Colonialism has left its indelible mark on the world: cultures denied, traditions altered or erased, narratives ignored—all under the guise of noble, and perhaps sincere, intentions of spreading civility among "heathens" and the "wretched." Power and authority have been assumed with little regard for the conquered as their voices have been disavowed, discounted as subhuman. Societal structures have been implemented as ideal solutions to the perceived inferiority of indigenous societal structures; language, culture, and traditions of a conqueror have been imposed on the conquered, an ontology imposed on another, despite cultural incongruence, and in consequence of power assumed by one over another. The colonized have been classified as the "others," as "uncivilized," as "ungodly in need of saving." This has been the experience of China and Korea at the hands of Japan; the Philippines at the hands of Spain; India, Burma, and Singapore at the hands of Britain; and countless others throughout history.

While the example of colonialism may be extreme as a metaphor for ontology, it still serves as a compelling metaphor; colonialism alludes to structures of power, as does an ontology imposing itself on another. In hindsight, history has revealed the terrors and consequences of colonialism, including loss of culture, loss of life, and loss of heritage. It has also revealed the implications of classification. Who creates the categories into which people are separated? Who decides who belongs where? Translated in terms of information classification, the questions become: Who creates categories to separate information, and who decides what belongs where? This paper aims to explore these issues by investigating the process and product of standardized classification, and the structures that inform them. Of primary interest is the relevance of the notion of ontology, or ways of being, and the standardization of classification schemes. This paper posits that standardized classification inherently alludes to ideas of power in that certain ontologies are privileged over others, and argues in favor of folksonomies as equally valid systems for the organization of information.

Social commentator Clay Shirky (2005) asserts that "ontology is overrated," a bold statement given the pervasive use of standardized classification systems. Bowker and Star (1996) define classification in terms of segmentation—systems that compartmentalize and modularize. They add that such standardized systems exhibit four primary characteristics: 1) embeddedness in a network of classification systems, 2) the material and tangible nature of that which is categorized, 3) a singular (both metaphorical and literal) authoritative voice that de-legitimizes other voices, and 4) the politics that inform creation of categories and the inclusion and exclusion of members of those categories. Power here is referenced multiple times, especially with regards to inclusion and exclusion: Who decides "what" goes "where," and how did those decisions come to be accepted?

Defining "Ontology"

A survey of the literature regarding ontology will reveal the ambiguity of the term and the diverse ways that it is employed across disciplines, including philosophy, computer science, anthropology, and sociology, among others. The Oxford Reference Online's *World Encyclopedia* (2005) defines ontology as the "branch of metaphysics that studies the nature of things; the essence of 'being' itself." Brey (2003) corroborates this definition but adds that a "basic ontology" also includes how the existing things of the

world are classified by virtue of their current existences and their origins. Thus, the subject of inquiry is the nature of reality: What exists, and what comprises existence?

Adopting an anthropological perspective, Searle (2006) articulates the concept of social ontology, which is comprised of facts, physical objects, and processes and events in social interactions. Searle's definition alludes to the diversity of experiences that inform an ontology and the idea that ultimately, ontology is better conceived of as *ontologies*, multiple and situated. Moreover, his definition rejects the idea of a singular monolithic perspective of being. Harding (2003) asserts that "different cultures organize the production of information/knowledge about nature and social relations in different ways" (p. 255), and that knowledge and information production are ultimately influenced by individuals' cultural and social positions and locations. Diverse communities experience diverse realities and consequently produce and possess diverse bodies of information and knowledges. Many scholars have argued for a paradigmatic shift away from a definition of ontology that assumes a singular reality toward definitions that include diverse ways of producing, organizing, and utilizing knowledge (Turnbull, 2006; Boast, Bravo, & Srinivasan, 2007).

