proposed by different scholars, and then discuss the position of classification schemes.

Kluckhohn (1944) thinks manifestations of culture are overt behaviors and artifacts. The former include speech, gestures, and activities, and the latter covers tradition, and mental blueprints. Goodenough (1971) sees manifestations of culture as “cultural artifacts,” and lists three types of them: material manifestations, overt behaviors, and social events. He claims that cultural artifacts are not limited to material objects, and should be distinguished from culture writ large. Hofstede (1994) lists manifestations of culture along a scale of superficial and sophisticated: symbols, heroes, rituals, and values. Symbols are at the superficial end of the scale, because they can be created and changed rapidly. Heroes are models of behavior by people within a culture. Rituals are activities with symbolic meanings. Values are the terminus of the scale; they are sophisticated. Values are beliefs or abstract ideals that guide people’s actions and judgments. Among the four manifestations listed, Hofstede groups the previous three as practices, and links the concept “norms” with values. In his opinion, norms are “standards for values that exist within a group or category of people” (Hofstede 1994, 9). Besides the four manifestations, Hofstede provides another set of manifestations, including education, art, and literature. We can see some similarities and overlaps among manifestations introduced so far. For instance, both Goodenough and Hofstede list art(s), and Hofstede’s symbols may include Kluckhohn’s gestures. Rituals, tradition, mental blueprints, beliefs, norms, and values seem to be closely related, since Hofstede treats values, beliefs, and abstract ideals as synonyms.

Besides manifestations of culture, scholars also list elements of culture. According to Kluckhohn (1944), culture includes expectations of behaviors, ready solutions for recurring issues, skills, mental blueprints, as well as organization and relationships between the elements of culture. This list covers a mix of objective/external and subjective/internal elements. Tylor’s (1958) list of elements of culture include: knowledge, belief, art, morals, law, custom, and capabilities and habits acquired as member of society. Goodenough (1971) identifies four elements of content of culture: (1) percepts and concepts (2) propositions and beliefs (3) value/sentiment systems, and (4) operational procedures. Except the forth element, the other three are subjective/internal. This reflects his cognitive anthropology stance.

Researchers are inconsistent in differentiating manifestations of culture and elements of culture. While scholars (Geertz 1973; Goodenough 1971; Kluckhohn 1944) may agree on the importance of distinguishing them, how each researcher defines and uses them is often not clear. Among concepts of manifestations and elements of culture, it is

relatively straightforward to treat material culture as manifestation of culture, since it is cultural representation created by human beings, and exist external to the person. However, scholars view non-material artifacts differently. This results in some concepts belonging to both categories. The lack of clarity adds another layer of confusion onto the efforts to reach agreement on the meaning of culture.

Given the complex and intertwined concepts of culture, its elements, and its manifestations, it would be helpful to follow the proposals of previous research (Geertz 1973; Goodenough 1971; Kluckhohn 1944), and focus on an object of study, in our case, users use of classification schemes. In other words, we would like to look at how people interact with classification schemes, which are manifestations of culture, in order to gain deeper understanding of culture and classification schemes. The context of our research focus falls within a topic of contemporary research: the relationship between culture and classification (Smiraglia and Lee, 2012). Most recently, Smiraglia (2012) talks about cultural frames of knowledge. He links this topic to domain analysis, and adds perception to Hjørland’s four classes of epistemic approaches to domain analysis. He points out that culture shapes perception, and perception shapes how people sharing that perception comprehend the world. The notion of how culture influences perception echoes Olson’s (2000) application of the Third Space model. Olson applies Homi Bhabha’s Third Space model to the context of libraries. The Third Space model emphasizes how meaning construction is influenced by both content and context. Olson regards librarians and subject descriptions, like *LCSH*, as third space, a space between information and users in which meaning is constructed. In this sense, a classification scheme is also a third space. It frames the context of subject representation, which influences how people perceive a subject or the whole body of knowledge. Through the process of meaning construction, subject representation and the classification scheme present a certain worldview, which conforms to their embedded culture.

4.0 Culture – A Definition

Building on the discussion put forth by Smiraglia (2012) and Olson (2000), we would like to add our literature review. Based on the families of definitions, we are able to reflect on a more complete picture of culture by integrating aspects presented by different perspectives. We can also identify core elements of culture by highlighting concepts mentioned repeatedly by different scholars. The purpose of this paper is to propose a working definition of culture following this literature review. Our intention is to contribute to the discussion of culture in relation to KO.

