Olson, H. A. (1999). Cultural discourses of classification: Indigenous alternatives to the tradition of Aristotle, Durkheim and Foucault. Proceedings of the 10th ASIS SIG/CR Classification Research Workshop, 107-124. doi: 10.7152/acro.v10i1.12484

Cultural Discourses of Classification: Indigenous Alternatives to the Tradition of Aristotle, Durkheim and Foucault

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Like any common living thing, I fear and reprove classification and the death it entails, and I will not allow its clutches to lock down on me, although I realize I can never lure myself into simply escaping it.
— Trinh T. Minh-ha (1989, p.48)

Abstract

The paper explores the cultural construction of classification by identifying fundamental characteristics of classification and examining how these fit with other cultures. Foucault's method of discourse analysis is applied to selected texts on classification in two areas. The first area is classification, originated in the dominant western culture. The second area is classifications from indigenous cultures. It is concluded that classification research needs to have an increasing awareness of the cultural construction of classification schemes, and to work with alternatives to approaches of fundamental universal principles of classification.

Introduction

Classification is a mapping of information in a library and information studies context. It is one among many social classifications that construct people's everyday realities — ontological cartographies drawing boundaries that selectively demarcate samenesses and differences. This paper's epigraph from Trinh Minh-ha suggests that the maps that are classifications can be dangerous and coercive. The aim of this paper is to discover why classifications might be considered in this light and suggest paths that could be pursued in seeking alternative means of organizing information (or any other aspect of our realities).

The problem that Trinh identifies in classification in its broadest social context is similar to one identified in the library and information studies literature. Critiques

ISSN: 2324-9773

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based on both research and description have shown bias in our classification schemes in terms of race, gender, sexuality, nationality and numerous other facets (Olson and Schlegl 1999). The problems of one-size-fits-all subject access schemes pit users' interests against literary warrant and both against the quest for objectivity unless it is possible to believe that readers and authors have identical conceptions of knowledge and that these conceptions are objective. It is no wonder then that standardized classifications, widely used for the sake of economy, are seen to create fences around concepts and around the people who identify with those concepts. This paper explores the cultural construction of classification as a possible explanation for this apparently hegemonic structure. It is a preliminary exploration of the likelihood that not only the content, but also the fundamental principles of our classifications reflect a particular culture and that other cultures may find these principles antithetical.

The problem of cultural specificity becomes increasingly significant as standardized classifications are used ever more widely. For example, the *Dewey Decimal Classification* (*DDC*) is translated into Arabic, Chinese, French, Greek, Hebrew, Icelandic, Italian, Korean, Norwegian, Persian, Russian, Spanish and Turkish. Some adaptations and expansions are available for *DDC* to make its content more appropriate in other contexts such as Indian philosophy and religion, Malaysian history and Fiji, but these still use the same fundamental structure as the original. Classification using the same basic principles (only usually not as effectively) is becoming common on the World Wide Web. The popularity of classificatory interfaces to search engines is an indication that these structures are now being exported in other forms. The globalization of information of which the WWW is a part means that tools such as classifications are crossing cultures at a rapid rate. Returning to Trinh's statement, we can imagine the potential for intellectual colonization — probably largely unintentional, but real nonetheless.

This paper, then, will identify fundamental characteristics of classification as we know it and examine how they might fit with other cultures. It is a Foucauldian discourse analysis of selected texts in two areas. The first area is classification in the dominant western culture which has grown from classical Greek and European sources and been fostered in settler cultures around the world. The characteristics found in these texts will reflect the status quo of mainstream western classifications. The second area is that of indigenous knowledge organizations that are radically different from the dominant western models, offering alternatives to the teleological and hierarchical structures typical of standard library and other classifications. Because this analysis is seeking fundamental principles it will take place at a largely metaphysical level. However, the conclusion will draw it back to both Trinh's fear of classification and the biases found in existing bibliothecal classification schemes.

The methodology of Foucauldian discourse analysis examines texts for their indications of power as embodied in discourses. Discourse is used here:

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> ... in the Foucauldian sense of a **conceptual grid** with its own exclusions and erasures, its own rules and decisions, limits, inner logic, parameters and blind alleys. A discourse is that which is beneath the writer's awareness in terms of **rules governing the formation and transformation of ideas** into a dispersal of the historical agent, the knowing subject. (Lather 1991 — emphasis added)

Classification is, indeed, a "conceptual grid" constructed by "rules governing the formation and transformation of ideas." As classificationists and classifiers we shape the ideas that transform knowledge by organizing it into a particular structure. Our purpose may not be to exert power, except the power of retrieval, but we are part of a powerful discourse. This analysis will identify that discourse and identify alternatives to it. The identification of alternatives in indigenous cultures will make it clear that our notion of classification is a constructed one growing from our cultural heritage.