In contrast, computer and information science uses the term ontology as an artifact "engineered by—but often for—members of a domain by explicating a reality as a set of agreed upon terms and logically-founded constraints on their use" (Mika, 2005, p. 522). Similarly, Vickery (1997) describes ontology as a conceptual schema and its corresponding vocabulary, employed to represent a particular domain of knowledge. That is, Vickery's "knowledge engineering" perspective views ontology primarily as a framework of hierarchical classes by which a knowledge base can be symbolically represented in a material space (e.g., databases and application environments). Vickery presents Project Generalized Architecture for Languages, Encyclopedias, and Languages Coding Reference (GALEN CORE) as an example of ontology in that it parses the domain of clinical medicine into classes of simple concepts that may be combined to represent more complex concepts. The GALEN CORE model is therefore able to describe a broad range of medical concepts through its technical structure and its classification of concepts. Bateman, Brooks, & McCalla (2006) add that ontologies in software application environments also serve to explicate relationships between concepts; these ontological frameworks, therefore, can be conceptualized as microcosmic representations of knowledge domains. Furthermore, Taylor (2004) divides ontologies into those that are nonlinguistic (such as those that are used to perform an action or complete a task) and those that are linguistic, based on rules for grammar, syntax, semantics, and other features of language. Linguistic ontologies, according to Taylor, include lexicons, controlled vocabularies, dictionaries, and thesauri, among others.

What sort of relationship can be distilled from these seemingly divergent definitions of ontology? The literature of computer and information science suggests that the focus of ontology lies in its technical aspects, including (but not entirely limited to) the construction of vocabularies, thesauri, and glossaries to describe reality for particular domains of knowledge in application environments. However, as numerous scholars (e.g., Harding, 2003; Lawson, 2003; Searle, 2006) have argued, ontologies exist in multiplicity, co-produced and co-existing in diverse contexts. Turnbull (2006) states that local knowledges and multiple ontologies differ in their mobilities and capacities for linkage; they are subject to social and technological influences on the manners in which

they assemble and flow. Knowledges, Turnbull emphasizes, emerge in spaces of connectivity, between "people, practices, and places" (2006, p. 142). The computer and information science definition of ontology in application environments—as representations of knowledge domains—therefore provides means for mobility, connectivity, and potential avenues by which knowledge may emerge across spatial boundaries.

Tensions: The Politics of Ontologies in Classification

Ontologies refer to the lived experiences of actors, and include sets of factors that account for who the actors are, how the actors act, and how actors approach organization of their worlds. Ontology is subjective and constructed; it articulates the relationships and interactions that an entity has with other entities (Bowker & Star, 1996). Given the multitude of experiences that any one individual may have, not only in his or her daily interactions but also in the totality of experiences from which he or she derives identity and participates in, ontologies are relative. Classification can be conceived to be an expression of an ontology, as it describes a particular perspective, a specific ordering and parsing of information into more manageable forms, in contrast to the vast volumes of information that have yet to be categorized, or will not be organized because they might not fit. Classification is therefore a tool that enables an individual to perceive and express organization, oftentimes at the expense of what is not included, or left out of such an organizing scheme. Foskett (1984) demonstrates the bias inherent in classification, and also elucidates examples that convey the socially constructed nature of Dewey Decimal Classification (DDC), Library of Congress Subject Headings (LCSH), and the Universal Decimal Classification (UDC). For example, Foskett discovers that the ninth edition of the LCSH cross-references "Adolescent boys" with "Church work with adolescents," "Religious education of adolescent boys," "Adolescents," "Teen-age boys," "Boys," "Puberty," and "Youth." In contrast, "Adolescent girls" are cross-referenced with "Adolescent mothers," "Church work with adolescents," "Menarche," and "Pregnant school girls" (p. 348); these cross-references as expressions of how adolescent boys and girls are categorized in LCSH, Foskett posits, reflect the particular socio-historical moment. Interpreting and extending Foskett's critical approach to classification, Olson (1998) asserts that classification is a product of classificationists, who are in turn influenced and shaped by the time and spaces that they occupy. Furthermore, Olson states that classification schemes aim to be used by the greatest proportion of individuals within a society; it is advantageous for a classification scheme to reflect an ontology that is shared by the greatest number of people. Thus, classification is not only biased, as Bowker and Star (1996; 2000) so diligently demonstrate; it is also socially constructed for the mainstream, at the expense of the marginalized.