For our purposes, culture is a cognitive framework constructed by a community. The framework influences how people within the community perceive the world. For us, culture is learned, dynamic, and co-existing. The younger generation of members of a culture 1) learns to participate in culture through family and school, and learns by conforming to social norms. The learning and conforming process is critical in making culture a collective phenomenon shared among a group of people. In this way, we agree with Goodenough (1971), Hofstede (1994), Kluckhohn (1944), Steinwachs (1999), and Tylor (1958). Culture is also 2) dynamic. As shown in the literature review, both manifestations and elements of culture include concepts that evolve over time. With dynamic manifestations and elements, we can infer that culture, and people's perceptions of a culture change accordingly. As a result, a dominant culture can be replaced by another culture, which leads to the third characteristic. Multiple cultures 3) co-exist in the world. This is supported by Olson's (1999) work. She points out that a classification scheme is efficient in representing the mainstream in its originating culture, but may not represent other cultures and marginalized concepts. This happens at the societal level, too, where subcultures co-exist with the mainstream (Ohly 2014). Multiple cultures even co-exist within a person. Since a person often belongs to multiple groups (e.g. ethnicity, gender, religion), it is very likely that a person possesses multiple cognitive frameworks. This echoes Hofstede's perspective. While he names different cultures within a person as "levels" of culture, he assumes that "people unavoidably carry several layers of mental programming within themselves, corresponding to different levels of culture" (Hofstede 1994, 10), such as national level and social class level. Different levels of culture may conflict with one another.

5.0 Ethics and Culture in Knowledge Organization

As we have seen, culture influences perception. It frames the way we make sense of the world. It affects how we classify. As previous research shows, cultural influences are ubiquitous in classifications, since they are embedded in fundamental elements such as structure, semantics, and notations (López-Huertas 2008; 2013; Olson 1999). The lack of cultural sensitivity of a classification scheme can take different forms. For example, the inability of a classification scheme to accommodate changes to reflect a culture's particular dynamic can result in mismatch between the representation of a subject, and the perception of a user. In addition, classification scheme failing to encompass diverse cultural perspectives to represent co-existing cultures can reinforce certain culture(s) and marginalize others. Classification schemes lacking cultural sensitivity can lead to ethical issues.

The nature of classification is making decisions, a series of them: developing basic categories, choosing characteristics for each division, determining symbols for notations, etc. We make decisions with caution, and there have been efforts to create a neutral or value free classification (Mai 2013). Despite how different cultures that co-exist in the world, in a society, or within a person can have conflicting opinions about ways of organizing information, in practice, it is inevitable that people who design classifications select a set of cultures as the base of decision-making. As a result, librarians conform to what is considered reasonable in their local dominant culture, and apply principles like literary warrant and cultural warrant (Begthol 1986). Even so, literary warrant as a principle has its limitations. It is limited to the context of a library collection (writ large perhaps), and reflects the threshold of publication, which favors mainstream voices (Olson 2000). The trend of adopting the few classification standards such as *DDC* and *LCC*, copy cataloging, and cooperation across cultures and borders complicate the issue. When users of a classification scheme are not limited to people who share similar cultures, but people around the world with diverse cultural backgrounds, ethical issues emerge.

Classification reinforces specific culture(s) embedded in it. This leads to the ethical concern of unequal access to information. According to Star's definition, classification is one type of representation of infrastructure (Bowker and Star, 1999; Star 1999). We identify characteristics of infrastructure shared by classification. One characteristic is becoming visible upon breaking down. The concept of classification is intuitive and taken for granted. It becomes visible when there is mismatch between its function and users' expectations. Thus, when a classification scheme is used by people sharing the same culture with which the classification originates, the classification scheme functions and remains invisible. However, when users do not share the same culture with which a classification scheme originates, mismatching may happen, and lead to breaking down of the classification scheme's functions. People of different cultural backgrounds may have different levels of difficulty accessing information using the same classification scheme. Unequal access is an ethical issue concerning culture and knowledge organization.

In addition to the unequal access issue, we have the dilemma of standardization and localization. Star and Ruhleder (1996) point out the paradoxical nature of infrastructure. On one hand, infrastructure is built on an established base and embedded in standards and practices to transparently support people across time and space. On the other hand, infrastructure is a relational and contextual concept, which emphasizes customized, local, and flexible use. The two forces are equally strong, and pulling toward opposite directions. This also describes the tension between stan-

dardization and localization of classification schemes. In libraries, adopting others' classification standards is built on copy-cataloging work practices and established cataloging systems. Nevertheless, research (López-Huertas 2008; 2013; Olson 1999; 2000) shows that classification schemes are contextual, cultural, and value-sensitive. This perspective raises the need of localizing classification schemes. We are still pursuing the balance between standardization and localization, of which libraries gain both the benefits of collaboration and serving local needs.

6.0 Conclusion

We have examined the relationships between culture, ethics, and classification schemes. Research shows influences between culture and classification schemes, and how that raises ethical issues. Thus, we review definitions of culture from both KO and anthropology literature, and compile the definitions into four families of definitions. Furthermore, following the proposals of previous research, we compare concepts of manifestations of culture with concepts of elements of culture. While examining these concepts, we identify the relationships between culture, elements of culture, manifestations of culture, classification, and classification scheme.

