

“The Postulate of Indigenous-ness: A Report to the Academy on Conundrums of
Global Totalization and Classification”ⁱ

By Jesse A Lambertsonⁱⁱ

*“What we really need is a brand new language – I think it's for that we really
yearn.”ⁱⁱⁱ*

In scholarly circles around the work of James Joyce, there is a rumor that in an interview, he was once asked what his novel *Ulysses* was about. He supposedly replied, “*Ulysses* is not about anything, it is something.” This anecdote suggests an important tension: What IS something and how do we classify it as being ABOUT something – rather, what is and how is it classified and defined? I ask this question not to pose philosophical conundrums on line of divide but because responses and solutions sought to declare IS-ness or DESCRIBE are intertwined with other trends toward global totalization (globalization) and standardization – trends such as patent applications and bio-piracy because the classifications I examine here result in global standards while even little local knowledge or unique-ness is used. In fact, even as the rhetoric of rights and respect of local knowledge is pronounced, the standards by which those rights and knowledge are verified and used hides the origin from which that knowledge sprang. The answer (s) to this conundrum is not simply operational. Nor is the answer simply stated and “applied.” In fact, the answer is something else, something not immediately certain – the answer lies somewhere between classification standards that encourage moves toward

totalization and those which allow for the breaking up of that trend (the letting go of classifications/definitions and thus resulting actions). Questions of classification, definition and description are asked in cataloging and in database design. The reason they are relevant is that classifications, definitions and description are not the thing being classified, defined and described. Classifications are marks and intellectual frames, but those things being classified, defined or described are not intellectual frames. I believe this fact is a fundamental disconnect and one that must be examined even closer because the classification “indigenous” that I write on here is “about” people, not things.

These same questions are equally relevant as a framework with which to approach the subject “indigenous” and the literature on the subject. For we see that the literature in the field is not “indigenous” as “indigenous” are not the literature in the field because the term (or words commonly used as synonymous) are either used in the literature or are used as subject headings in the catalogues. But subject headings and words are not people, they are subject headings or words. In the same way, database and classificatory design are not “indigenous” nor Vice Versa. It is as if there is a giant invisible sphere floating in the universe of knowledge and someplace in it is all the information that is possible on a topic. We do not know exactly how to classify the topic nor exactly what resources fall under that topic. But the one thing we do know is that it is not obvious that knowledge of a topic is the same as the thing-in-itself. Yes this examination is philosophical but it also has that tinge of that

same break-up suggested above via the James Joyce anecdote between art and what it may be “about.” I see this as an art of life question.

I do not want to harp on this simple tautology for long, but we see this paradox pop up in the literature on topics from database control to bio-piracy. I bring it up these varied ways because the tensions I explore in this essay are between things-in-themselves (which we may never know) and delineated, scientifically created frameworks that frame and order those things into stri(u)ctures. I don't think that we can simply let it go because the implications of this paradox are international in scope. And in fact, the issue of its international implications is, as we shall see, very important because just as the act of classifying what something is “about” imposes from outside upon the thing-in-itself (“indigenous” populations), the action of creating legal frameworks, declaring needs for rights, monetization and classification itself fall under this notion of imposing strictures from without upon some populations. I do not mean to write that all strictures of rights, legal protection etc are imposed from without. Much of the move toward totalization of the globe under international globalization is enacted by the “indigenous” themselves around the globe. Not all. I would fail if I lost touch with the chicken-and-the-egg question of which came first, “indigenous” fighting for rights recognition or imposed legal structures. I am asking art-of-life questions that seem to draw from many directions.

To take these questions a little further, I observe in the literature commentary produced for the academy written on a topic outside the academy. Yet, the conversation and its parameters are arranged within the academy. We need not think this a problem. But I do believe that we need to be honest about this because this very notion has been trouble for some of the so-called indigenous peoples on issues of intellectual rights, bio-piracy or illegal ownership by museums of traditional items. These are questions that revolve around ethnography. Jean Baudrillard and Michel Foucault recognized trends of ethnography, power and tensions built into these structures where one thread draws toward globalization and one thread simultaneously draws away from globalization. On this article we will see it in a topic of focus that culminates with a section that analyzes definitions of “indigenous” with implications of those definitions and how these definitions affect classification itself. The sections before are on bio-piracy as it relates to goals of totalization of the world, examples of databases that contain listed knowledge items from indigenous sources along with commentary as it relates to that totalization agenda, what some peoples have had to do to fight for rights and recognition in unfavorable conditions, the connection to the death of linguistic diversity and finally, to classification and definitions – which is the keystone for this paper.^{iv}