This notion of inherent invisibility and the marginalization of certain knowledges in classification points to the political play between ontologies and the ways that they are articulated. Ontologies, as referents to what individuals perceive as real and conditions of possibility, imply that our capacities for action, reaction, interaction, and inaction are all open, contested, and conflictive (Mol, 1999). Thus, the interrogation of ontological politics requires acknowledging ontologies as multiple, situated, local, and diverse (Haraway, 1988; Mol, 1999). Ultimately, ontological politics as a concept can be taken to

mean that there are winners and losers, the visible and the invisible, the acknowledged and the unacknowledged.

The Koorie Heritage Archive (KHA) project of the Koorie Heritage Trust, Inc. in Melbourne, Australia is one example of the intersections between ontological politics, classification, technology, and local knowledges. The project aims to rectify some of the difficulties faced by Indigenous[*] Australian communities in preservation of and access to their cultural materials in manners that are culturally respectful and appropriate (Huebner and Cooper, 2007). It also seeks to redress and counterpoint the Australian government records that erased and oppressed the Indigenous peoples throughout its history; the Australian government, operating from a position of power in governance, created recorded representations of the Indigenous peoples without regard to how the Indigenous peoples viewed themselves and their world. Moreover, the Indigenous Australian experience with colonialism resulted in the legalized forced removal of Indigenous children from their communities and their families from 1910 to 1970, as the government sought to assimilate the "Stolen Generations," and obliterate the Indigenous Australian communities (Van Krieken, 1999; Bretherton & Mellor, 2006).

The KHA includes a media library of various digitized materials significant to the community, including photographs of individuals and places, cultural artifacts, art objects, film footage, and sound recordings. Community members, in addition to accessing the KHA, are also able to contribute their own metadata, describing the materials in the digital archive on their own terms, in their own ways. This "living archive" (p. 21) brings the materials back home to the community:

> By taking them back to the community we are saying, these were written in hatred, and were taken under duress, but we've returned it. We've returned it to you and what we want you to do with it is something positive; somethin' right by your community. Prove them documents wrong. That you are a strong black person. You are not a savage. You are not a slave. You are not a servant. You are a strong black man. You are a strong black woman. That's what giving back those documents allows. It returns everything back to country; back to people. (Huebner & Cooper, 2007, p. 28)

Beyond Essences: Assemblage Theory and Classification

A classification system assumes that it can account for the totality of information that it categorizes (Shirky, 2005). That is, information has already been assigned to its place upon the proverbial "shelf" before it has been committed to paper or other tangible

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[*] The author has intentionally capitalized "Indigenous", as it refers to a specific group of people within the larger context of Australian history and its populations. It is a convention that has been adopted as reflective of respect for these communities, similar to the capitalization of Native American. It is also consistent with some of the literature in Australia that has been written about/by members of these communities as a matter of community self-designation. The Chicago Manual of Style (15th ed.) also recommends that names of ethnic and national groups and any accompanying adjectives be capitalized. For more information, please see the New South Wales' *Protocols a*nd Guidelines (http://www.curriculumsupport.education nsw.gov.au/shared/protocols htm) and Russell, P. (2005). *Recognizing Aboriginal Title: The Mabo Case and Indigenous Resistance to English-Settler Colonialism.* Toronto, Canada: University of Toronto Press.

media forms to be physically categorized and made accessible. Such a system presupposes the existence and primacy of essences, indices of objective characteristics by which all things may be classified. Essences are the "atoms" that form the substrate for all things, the nature of things that are invariant and constant. Philosopher Manuel DeLanda (2006) presents the example of Aristolean taxonomy, which posits that in nature, there are three primary hierarchical categories that allow for the classification of biological organisms: genus, species, and individual. Thus, this classification assumes "reified generalities" and assumes the presence of essences in and of the organism that can be distilled to categories reflective of characteristics inherent in biology, primarily at the level of species. DeLanda further extends his investigation of essentialism by exploring the demarcations of biological taxonomy through evolutionary theory, such that species can be identified through the "different forms of natural selection (predators, parasites, climate) that steer the accumulation of genetic materials in the direction of greater adaptability" (p. 27), and through reproductive isolation, an evolutionary mechanism that prevents one species from mating with another. Biological science looks to the demarcations of biology, inter- and intra-species, to assert the validity of Aristotelean taxonomy.