Classification in the dominant culture

The first problem in discussing the cultural construction of classification is what to call the dominant culture, that is, the culture that began in classical Greece, was nurtured in Europe and has flourished in many of the colonized parts of the world, most notably North America. In North America it can be called a Euro-settler culture in that it is the culture of the dominant inhabitants who are mainly descendants of European settlers and it tends to marginalize or exclude immigrants from other parts of the world and the aboriginal peoples of North America. Benjamin Whorf called it "standard average European" culture which works well in relation to classification since standardization is a factor in the dominance of one conception of classification. However, it is also a culture invented and enforced by an educated elite and imposed on other classes as well as people from other cultures. Acknowledging these concerns I will use the word "dominant" even though it is not specific regarding the origins of the culture.

From the many possible authors discussing classification in the dominant culture I have chosen to look at Aristotle, Émile Durkheim and Michel Foucault to begin my search for characteristics of classification.

Aristotle

Aristotle is often cited as having developed the origins of classification as we know it. Although he drew on his predecessors to develop the basic notion of classification we still use, he is the one who synthesized their work into something that could be passed through generations. He started with an inheritance from Parmenides who established the idea of a binary definition of existence: what is, is; and what is not, is not. It seems such a simple concept to us, but until Parmenides voiced it this idea of mutual exclusivity between what exists and what does not was not a generally

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accepted tenet of thought. That Parmenides had to invent mutual exclusivity indicates that it could be a cultural construction and may not exist in the same way in other cultures. This mutual exclusivity is an essential part of classification as we know it. Categories in our classifications ideally have prescribed boundaries and do not overlap with other categories.

Another characteristic of classification came from Plato. Plato took Parmenides's mutually exclusive categories and created the dialectic. Plato's dialectic is a series of questions each having two possible and mutually exclusive answers. This series is used to build a logical and inescapable line of argument. The result is a linear progression toward a goal: a teleological progression. Teleology in this sense becomes the second characteristic of classification.

Aristotle took Plato's dialectic, and added to it his idea of the logical syllogism to create the foundations of classification as we know it. The syllogism added hierarchy to the other two characteristics. A standard example is:

All humans are mortal
Socrates is human
Therefore, Socrates is mortal

In this instances a classificatory hierarchy is established: mortal beings are the broadest category encompassing humans and the category of humans encompasses Socrates. Therefore, what applies to mortal beings applies to Socrates just as a number in a bibliothecal classification scheme is governed, throught he concept of hierarchical force, by the concepts expressed through numbers higher in its particular hierarchy. Aristotle's goal was teleological: the identification or recognition of universality. The syllogism's three levels, going from individual to universal, demonstrate a hierarchical relationship with each other that gives prominence to the universal.

Aristotle, then, drew together exclusivity, teleology and hierarchy as basic criteria for classification and this classificatory foundation is the same as the foundation of the philosophical discipline of logic. Hence, classification appears to us to be a reasonable means of organization.

Durkheim

In 1903, Émile Durkheim and Marcel Mauss published their extended essay, *Primitive Classification* (1963). In it they put forward the idea that what they call "logical classification" grows from "social classification." In their analysis this means that kinship patterns determine the manner in which cultures organize their knowledge. To prove their point they use other people's research on societies that they consider to be "primitive" or less developed to construct their argument. They work through what they view as a progression of societies from most to least "primitive," beginning with Australian Aboriginal peoples, then North American aboriginal peoples (Zuñi and Sioux) and finally Taoist Chinese culture. In each of these societies they examine kinship systems and the links between these systems and

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other factors — how a particular clan might be linked to a season, a compass direction, one or more animals and plants, *etc.* Rodney Needham, in the introduction to his English translation of *Primitive Classifications* (1963) notes the many flaws in Durkheim and Mauss's interpretation of the evidence they use and their failure to demonstrate causality. Nevertheless, Durkheim & Mauss conclude, on the basis of very tenuous evidence, that classification develops teleologically toward a more sophisticated format as societies develop and that it develops the characteristics of our dominant classification. In each of the cultures they examine, Durkheim and Mauss see stages of social organization as developing into hierarchy. They also presume the need for the mutual exclusivity adopted by Aristotle. For example, in assessing the sophistication of classification in Chinese culture they note: "Naturally, these classifications lack anything resembling Greek or European logic. Contradictions, deviations, and overlappings abound in them" (1963, p.69). The characteristics of exclusivity, teleology and hierarchy are presumed in *Primitive Classification* to be basic to a sophisticated classification and the prerequisite to achieving such a classification is the logic of Aristotle.