The Role of Bio-Piracy to Globalization

Jean Baudrillard writes that an integrated totalized world is the plan for the future.^v By suggesting this notion, Baudrillard has opened the door to two

major extrapolations. The first I will tackle now and the second I will explore in a different section. The first of these extrapolations is the role of bio-piracy and applications for patents around the globe. Baudrillard writes, "...science never sacrifices itself, it is always murderous..."^{vi} He means to say that rules for investigation are written by those who investigate and that categorization and definitions are produced by those same investigators – these categorizations/definitions do not necessarily encourage multiple lines of inquiry once they are established. And let's not assume that inquiry is synonymous with patent grants or mass production factories set up in the nations where bio-prospecting/piracy has taken place. Inquiry has the potential to reside in thought experiment only. I hope it's okay that we can use a little philosophy of science here – it's relevant. But in the case of bio-piracy, the notion of murder (as it relates to ethnographic work) takes on a new element because patents and mass production are assumed within the hierarchy of "development."

A shallow example with which to wade in can start with the use of *Blue Corn* and the Hopi, Navajo and Zuni tribes of North America. Companies that produce products that contain Blue Corn often use references to these three tribes, who used *Blue Corn* traditionally, in order to establish authenticity. But they are paid nothing in Royalties. One need not assume they have to be paid, but the rhetoric used in marketing these products ties three tribes (tribes reserved on legally set lands) to products sold across the United States.^{vii} Trademarking in commerce is not new of course, but it does point to the

problem of tradition Vs. disconnect (really, fragmentation) with reality and the past where products contain names and narratives but put them on a product that does not evoke the tribes' traditional use of these products. And of course, Blue Corn as "product" is not the same as a bag of ships in a trademarked bag of product. Justification used to proceed with this process of using certain peoples to move forward with business and corporatist ideology is called "development." The *OED Online* provides a slope of definitions for "development" that refer to bringing the germ of an idea of process into fruition and unfolding. But the first definition is: "The process or fact of developing; the concrete result of this process."^{viii} I don't see this definition as taking a hierarchical or judgmental tone but the ideology of capitalist movements is assumed to be positivist from the start – that development is improvement. What have the Hopi, Navajo and Zuni tribes received from this development?

Another example of development in action has very recent implications and consequences. "Ideas" are not patentable, but products and physical objects are.^{ix} For instance, in Brasil, the Guajajara people have traditionally used *Pilocarpus Jaborandi* to treat glaucoma.^x My source does not say how long this has been practiced, just that this is considered traditional (Indigenous) knowledge. But since companies have been granted distribution rights due to the chemical properties in this plant, the Guajajara are no longer able to use it because so much of the plant has been depleted as these companies export from Brasil globally and millions of dollars annually are made – very little if any the Guajajara see returned. I do not mean this to be a tirade against making

money, but that, as Britz and Lipinski suggest in their article, there does seem to be an invisible moral factor in these arrangements – something not quite classifiable.^{xi} And in fact, Britz and Lipinski also ask if we have not created an impossible arrangement by building legal frameworks and “quantified” definitions for things such as knowledge and practice which are “defined” mostly from the very act of “knowing” or “practicing.” I think the idea is that one cannot really escape from moral implications evident in this example of “development.” And of course, quantifying moral implications could be quite an apotheosis of “the uncertainly determined task,” where classification seems to lose its real power – and this is about power.