One example that attests to the pervasive acceptance of the notion of essences as a driving force behind the organization of information is that of controlled vocabularies, a set of terms that have been accepted by the creator of the classification system as viable search terms. They are a contract, a manner by which the user is afforded the privilege of searching an information database, but only if their queries are made in terms decided upon by the creator(s). However, the delineation of controlled vocabulary search terms is problematic in the degree to which they are ontologically, and arguably ideologically, loaded. Controlled vocabularies delineate a finite set of terms to describe information, such that the constituents of the totality of information can be demarcated by "universal" subject headings that are intuitive and accepted by the majority of people who would use them. Shirky presents the example of the political connotations of categorizing information relating to same-sex attraction as "queer" as opposed to other similar terms such as "gay" or "homosexual." Each conveys an experience and a history and has been used in a variety in contexts (i.e., "queer" is often used in more politicized, sexual identity-affirmative contexts, while "homosexual" is often used in more neutral or in de-politicized contexts and/or used pejoratively). Shirky (2005) refers to this loss of granularity between similar terms that have been lumped together as one category as "signal loss."

In examining classification and categorization, we must take care to note that their locus of power lies primarily in standardization. Standards homogenize "doing" and "thinking." Bowker and Star (2000) defined standardization as a set of rules that have been agreed upon in the production of textual and/or material objects, while also being trans-local and trans-temporal, such that it is employed in multiple locations and exhibits a degree of persistence over time. This persistence, this inertia, makes standardization difficult to unseat, as the spatial and temporal expansion of its usage reinforces its authority.

For classification to be standardized is to communicate that a particular scheme has been adopted as among the most widely accepted and used, and ultimately implies that schemes that not the standard are "alternatives." This structure of power is alluded to

by the rhetoric and definition of standardization. Standards have authority, afforded to them by aggregations of "expert" input and consensus. But the question then becomes who is left out of these expert circles? Who is left out of the dialogue and the negotiation of these standardized categories for the classification of information? Thus, the configuration of the cataloger-as-authority-as-informational-gatekeeper again underscores power as an inherent dynamic of standardized classification. The cataloger is an agent, poised to disseminate information and encourage discovery, but the actualization of these goals is hindered if the user's own ontology is incommensurable with that of the cataloger. Where is the common ground, the foundation for informational discovery?

DeLanda (2006), while taking care not to discount classification as set forth by Aristotle, makes the case for another perspective: assemblage theory. As opposed to Aristotelean taxonomy that seeks to delineate the generalities and characteristics that determine speciation and other biological categories to define natural essences, assemblage theory does not presuppose that such specific generalities exist. Instead, it looks to individual entities, how they aggregate and interact with one another, the results of those interactions, and the potential for the emergence of larger assemblages.

While assemblage theory recognizes the categorical hierarchy that Aristotelean classification assumes, it conceives of it differently. Aristotelean classification conceives of its categories in terms of the degree to which one category is part of a larger category; DeLanda (2006) refers to this as the "Russian Doll" or "Chinese Box" perspective, with a category "nesting" within a larger category, which also "nests" within a larger category. Ultimately, these categories are delineated through biological indices: a horse is always a kind of mammal; an alligator is always a kind of reptile; a pigeon is always a kind of bird. In contrast, assemblage theory seeks to explain the emergent properties of categories, while also acknowledging the existence of hierarchies—structures of generality moving toward specificity and vice versa. Its focus is the individual properties of organizations; in other words, individual entities (e.g., people) comprise larger organizations, which in turn comprise larger organizations. On the face, this seems to coincide with the "nesting" perspective of categorization, but assemblage theory has at its focus the interactions and emergence of larger categories as a result of interactions between organizations. Thus, individuals aggregate in a variety of ways, on different scales; families differ in size, as do the breadth and expanse of their linkages to other families across space and time. While the Aristotelean brand of classification system creates categories based on the essences—the static natural features—of the organisms that it classifies, classification emerging from the interface between assemblages has the potential to be much more dynamic. They are the product of process, actively emerging from the organizations themselves rather than being prescribed based on the presence (or absence) of essences. DeLanda states: "As larger assemblages emerge from the interactions of their component parts, the identity of the parts may acquire new layers as the emergent whole reacts back and affects them" (p. 48).