Foucault

In examining the foundations of classification, the interesting thing about Michel Foucault's *The Order of Things* (1970) is what he does not question exclusivity, teleology or hierarchy as one might expect of such an iconoclastic thinker. What he highlights is the warrant for classification. In *The Order of Things* Foucault examines the shift in thought from the medieval and renaissance to the classical period in Europe and from the classical period to the modern. What he finds characterizes these changes is the transition from order based on resemblance to order based on differences in identifiable characteristics and then from the latter to order based on the functions of systems. At the same time Foucault tacitly accepts the more fundamental presumptions underlying classification. So in the end he agrees with Aristotle that there is some kind of order or classification in our realities:

> It is here [at a time of transition] that a culture, imperceptibly deviating from the empirical orders prescribed for it by its primary codes, instituting an initial separation from them, causes them to lose their original transparency, relinquishes its immediate and invisible powers, frees itself to discover that these orders are perhaps not the only possible ones or the best ones; this culture then finds itself faced with the stark fact that there exists, below the level of its spontaneous orders, things that are in themselves capable of being ordered, that belong to a certain unspoken order; the fact, in short, that order *exists*. (1970, p.xx)

Foucault offers no examples that would deviate from the characteristics of exclusivity, teleology and hierarchy, but perhaps this is because he deals only with classification in our dominant culture.

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Classification and Culture

While Foucault and Durkheim and Mauss unquestioningly accept Aristotle's tenets of classification, they also connect classification and culture. Durkheim and Mauss propose a causal relationship between social structures and knowledge structures. Foucault does much the same in seeing classification as a reflection of the "fundamental codes of a culture" that establish the order by which we live:

> The fundamental codes of a culture – those governing its language, its schemas of perception, its exchanges, its techniques, its values, the hierarchy of its practices – establish for every man, from the very first, the empirical orders with which he will be dealing and within which he will be at home. (Foucault 1970, p.xx)

The inescapable teleological progression toward logical classification that Durkheim and Mauss assert and the role of classification as a vehicle for reifying the foundations of a culture implied by Foucault both make it easier to understand the view of Trinh Minh-ha in the epigraph to this paper:
that classification, like the hierarchical force of a syllogism, locks down on one.

Still, most of us find classification a useful device. Many authors have suggested that some sort of classification is innate to human thought. W.C. Berwick Sayers opens his *A manual of classification for librarians & bibliographers* (1926) by stating that "We cannot reason, even in the simplest manner, unless we possess in a greater or less degree the power of classifying" (1926, 21). The example with which he follows this statement is of someone from another planet who, if set down on earth, must classify to make sense of his surroundings. Berwick Sayers further asserts: "I doubt if a man would survive for twenty-four hours if he were entirely without his power of classifying" (1926, 22), illustrating this assertion with examples of navigating the streets of London. He even goes on to attribute classificatory powers to animals who differentiate between what is edible from what is not, presuming that animals think in such categories and not in others that we cannot even imagine. With such positive views of classification how can Trinh adopt such a negative view? My suggestion is that the difference is a cultural one. If one is a member of the dominant culture our classifications seems transparently obvious ways of organizing. However, if one is of a different culture the presumptions do not necessarily fit. As our world becomes more globalized the practice of exporting classifications of the dominant culture to other cultures expands with the result that cultural mismatches become increasing apparent.

To test the idea that the fundamental presumptions of our classification are culturally constructed I will look at the notions of exclusivity, teleology and hierarchy in other cultures. I have chosen the context of indigenous cultures because I perceive they are most likely to be radically different from the dominant culture and, therefore, can most clearly illustrate the disjuncture in notions of classification.

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Exclusivity, teleology, hierarchy and classification in relation to indigenous cultures

The definition of what is "indigenous" that I will use refers to the cultures of original inhabitants of a place or at least inhabitants who have lived in a given place and become one with it long before its European colonization [1]. Among these indigenous cultures my interest is with those that have least been least influenced by the dominant culture. Further, I will focus on what is increasingly referred to as indigenous knowledge which is typified by certain characteristics relevant to this discussion:

1) it is local, so not necessarily transferrable
2) it is orally transmitted or transmitted through demonstration and imitation
- it is "a fluid and transforming agent with no real end" (Eugene Hunn, 1993 quoted by Ellen & Harris, p.6)
3) "it does not exist in its totality in any one place or individual. Indeed, to a considerable extent it is devolved not in individuals at all, but in the practices and interactions in which people themselves engage." (Ellen & Harris, p.6)
4) "Despite claims for the existence of culture-wide (indeed universal) abstract classifications of knowledge based on non-functional criteria ... ; where IK is at its densest and directly applicable its organisation is essentially functional." (Ellen & Harris, p.7)
5) it does not fall into separable dichotomies such as rational / non-rational