The Guajajara are not the only people set upon by development factions. Commodification of knowledge and natural objects is much larger in scope.^{xii} W.P. Falcon and C. Fowler write, “Men and women have been acquiring, moving and improving plant genetic materials for 10,000 years. Despite recurring conflicts over ownership and control – some dating back millennia – ...have spread far beyond their original birthplaces or centers of origin.” With this quote we come to understand, not the battle of “indigenous” Vs. corporate interest, but that even corporate interests are part of this process – albeit with a different kind of twist. For instance, we learn that Maize, a fundamental crop to Central Americans has become a staple food crop in southern Africa, the “...Soybean, a species from China and East Asia, is now a major crop in the US and Brazil. The sweet potato, indigenous (a very different use of the term here) to South America, is currently grown in over 100 countries around the

world.”^{xiii} These farmers and “geneticists” have had no need for “scientifically” created plant-formulations to make the best of growth time and space. But in 1970, the US Department of Agriculture, in order to standardize and “set” seed types, devised the American Plant Variety Protection Act (revised in 2006) to “protect” breeders’ rights over their genetic products.^{xiv} Though this Act MAY encourage competition, it is not clear that it encourages nature or bio-diversity (an issue we will come back to later). Also, a closer look at the newest edition of the Act shows the sheer number of each plant type under patent control. But one must ask if there are others that are still being used that are not listed in the Act. We could ask a future question about what entails determining “ownership,” but Falcon and Fowler suggest this Act came into being only because information technology (a major factor in the next section of this paper) and Law have become integrated in a certain way historically.^{xv} The World Trade Organization is on board with like agreement and Acts.^{xvi} In other words, the Logic of Law and the possibility to spread information meant the US Government needed to respond to order this “protection.” In other words, the intersection of the above mentioned circumstances

Martin Khor has provided an excellent example in a study of cases in which patents have been applied for on plants and like naturally occurring species:

“The...study listed patents claimed for naturally occurring compounds, genes or gene sequences with a variety of functions. They included sixty-two patents on genes or natural compounds from plants (including rice, cocoa, cassava, sweet potato, millet and rubber) which are traditionally grown in developing countries and a hundred thirty-two patents on genes in staple food

crops which originated in developing countries but which are grown globally, including maize, potato, soybean and wheat. There are also patents and applications for patents relating to plants traditionally used for medicinal and other purposes. Among the cases are a US patent on the use of turmeric for healing wounds (this was successfully challenged by the Indian government), a Japanese patent on the antidiabetic properties of bananas (traditionally used as herbal medicine in the Philippines), and the US patenting of a protein from a native strain of Thai bitter melon (after Thai scientists found its compounds could be used against the AIDS virus).^{xvii}

In this source, we see Baudrillard's totalization at work amidst the lives of peoples around the globe. Specifically, we note patents for monetary and distribution rights of resources that occur naturally unfunded scientific inquiry/control and agendas for development as discussed above. We also note these legal contracts do not set up relationships of human-to-human. But Terry Roopnaraine says that relationship building may be the only method to fully develop understandings of rights.^{xviii} Legal documents, "rights" recognition are may be useful in a way if you accept their presuppositions, but they are not the same as relationships as rights and legal documents are stripped of "original" context. I hope it is clear that classifications make it easier for constraining and context-stripping legal patents to be signed into being.

The paradox of creating "rights," legal recognition and "proper" remuneration in the context of bio-piracy, being granted patents and development ideology is stated best by Agrun Agrawal, who points out NGOs and groups like the World Bank believe that indigenous knowledge such as the examples above with plants is essential to international development. But, if after the science-minded developmentists have decided that something is not useful to them, then they are not interested in any kind of classification that allows for preservation in perpetuity.^{xix} The flipside reverse of this preservation

problem is that in “preserving” this data, it may in fact no longer be preserved. Agrawal refers to the factions dedicated to the use of these peoples’ knowledge as “neo-indigenistas.”^{xx} But he critiques their attempts for weighty philosophical reasons attached to the stripping of local, specific and “invisible” elements that really determine its “indigenous-ness.”^{xxi} But Agrawal also points out the line of demarcation between attributions of “indigenous” and “scientific” knowledge is slippery as many philosophers of science such as Gottfried Leibniz, Karl Popper, Rudolph Carnap (and others) have had an impossible time setting hierarchies between types of knowledge.^{xxii} I see this lack of clear demarcation as quite meaningful because hierarchies of legal frameworks and validation methods can then be out under the skeptical eye. Lines of demarcation connect to the hierarchy of knowledge processing, validation via “scientific” means, development (assumes un<or under>developed) value (even before any knowledge has been explicitly patented or monetized) and the creation of databases listing “indigenous” knowledge for access globally.