By exploring the social layers of how individuals gravitate toward (or move away from) each other and the ensuing interactions that they and their larger organizations engage in, assemblage theory provides a useful framework for investigating the notion of multiple ontologies and their contiguous links. The cohesion of assemblages arises from "the habitual grouping of ideas through relations of contiguity (in space or time), their

habitual comparison through relations of resemblance, and the habitual pairing of causes and effects by their perceived constant conjunction" (p. 48). Therefore, an assemblage is a collection of ideas that turns into a whole with emergent properties. As collective individuals, assemblages therefore possess specific ontologies, unique to their constituents, their respective relations of exteriority, and their interactions. Assemblages have specific ways of being, informed by the factors that have led to their emergence, and their potential and capacities for further emergence. Therefore, it follows that one assemblage may organize its world differently than another assemblage might.

Folksonomies: Expressions of Assemblage

In contrast to controlled vocabularies and standardized classification that seek to unify perspectives under the master ontology of the cataloger and/or creator of classification scheme(s), folksonomies aim to incorporate multiple ontologies into classification. Folksonomies, also known as "tagging," allow the user community to define its own categories for classification, or "tag" information, thereby decentralizing description and classification. These categories are created and used by the user community. Alexander (2006) states that an advantage of folksonomies is that users actually use the categories that they generate, attesting to the salience and relevance of user-generated categories. He also underscores the social aspect of folksonomies as products of negotiation. That is, applications that employ folksonomies also provide avenues for feedback for further development (Johnson, 2001). This feedback, this dialogic negotiation, points to DeLanda's description of assemblage in terms of activity and reactivity. For example, in Flickr (http://www.flickr.com), an online photo-sharing site that offers users the ability to tag their items, users are able to browse tags that others have applied to their own respective items and have been ranked in terms of popularity. Users may then subsequently decide to use tags that have been used by others, or to generate their own. Veres (2006) asserts that folksonomies can be distinguished from taxonomies in a variety of ways. Most notably, folksonomies (i.e., tags) categorize *and* describe the objects, employing adjectives, verbs, and proper names. The diversity in the kinds of tags employed by users therefore allow for richness of description, and encourage finer granularity in how the tagging community categorizes, for example, photographs in Flickr.

Del.icio.us (http://del.icio.us) is another example that is frequently cited in the extant body of literature on folksonomies. A social bookmarking site, Del.icio.us allows its users to aggregate their bookmarked websites and tag them with descriptions. Tags are defined on the website as:

> one-word descriptors that you can assign to your bookmarks on del.icio.us to help you organize and remember them. Tags are a little bit like keywords, but they're chosen by you, and they do not form a hierarchy. You can assign as many tags to a bookmark as you like and rename or delete the tags later. So, tagging can be a lot easier and more flexible than fitting your information into preconceived categories or folders. (http://del.icio.us, 2007)

Peterson (2006) contends that philosophical relativism informs folksonomies, both in their creation and their use. That is, folksonomies are contingent upon the diversity of the

experiences of the individuals who create the tags, and those who use them as a tool for information retrieval. Peterson also states that the relativism of folksonomic classification, which on the one hand can be viewed positively as a democratic project, can also be its caveat. Specifically, tags that are semantically contrary to one another (e.g., "guitar" and "violin") may be used to describe the same thing, and relativism deems the tags valid, despite inaccuracy of the tags as descriptors for the object they purport to represent. Another criticism of folksonomies includes "metanoise," which can include misspellings of tags and inaccuracies of the tags as descriptors. Dye (2006) further adds that because folksonomies are predicated on the activity of the community, their successes in linkage and connectivity are contingent on the sharing of metadata; a tag loses its function and richness in the context of the tagging community if the collective endeavor is usurped by "selfish tagging" that does not aim or function to contribute to the corpus of tags that are useful to other users.