The classificatory apparatus of indigenous knowledge is usually referred to as an indigenous knowledge structure. Marcia Bates (1998, p.1190) suggests that "folk classifications," which are somewhat similar to indigenous knowledge structures, should be consulted and considered in designing information retrieval systems as they may show more generally accessible patterns, especially in relation to their shallower hierarchies (implying a mild questioning of one fundamental attribute of our classifications). I think that the potential in studying indigenous knowledge structures includes this idea, but is also much greater. This kind of study can open us to radically different ways of organizing knowledge and information to give us a wider array of options for all of our systems and more open and creative ways of thinking.

Indigenous knowledge and classification

A problem in looking at indigenous knowledge is that most of the readily available information has been gathered by ethnologists trained in the dominant paradigm. It is difficult to escape the mental structures of one's cultural development and academic

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training. The result is that most of what is reported has been organized into exclusive categories, hierarchically arranged. This research is probably not actually inaccurate, but definitely interpreted in a standardized manner. The data that is gathered is necessarily selected and what fits the dominant paradigm is most likely to be perceived by researchers. Much of this data is gathered to enhance development efforts which, by definition, presumes a teleological path from less developed to more advanced. Various institutes established to study indigenous knowledge seek to document and record it and then make it available in centralized systems. The local applicability of indigenous knowledge makes it problematic to relocate the knowledge into a centralized database. One article I encountered discussed indigenous communication and, although it did not acknowledge or probably even know it, used Shannon's communication theory model to describe it. Since this model is not only linear, but also unidirectional, it is probably a very inappropriate one for indigenous cultures as I will discuss below.

Much of the literature on indigenous knowledge gathers data, but does not contextualize it in terms of the ontological and epistemological perspectives of the culture from which it originates. It does not look at the metaphysics of the culture - what perspectives it holds on being and knowing. My approach has been to try to find research with a critical theoretical stance and research and description from people who are members of indigenous cultures. In choosing materials I have found it more useful to focus on the metaphysical questions of being and knowing and how they relate to the three characteristics of standard classifications: exclusivity, teleology and hierarchy, than to try to extract fundamentals from indigenous knowledge structures. To actually define the foundations of another knowledge system probably requires being a member of the culture in which it operates. However, to discover that another culture does not adopt the presumptions of one's own is a more viable (and ethical) task, much like the practice in language translation of translating from a second language into one's mother tongue. Therefore, I will not attempt to define indigenous knowledge structures, but to show that the metaphysical properties of classification that I have identified in our dominant culture are not compatible with many indigenous cultures and are, therefore, not universal across cultures.

Exclusivity in indigenous cultures

Parmenides' idea of mutual exclusivity seems to be at odds with the fundamental metaphor for most indigenous North American (First Nations) cultures: the circle of being or sacred hoop (Allen 1992). All people, all plants and animals, all natural phenomena are integral and inseparable elements of the circle of being. The role of each is as a part of the whole rather than as an autonomous individual. For example, a way of discussing things in First Nations communities is a talking circle in which all participants sit in a circle and each has a chance to speak in order as a significant object such as an eagle feather is passed around. Only the person holding the eagle feather may speak. As a result, discussion is not in topical sequence since several topics may be under discussion at once. The talk keeps going around until no one wants to talk any more. During this process the discussion is not linear like a logical

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syllogism. Rather, all participants make sense of it for themselves. Those who are listening are as active participants in the discussion as the person who is speaking at any given time. The discussion is a weaving of many inseparable strands. It is unlike the meetings with delimited, mutually exclusive, agenda items worked through in a predetermined sequence.

This type of integration of everything also means no separation between mind and body or reason and emotions. The emphasis on logic in our classificatory practice is an example of a broader idea that mind is separable from body and reason from emotion. As indicated in the passage from Durkheim and Mauss quoted above, we generally consider "contradictions, deviations, and overlappings" as failings showing a lack of logic. Logic as the product of a reasoning mind is highly valued in our dominant culture. However, the exclusion of emotion, or, indeed, of what our bodies can tell us, is not a universal cultural characteristic. For example, the Polynesian people of Hawai'i aim to integrate mind and body and reason and emotion, finding that mind or logic alone gives them a limited knowledge of the world (Meyer 1998). There is no innate need to divide thought into the categories of reason and emotion or to divide our being into the physical and mental. Such division is a legacy from Parmenides.