Based on the discussions, we set an object of study at users' use of classification schemes, and introduce the context of our research: the influences between culture, users' perceptions, and classification scheme. Looking at the literature review under the research context, we propose a working definition of culture for future works concerning culture, ethics, and KO. The definition is applied when we reflect on some ethical issues concerning culture in KO. The intention of this paper is to contribute to the discussion of culture and ethics in relation to KO.

References

- Beghtol, Clare. 1986. "Semantic Validity: Concepts of Warrant in Bibliographic Classification Systems." *Library Resources and Technical Services* 30: 109-25.
- Bowker, Geoffrey C., and Susan Leigh Star. 1999. *Sorting Things Out: Classification and Its Consequences*. Cambridge, Mass.: MIT Press.
- Everett, Daniel L. 2012. *Language: The Cultural Tool*. London: Profile.
- Furner, Jonathan. 2007. "Dewey Deracialized: A Critical Race-theoretic Perspective." *Knowledge Organization* 34: 144-68.
- Geertz, Clifford. 1973. "Thick description: toward an interpretive theory of culture." In *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.
- Goodenough, Ward H. 1971. *Culture, Language, and Society*. McCaleb Module in Anthropology. Reading, Mass: Addison-Wesley.
- Hofstede, Geert H. 1994. *Cultures and Organization – Software of the Mind*. London: HarperCollins.
- Kluckhohn, Clyde. 1944. *Mirror for Man: the Relation of Anthropology to Modern Life*. New York: Whittlesey House.
- López-Huertas, María. J. 1997. "Thesaurus Structure Design: A Conceptual Approach for Improved Interaction." *Journal of Documentation* 53: 139-77.
- López-Huertas, María. J. 2008. "Cultural Impact on Knowledge Representation and Organization in a Subject Domain." In *Culture and Identity in Knowledge Organization: Proceedings of the Tenth International ISKO Conference 5-8 August 2008 Montréal, Canada*, edited by Clément Arsenault and Joseph T. Tennis. *Advances in Knowledge Organization* 11. Würzburg: Ergon Verlag, 340-46.
- López-Huertas, María. J. 2013. "Transcultural Categorization in Contextualized Domains." *Information Research* 18, no. 3: paper C16.
- Mai, Jens-Erik. 2013. "Ethics, Values and Morality in Contemporary Library Classifications." *Knowledge Organization* 40: 242-53.
- Menou, Michel J. 1982. "Cultural Barriers to the International Transfer of Information." *Information Proceedings and Management* 19, no. 3: 121-29.
- Ohly, H. Peter. 2014. "Sociological Aspects of Knowledge and Knowledge Organization." In *Knowledge Organization in the 21st Century: Between Historical Patterns and Future Prospects: Proceedings of the Thirteenth International ISKO Conference, 19-22 May 2014, Kraków, Poland*, edited by Wiesław Babik. *Advanced in Knowledge Organization* 14. Würzburg: Ergon-Verlag, pp. 41-9.
- Olson, Hope. 1999. "Exclusivity, Teleology and Hierarchy: Our Aristotelian Legacy." *Knowledge Organization* 26: 65-73.
- Olson, Hope. 2000. "Difference, Culture and Change: The Untapped Potential of LCSH." *Cataloging & Classification Quarterly* 29, nos. 1/2: 53-71.
- Smiraglia, Richard P. 2012. "Introduction: Theory, Knowledge Organization, Epistemology, Culture." In *Cultural Frames of Knowledge*, edited by Richard P. Smiraglia and Hur-Li Lee. Würzburg: Ergon, pp. 1-17.
- Smiraglia, Richard P. and Hur-Li Lee. 2012. *Cultural Frames of Knowledge*. Würzburg: Ergon.
- Star, Susan L. and Karen Ruhleder. 1996. "Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces." *Information Systems Research* 7: 111-34.
- Star, Susan L. 1999. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43: 377-91.

- Steinwachs, Katarina. 1999. "Information and Culture – the Impact of National Culture on Information Processes." *Journal of Information Studies* 25: 193-204.
- Taheri, Sayyed M., Shahrestani, Zohre and Mohammad H.Y. Nezhad. 2014. "Switching Languages and the National Content Consortiums: An Overview on the Challenges of Designing an Iranian Model." In *Knowledge Organization in the 21st Century: Between Historical Patterns and Future Prospects: Proceedings of the Thirteenth International ISKO Conference, 19-22 May 2014, Kraków, Poland*, edited by Wiesław Babik. Advanced in Knowledge Organization 14. Würzburg: Ergon-Verlag, pp. 367-73.
- Tennis, Joseph T. 2013. "Ethos and Ideology of Knowledge Organization: Toward Precepts for an Engaged Knowledge Organization." *Knowledge Organization* 40: 42-9.
- Tylor, Edward B. 1958. *Primitive Culture, vol 1*. New York: J. P. Putnam's Sons.