Folksonomic classification alludes to the idea of emergent knowledge. Such knowledge is the result of the interface between multiple ontologies, the ensuing tension that arises between competing ontological narratives, and the processual dialogue, negotiation, and consensus of inter-actor collaboration. Writer Steven Johnson (2001) applies this principle to a variety of contexts where structures are not prescribed, but rather emerge from factors outside of an authority's locus of control. Johnson asserts that the local interactions between actors effect global changes, as seen in the development of cities, ant colonies, and software. Thus, emergent knowledge—folksonomies in this case—consists of organic endeavors, contingent upon and shaped by the members of the user community, transformations of the community, and the knowledge that emerges from their interface with one another. Folksonomic categories are comparatively more comprehensive than standardized classification in that the former emerges from pluralized user experiences, rather than from artificial and prescribed cleavages that carry the potential to fail in capturing important nuances of information. In *The Archaeology of Knowledge and the Discourse on Language*, French philosopher Michel Foucault states:

> The discursive formation is not therefore a developing totality, with its own dynamism or inertia, carrying with it, in an unformulated discourse, what it does not say, what it has not yet said, or what contradicts it at that moment; it is a rich, difficult germination, it is a distribution of gaps, voids, absences, limits, divisions. (Foucault, 1972, p. 119)

Shirky (2005) states that the failure of ontological classification, as embodied in the "gaps, voids, absences, limits, divisions" of its categories, is the privileging of certain information above others. That is, certain information is made visible in its inclusion in classification, whereas other information is made invisible in its exclusion from classification (Bowker & Star, 1996; 2000). Shirky attributes this failure to catalogers who have assumed that users, in their endeavors for information discovery, will think as they do, in the terms that they do.

Another distinction between ontological and folksonomic classification is the structural hierarchy of each system. The singular-ontology approach generally reflects a top-down flow from a classification authority who writes his or her ontology into the categories of the system (Dye, 2006). Thus, the categories reflect that ontology. Conversely, folksonomies are supported by the links between the members of the community that interface to create a set of categories, which they will also be using.

Folksonomies exhibit a bottom-up approach, qualified by social feedback (e.g., the popularity rankings of tags in the "tag cloud").

The integrity of information is called into question when comparing standardized classification and folksonomies. Specifically, how is information altered, including its access? Standardized classification and controlled vocabularies carry the potential to undermine the integrity of information through shaping information to fit the categories, potentially mis-categorizing information in light of the ontology or ontologies governing the scheme. Bowker and Star (2000, p. 42) assert that once a classification system is established, little thought goes into the decisions informing how that system came to be established. They state, "…classification of work is accorded to those with the most power and discretion, who are able to set their own terms." In contrast, folksonomies shape categories to fit the information. This process is facilitated by what David Turnbull (2005) refers to as co-produced space, a locality in which linkages and connections are established between the actors of a network who are in constant tension and dialogue. These interactions have the potential to effect the emergence of knowledge—collaboration through networking and connectivity.

Shirky (2005) also references linkages in his description of folksonomies as endeavors divergent from the paradigmatic monoliths that are standardized classifications. The proliferation of connections between the information that tags represent in folksonomic classification contrasts with hierarchical classification schemes, with categories divided into sub-categories, divided into further sub-categories. Shirky asserts that while hierarchy may be a functional approach and appropriate to employ in specific contexts (such as highly specialized and formalized disciplines of science), such unbending structures become redundant when information becomes linked and networked sufficiently; the metaphorical "shelf" no longer needs to exist as a prerequisite for effective organization of information (Shirky, 2005).