A third example of the cultural specificity of mutual exclusivity comes from the herbal medicine traditions of China and India (Shankar 1996 and Pang & Wang, personal communication 1999) [2]. Both of these traditions view medicine as a combination of substances to treat a unique combination of problems. The result in practice comes from the interactions between the substances rather than the substances themselves with the benefit that smaller doses are required resulting in fewer side effects. The practices of the pharmaceutical industry in our dominant culture are founded on scientific method which is based in Aristotelian logic. It focusses on the effects of mutually exclusive substances rather than the interactions between substances, demonstrating again that mutual exclusivity as a concept is not universally considered to be positive.

These three examples: the circle of being, the integration of mind and body and of reason and emotion, and the focus on relations between entities rather than the entities themselves, make it easy to understand why mutually exclusive categories are not suitable containers at least for much indigenous knowledge. Mutually exclusive categories are only one possible answer to the question of how to organize things.

Teleology in indigenous cultures

Teleology as the idea of a progression toward a goal implies a linear advancement in a particular direction. In looking across cultures we often encounter problems in recognizing what is characteristic of the culture and what is characteristic of the observer's culture. As mentioned above, much of the work on indigenous knowledge structures is done in the context of international economic development. The whole notion of international economic development presupposes industrial development as

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a goal. We often question whether or not this is really a valid goal, but we usually accept that there should be some goal. Therefore, in this discussion I will look beyond the specific context of knowledge or information to a more metaphysical conception of teleology and how it fits or does not fit indigenous world views. Implicit in the teleological stance of our dominant culture is our concept of time. We see time as linear — past, present and future — with everything happening in chronological sequences. Durkheim and Mauss envisioned a progression of cultures over time from "primitive" to "sophisticated." International development presumes that measurable progress can be made from one point in time to another. However, many cultures have different conceptions of time that do not lend themselves to linear progression toward a goal.

As a first example, it is no stretch of our intellects to recognize the cyclical time of the seasons that is common to classical mythology along with the mythic ontologies of many other cultures. Demeter's mourning for her daughter Persephone, descended to Hades, causes winter and Demeter's joy at Persephone's annual return brings on spring — life and death as a cycle mirroring an agricultural cycle. We are also familiar with the seasons as a metaphor for a person's life so we think of youth as spring and autumn as a metaphor for aging. Presumably, cultures that live closer to nature are likely to focus more on the cyclical time of the seasons than are industrial urban cultures in which we tend to divide ourselves from the elements.

The seasonal cycle is related to ritual time. The time for any event, such as a ritual or ceremony, is when things are in an appropriate balance. It may be at a solstice or equinox when there is a particular moment of celestial harmony. Ritual time escapes the strictures of chronological or linear time by being achronological. It is like the stories in oral tradition, the milieu of most indigenous knowledge, that do not follow a chronological pattern, but leave the listener to supply an appropriate order through various kinds of relationships between elements in the story. In that sense it is similar to the talking circle that does not follow a prescribed sequence of topics. Paula Gunn Allen suggests that linear time is useful for an industrialized society because it is a way to quantify the efficiency of production, but "[t]here is plenty of time in the Indian universe because everything moves in a dynamic equilibrium and the fact of universal movement is taken into account in the ritual life that is tribal existence" (1992, 147). The idea of time as achronological is foreign to our dominant culture in which we have turned clocks, a physical manifestation of linear time, into things we wear on our bodies in the form of watches.

Other indigenous perspectives on time separate time from location of which the best known may be the Dreamtime of Australian Aborigines' culture. Dreamtime is both the period when the original ancestors created the world and a parallel time to the present — a different state of the same reality. One does not have to be asleep to experience Dreamtime — Jamake Highwater suggests that it may be the answer to Hannah Arendt's question: "Where are we when we think?" (1981, p.89).

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The Dreamtime is another place, a concatenation of time and place. It is a parallel world as well as a parallel time. In this sense it is easier to see how this discussion of teleology focussed on time relates to classification. Classification is at least metaphorically spatial and, in the case of library classification, it is physically spatial, determining what sits where and next to what other things on library shelves or in library databases. The linearity of classification, its lining books up in a row, reflects the chronology of our dominant culture's notion of time. This same linearity in classification is used not only to gather items on one topic, but also to group them next to related topics. The overall structure, then, requires some sort of progression. For example, the progression of classes in mainstream classification schemes tends to reflect some kind of progression such as the one Melvil Dewey borrowed from William T. Harris's classification for the St. Louis Public Schools which Harris, in turn, allegedly adapted from Francis Bacon. The result is a progression from abstract to concrete, at least in the eyes of the historical originators. Such teleological orders of knowledge suggest a progress toward an end. Conceptions of time that do not focus on linear sequence suggest an escape from the goal-oriented progress of the dominant teleological ethic.