Conclusion

Classification need not privilege standardization over folksonomy, or vice versa. Perhaps a happy medium could be reached through a marriage of the two, taking the benefits of both and using them to improve the organization of information and how users retrieve it. The merits of standardization lie in its homogenizing effects: its ability to provide a scheme or schemes that can facilitate the retrieval of information translocally, among different populations. By the same token, folksonomic classification finds its merits in its heterogenizing effects; its heart is in the multiplicity of categorizations and the multiplicity of socio-cultural ontologies that underlie them. And perhaps this marriage of the two can be articulated in systems that acknowledge the validity of both, and aim to incorporate the two alongside each other. Boast, Bravo, and Srinivasan (2007) advocate for an approach that acknowledges the existence and validity of multiple ontologies "*resolved* by one dominant descriptive ontology" (p. 401) and the recognition that this dominant ontology is only one of a diverse multiplicity. With all the interrogation and debate of Web 2.0 and networks of decentralized interactivity, approaches to classification have the potential to be increasingly situated in terms of negotiation and dialogue. But the question becomes: Are we ready for it?

We must unravel the ontological politics that form the basis for the tensions between standardized and folksonomic classification. This requires a paradigm shift away from an assumed infallible authority of standardization, one which recognizes that systems that fall outside its bounds are not mere alternatives. It requires acknowledging that information systems reflecting local, subjective, and situated knowledges are equally functional and valid as standardized information systems. However, there exists no easy solution, no prescriptive remedy, no catch-all formula. Any solution must be sensitive to the balance between the global and the local, and the potential that burgeoning information and communications technologies have for us all on collective and individual levels. We must be aware of political concerns and guard ourselves against perpetuating a de facto techno-imperialism. We must be aware of the economic implications of any endeavor to expand our practical and operational definitions of inclusiveness, while also interrogating the notion of inclusion itself. We must acknowledge the ideological, ontological, and epistemological concerns that are imbued in any implementation of a classification, whether it be authoritatively prescribed or vernacularly derived.

Standardized classification schemes are overrated, so Shirky has said, and so have many others concurred. Not only are such schemes testaments to expressions of power, they also possess a subtext of what may conceptualized as ontological imperialism, in which one ontology assumes power and expression over another. Classification is a concept laden with subtext, as it has been throughout history. It possesses a substrate for discrimination and procedures for determining what belongs where, if in fact it does belong. So are we to understand standardized classification as outmoded? Standardized classification continues to possess relevance, but it is neither flawless nor an organizational and informational panacea. If anything, it is laden with potential to be more problematic when applied inappropriately, in which cases, local indexing and categorization schemes may be adopted, such as folksonomies. Folksonomic classification finds its merit in its decentralization. No more is the Dictator of Information Standards barking orders and proclaiming the hyperbolic sing-song praises of Library of Congress Subject Headings; it has been dethroned. The People have spoken, and a torch has been raised.

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References

Alexander, B. (2006). Innovation for teaching and learning: Web 2.0. *Educause Review*, March/April. Retrieved March 8, 2007, from http://www.educause.edu/ir/library/pdf/ERM0621.pdf

Bateman, S., Brooks, C., & McCalla, G. (2006). Collaborative tagging approaches for ontological metadata in adaptive e-learning systems. In Proceedings of the Fourth International Workshop on Applications of Semantic Web Technologies for E-

Learning in Conjunction with 2006 International Conference on Adaptive Hypermedia and Adaptive Web-Based Systems, Dublin, Ireland, 3-12.

Boast, R., Bravo, M., & Srinivasan, R. (2007). Return to Babel: Emergent diversity, digital resources, and local knowledge. *The Information Society, 23*, 395-403.

Bowker, G., & Star, S.L. (1996). How things (actor-net)work: Classification, magic and the ubiquity of standards. *Philosophia*, 25(3-4), 195-220.

Bowker, G. C., & Star, S.L. (2000). *Sorting things out: Classification and its consequences*. Cambridge, MA: MIT Press.

Bretherton, D., & Mellor, D. (2006). Reconciliation between Aboriginal and other Australians: The "Stolen Generations." *Journal of Social Issues, 62*(2), 81-98.

Brey, P. (2003). The social ontology of virtual environments. *American Journal of Economics and Sociology, 62*(1), 269-282.

DeLanda, M. (2006). *A new philosophy of society: Assemblage theory and social complexity*. New York: Continuum.

Del.icio.us Team. (n.d.). Tags. In del.icio.us. Retrieved December 1, 2007, from http://del.icio.us/help/tags

Dye, J. (2006). Folksonomy: A game of high-tech (and high-stakes) tag. *EContent Mag, 29*(33), 38-43.

Foskett, A.C. (1984). Better dead than read: Further studies in critical classification. *Library Resources and Technical Services, 28*(4), 346-359.

Foucault, M. (1972). *The archaeology of knowledge and the discourse on language*. New York: Pantheon.

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies, 14*(3), 575-599.

Harding, S. (2003). Representing reality: The critical realism project. *Feminist Economics, 9*(1), 151-159.

Huebner S., & Cooper, K. (2007). Koorie culture and technology: A digital archive project for Victorian Koorie communities. *Archives and Manuscripts, 35*(1), 18-32.

Johnson, S. (2001). *Emergence: The connected lives of ants, brains, cities, and software.* New York: Scribner.

Lawson, T. (2003). Theorizing ontology. *Feminist Economics, 9*(1), 160-169.

Mika, P. (2005). Ontologies are us: A unified model of social networks and semantics. In Y. Gil, E. Motta, V. R. Benjamins, & M. Musens (Eds.), *Lecture notes in computer science*. Vol. 3729, The semantic Web – ISWC 2005 (pp. 522-536). Berlin/Heidelberg: Springer.

Mol, A. (1999). Ontological politics: A word and some questions. In J. Law and J. Lassard (Eds.), *Actor Network Theory and after* (pp. 74-89). Malden, MA: Blackwell.

Olson, H.A. (1998). Mapping beyond Dewey's boundaries: Constructing classificatory space for marginalized knowledge domains. *Library Trends, 47*(2), 233-254.

"ontology." *World Encyclopedia*. Philip's, 2005. Oxford Reference Online. Oxford University Press. UC Los Angeles. Retrieved December 2, 2007, from http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t142.e8443

Peterson, E. (2006, November). Beneath the metadata: Some philosophical problems with folksonomy. *D-Lib Magazine*, *12*(11). Retrieved November 22, 2007, from http://www.dlib.org/dlib/november06/peterson/11peterson.html

Searle, J.R. (2006). Social ontology: Some basic principles. *Anthropological Theory*, *6*(1), 12-29.

Shirky, C. (2005). Ontology is overrated: Categories, links and tags. *Clay Shirky's writings about the Internet*. Retrieved March 8, 2007, from http://www.shirky.com/writings/ontology_overrated.html

Taylor, A. (2004). *The organization of information* (2nd ed.). Westport, CT: Libraries Unlimited.

Turnbull, D. (2005). *Messy assemblages, emergent protocols, and emergent knowledges: Complex adaptive systems and the possibilities of sustaining multiple ontologies and the cultural commons in new ways of assembling and creating knowledge*. Paper presented at the annual SLSA Conference, Chicago, IL.

Turnbull. D. (2006) Maps narratives and trails: Performativity, hodology, and distributed knowledges in complex adaptive systems - An approach to emergent mapping. *Geographical Research*, *45*(2), 140-149.

Van Krieken. (1999). The barbarism of civilization: Cultural genocide and the 'stolen generations.' *British Journal of Sociology, 50*(2), 297-315.

Veres, C. (2006). The Language of folksonomies: What tags reveal about user classification. In C. Kop, G. Fliedl, H.C. Mayr, & Elisabeth Métais (Eds.), *Lecture notes in computer science.* Vol. 3999, *Natural language processing and information systems* (pp. 58-69). Berlin/Heidelberg: Springer.

Vickery, B.C. (1997). Ontologies. *Journal of Information Science, 23*(4), 277-286.

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