Since time is not the simple, linear concept that we have taken it to be, neither is it a teleological progression. A Platonic dialectic seems a very artificial construction in light of cyclical ritual time or Dreamtime. A simple causal sequence, like Plato's dichotomous questions that lead inevitably through a dialectic process toward a prescribed end, limits the flexibility of a system of ordering to one dimension — forward or backward along a line. Other dimensions can come to us from other cultures, enriching our ways of relating one thing to another.

Hierarchy in indigenous cultures

Hierarchy was the third of the conceptions to develop in terms of Aristotle's classificatory logic. The reader will already have guessed that in cultures with concepts like the circle of being or Dreamtime a hierarchical pyramid makes no sense. In a talking circle, for example, there is no vying for attention or to take the floor. Social dominance is not a factor in having the opportunity to be heard. In the same manner, each person in the circle of being has responsibility to the whole. However, there are both more specific and subtler differences as well. Recalling Durkheim and Mauss's idea of "logical" classification reflecting social classification it is useful to examine the idea of kinship structures that Durkheim and Mauss employed as demonstrative of social.

The hierarchies of kinship in the Polynesian society on Pukapuka, an atoll in the Cook Islands of the Pacific, offer an interesting example (Borofsky 1987). Pukapukan kinship relationships are complex being based on both matrilineal and patrilineal lines. In addition, there are established relationships based on the division of territory that crisscross the kinship lines. The ethnologist, Robert Borofsky, witnessed a radical change in these groupings when the three territorial villages were suddenly abandoned in favour of a two-part organization called the *Akatawa*. What interested

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Borofsky was the fact that the *Akatawa* was said by the Pukapukans to be a revival of another traditional form of organization, but it had never been documented by ethnologists as either existing or as part of people's histories. A further interesting aspect to Borofsky's description of Pukapuka and the ethnographic descriptions of it is that there is an enormously complex set of organizational structures governing people and resources even without the change to the *Akatawa*. Obviously there is no emphasis on some single pyramidal hierarchy, but rather on a series of relationships that serve to balance the interests between groups by ensuring that group members have other affiliations to differently constituted groups. In classifications we try to find one place for any given topic so that all works on that topic will be grouped together. However, in trying to establish a universally applicable ordering we fail, because topics can be combined according to an enormous range of criteria and to impose universality we must choose one — even though which one we choose may change over time as documented by Foucault.

Another view different from the standardized hierarchical kinship structure suggested by Durkheim and Mauss is seen in North American Aboriginal family relationships. In our dominant culture, we are accustomed to seeing kinship structures look like family trees, hierarchical structures based on parentage. These hierarchical orders are typical of the kinship systems created by the researchers whose work Durkheim and Mauss used to come to their conclusion that such a pattern evolved with increasing sophistication in all societies. A Native American extended family system helps to explain why a hierarchical order makes no sense in some cultural contexts. Close relationships skip a generation and so while parents and aunts and uncles play an important role for children, especially in providing for the family, the next generation older is linked more closely as caregivers and educators (Tafoya 1983). Further, it is not only a child's parents by birth, but also aunts and uncles and great aunts and uncles who are significant for the group of children in a particular group. While precise parentage is not insignificant, it does not carry the weight of responsibility typical in our dominant culture. Responsibility for children is shared. Again, the circle of being comes into play — the harmony of the components is maintained by balancing different kinds of relationships and by a range of types of relationships, few of which could be considered hierarchical. Like linearity, hierarchy is a limited device for organizing knowledge or anything else. It is represents only one type of relationship among the many that are possible between people or between concepts.

Drawing together in the style of our dominant culture

This largely metaphysical discussion of mutual exclusivity, teleology and hierarchy suggests that our standard practices of classification are a mismatch for at least some cultures at a very fundamental level. They do not fit with the principles of being and knowing held by many indigenous peoples. One might tentatively extrapolate this conclusion to marginalized groups within our dominant culture. For example, feminist researchers have suggested that many women who are otherwise mainstream (straight, white, etc.) nevertheless have a significantly different way of knowing than is dominant within the culture. That this way of knowing is less linear and

ISSN: 2324-9773

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hierarchical and more attentive to what is peripheral and interconnected like a web. Given that women have traditionally had a less than advantageous place in the social hierarchy is not surprising that there might be such a difference. In the same manner, feminist theory suggests that the binary categories commonly found in our dominant culture — mind/body, reason/emotion, male/female — are constructions rather than natural (as Trinh Minh-ha has said: "Categories always leak," 1989, 94). If that is the case, then the separation of these concepts into mutually exclusive categories is the product of discourses within a dominant culture. Ultimately, the concepts of mutual exclusivity, teleology and hierarchy are limiting. Each one excludes some dimensions. Their limitations contribute to their being efficient, but make them hostile to those who see the world in a more fluid and less rigid manner.

Any attempt to develop new principles for organizing knowledge is likely to be incompatible with at least some cultures. A universally applicable answer is simply not viable. However, in questioning underlying assumptions research like this should help make us receptive to a wider variety of organizational structures. Further, it should give us some idea of how to go about modifying existing structures or creating new ones.

Myth and the construction of classification

To point toward an alternative view of classification, this paper will close with a look at the suggestion that what orders our worlds in a more positive sense, not generally recognized, is myth. Jamake Highwater states that "[a]ll of primal peoples' meaningful relationship to their world is thus not history, not causality in a scientific sense, but a mythical ordering of life that has not deviated and will not in the future deviate from the traditons of immediacy" (1981, 90-91). Here Highwater suggests that myth escapes teleology through an order that is both established and of the present. Paula Gunn Allen suggests that "[m]yth is a kind of story that allows a holistic image to pervade and shape consciousness, thus providing a coherent and powerful matrix for action and relationship. It is in this sense that myth is most significant, for it is this creative, ordering capacity of myth that frightens and attracts the rationalistic, other-centered mind ... " (Allen 1992, 104-105). Durkheim and Mauss alluded to the ordering quality of myth in the more simplistic sense of deities in a pantheon responsible for different aspects of reality, but saw it as ultimately developing into monotheism in the most sophisticated cultures (*i.e.* their culture).

Myth as a negative factor

In our dominant culture we tend to regard myth as lacking in credibility. For example, the *Oxford English Dictionary* (*OED*) describes myth as "a purely fictitious narrative usually involving supernatural persons, actions, or events, and embodying some popular idea concerning natural or historical phenomena," "an untrue or popular tale, a rumour," or "a fictitious or imaginary person or object." In these, the only three,

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senses of the word "myth" given by the *OED*, myth is portrayed as false, unreliable, and unsophisticated in that it is "fictitious," "untrue," and "popular." The *OED* gives no positive definitions of "myth." Further, we are often suspicious of myth. In Roland Barthes influential work on myth he suggests that it is has ideological implications — that myth attaches to seemingly natural everyday things that then become ideological tools for justifying and enforcing the status quo (Duncan and Duncan 1992, 18). Barthes deems myth to be a form of "language-robbery" that takes the meaning of an articulated statement and transforms it into form (1973, 131). That is, according to Barthes, myth takes what is a word or image with some obvious meaning, empties it of that meaning, and uses its empty form to convey something else. He takes the negative aspect of myth and makes it manipulative as well.

Bruce Lincoln, in his *Discourse and the Construction of Society: Comparative Studies of Myth, Ritual, and Classification*, falls in with Barthes by suggesting that both myth and taxonomy construct society:

> Taxonomy is thus not only an epistemological instrument (a means for organizing information), but it is also (as it comes to organize the organizers) an instrument for the construction of society. And to the extent that taxonomies are socially determined, hegemonic taxonomies will tend to reproduce the same hierarchic system of which they are themselves the product. (1989, 7-8)

To operate in this manner, myth, according to Lincoln, has three characteristics: credibility, truth, and authority. That is, they are believed, they are true and they carry weight. Nonetheless, Lincoln suggests that myth is invented and used to support some ideology or another.

Creation myths and ordering

With these negative ideas about myth can we consider it as a potentially positive force for ordering? Has it been so used in our dominant culture? If we take the creation story from the *Bible* we find that it is not incompatible with the principles we use in classification. On each of the six days of creation a different category was created and these categories divided elements of creation, light from dark, heaven from earth, dry land from water, *etc.* in what *The New Jerusalem Bible* calls "a complete logical classification of beings" (1985 ,17). God divides creation into mutually exclusive categories and orders them in a teleological sequence ending with "Man." That sequence is hierarchical in the sense that it moves from the most basic elements to the most complex as viewed in human terms, ending with Adam as the creature to name and rule over all others. This sequence embodies the great chain of being common in European thought. If we think of the Biblical creation story as a founding myth of the dominant culture then it is evidence that myth is at least part of the discourse that orders our realities, even in our dominant culture that tends to view myth negatively.

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Lincoln quotes other creation stories, most notably one from the Trobriand Islanders reported by the anthropologist, Bronislaw Malinowski. In explaining its hierarchical nature he accepts Durkheim and Mauss's statement that "every mythology is fundamentally a classification" (1989, 77). However, like Durkheim and Mauss, Lincoln takes the work of earlier anthropologists at face value. David Maybury-Lewis gives an example of the problem in so doing (1992,167-170). He describes the work of Marcel Griaule who studied the Dogon people of Mali and reported a creation myth that explained all aspects of their culture. No later anthropologist could find evidence of this myth. Maybury-Lewis concludes that the forcefulness of Griaule as an individual, combined with the Dogon "courtesy bias," resulted in the Dogon providing the myth that Griaule sought by making one up for him. In turn, Griaule respected the knowledge of his Dogon teachers and accepted what they told him.

A very different type of creation myth from the Cheyenne people is reported by Paula Gunn Allen (1992, 57-59). In it Maheo, the All Spirit, creates water, light, sky-air and the peoples of the water, but cannot go further alone. Maheo asks the loon that he has created for assistance in creating land and other elements in creation. The idea that a part of creation helps to create the rest is quite different from the Biblical version. In the Cheyenne story creation is not brought into being exclusively from outside and then set into motion. A classification created in this manner would draw on its users in the course of its construction.

Myth and a human need for order

Above I quoted Berwick Sayers' on the human need for some kind of classification: "We cannot reason, even in the simplest manner, unless we possess in a greater or less degree the power of classifying" (1926, 21). Paula Gunn Allen says much the same: " ... myth stands as an expression of human need for coherence and integration and as a mode whereby human beings might actively fill that need" (1992, 104) However, she goes on to say that "myth is more than a statement about how the world ought to work; its poetic and mystic dimensions indicate that is embodies a sense of reality that includes all human capacities, ideal or actual" (1992, 104). Berwick Sayers was, in all likelihood, speaking only of logical classification. Thinkers like Durkheim and Mauss and Foucault have linked logical classification to social classification and cultural forces. Allen takes it one step further than links classification to poetic and mystic dimensions. Nevertheless, Allen accepts some underlying need to create an order among things. She suggests that myth is teleological, not in the linear sense in which I have described our dominant classificatory practices, but in the sense of having order as an end. That this order might take many different forms and might be created in a variety of different ways suggests the possibility of variant principles for classification. Allen is, nevertheless, accepting the authority of the myth articulated by Lincoln.

Trinh goes even further than Allen in opening up the boundaries of myth. She suggests that myths give birth to myths "beyond any myth teller's control" (1989, 61). They do not require some kind of teleological progression toward greater

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sophistication, "[f]or, the underdeveloped is first and foremost someone who believes in development. Myths circulate like gifts without givers, and no myth teller (cares to) knows where they come from or who invented them ..." (1989, 61-62). They may vary. They may be mutually contradictory. However, these factors need not be of concern unless we adopt principles such as mutual exclusivity, teleology and hierarchy in rigid fashion. Aristotelian logic requires these factors. Durkheim and Mauss defined a teleological progression toward a social and logical classification free of overlap and contradiction. Foucault focussed on the cultural construction of classification within the dominant culture, but not across cultures. Moving outside of these strictures Trinh asks: "Who suffers from the need for classification and identification?" (1989, 62). She is not convinced that what Berwick Sayers and Allen suggest to be a human need is not a constructed need. The inability to live with uncertainty and fuzzy boundaries is not innate.

Trinh introduces a tolerance of "contradictions, deviations, and overlappings" offers us the possibility of having systems of ordering that do not have the limitations of mutual exclusivity, teleology and hierarchy. We might have crisscrossing systems like the Pukapukan social structures. Different local systems can coexist to serve different perspectives and cultures. Our need for classification is not always constructed in the same way. Sometimes we will need ambiguity in our ordering.

Into the future

Obviously this discussion is a survey of immense topics. In one sense it is a test to see whether the themes presented merit more exploration. Awareness of the cultural construction of our classifications is a useful first step. It offers the possibility of creative adaptation, of looking at classification. Clare Beghtol has said that classification research requires a paradigm shift "to build responsiveness to different discourse communities ... basic research is needed on structural principles and creative design criteria for classification schemes" (1998, 8). As noted above, Marcia Bates thinks that folk classification is one possible starting point. Putting these thoughts into the context of my epigraph I suggest that there is an urgency to looking at classification in ways that now seem unconventional. The power of a statement like Trinh's calls for a questioning of fundamental principles and merits looking to powerful cultural discourses such as myth. I hope that others will agree and will join me in such explorations.

Notes

1. I contrast indigenous cultures only to European culture because my purpose is to offer a foil to our dominant culture. The same might be true in relation to other imperialistic cultures, but is not significant to this discussion.

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2. European herbal traditions are still extant, but are most commonly simplified into maxims prescribing chamomile for an upset stomach and peppermint for a headache having lost, for most people, the ontological underpinnings still found in other cultures.

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ISSN: 2324-9773