The Role for Databases of Peoples’ Knowledge in Globalization

On the subject of databases that itemize examples from alternative knowledge systems from around the globe, Agrun Agrawal writes, “Ultimately, the effort to document, and then to particularize, validate (abstract), and generalize, and finally to disseminate, misapprehends and works against the very characteristics that are believed to render it indigenous.”^{xxiii} He also writes, “...if scientism gets hold of IK, it will remove it from use and from power. It will

control and the history of colonialism suggests the powerful do not bolster the interests of the weak.”^{xxiv} Agrawal’s words unify the notions we find in the dialectic/paradox of database design in the literature and the removal from context to produce its own globalist context – a tension that comes up again and again in the literature even as peoples around the globe have enacted various steps in/for digitization projects (again, the chicken-and-the-egg question of which came first, the design of knowledge databases and the building of those databases BY those people’s knowledge supposedly represented by them).

For instance, Geri Augusto writes that the Khoekhoe people of South America and the Sankwe of Zambia are considered indigenous and there are databases that itemize their knowledge.^{xxv} But philosophically, he wonders if this knowledge, such as the use of the plant, *hoodia*, used against obesity for generations, has a place in an online database. There is no mention in this article that this plant has been contested in patent applications or situations of the like. No, Augusto asks if this practice can continue in the same vein after it has been fractured from use through observation and recording for inclusion in a database.^{xxvi} He continues with this question by asking if colonization and the assumption that databases are required for the spreading of knowledge merge somewhere. He writes that even though many think such databases are useful as a tool in a conforming kind of democracy (as an *ism*), databases strip most of the narrative elements from Khoekhoe and Sankwe’s knowledge and are limited in their best function. In other words, He is asking that even though

databases COULD be useful, he can't say that they are useful for everything, for every context.^{xxvii}

Yet, knowledge logged into databases is supposed to be useful to the utmost for development. Remember, the World Trade Organization is actively encouraging the creation and dissemination of databases for international use. One would need more time to examine the positions held by the United Nations as there is not an "official" position by that organization. But a cursory search through the UN website returns many postings about local peoples asking for the halt, or at least serious questioning of certain development projects and database knowledge.^{xxviii} It is not exactly evident why the "developed" world has come to view "indigenous" knowledge as the thing that will save the future. In part it has to do with notions that "indigenous" are better at protecting the environment and sustainable using resources. This observation brings to bear two conflicting ideologies. The first is that SOME local peoples spread about the globe are better in some way than OTHER peoples in some way. But, M. Gadgil et al suggest through their observations of some nomadic herders and agriculturists were in the habit of moving into an area, using the land until it's weak and moving to "new" land.^{xxix} If that is the case, that sounds quite similar to the description used to justify why "developed" nations search so hard after other knowledge systems – that "we" just can't operate sustainably etc. This notion smacks of a brand new label of "noble savage" upon the "indigenous" peoples of the world – if we rid that classification and its hierarchical divides,

with that we find it not so easy to look “over there” for conservation methods that will “save” the world.

The other conflicting ideology wrapped into this search for “other” knowledge(s), the drive to digitize-digitize and make accessible via international databases (if they are in fact going to be made completely free via the open web) – remember power does not tend toward the bolstering of the interests of the weak - is that there is in fact an “other” knowledge system. To hark back to Jean Baudrillard, who first published his essay, “Precession of Simulacra” in 1981 in French (1994 in English), he writes, “Some “peoples” are protected to death...If ethnology is possible in any place with “exotic” peoples, it is possible right here where we are. The confinement of the scientific object is equal to the confinement of the mad and the dead. It is science that masters the objects.”^{xxx} Baudrillard’s words reflect another way that databases fail the peoples they are supposed to protect – that of search structure and generalized “keywords” used in lieu of the full linguistic structure/grammar. For example, in an example of analysis of a database using Malay (found in Indonesia), Tengku Mohd Tengku Sembok argues that databases need to take into account inflective elements in Malay as well as prefix/suffix language pieces that get annihilated in the creation of databases which abstract and generalize Malay into something representational of Malay but not the language.^{xxxi} He also provides the example of *MENGGOMPUTERKAN* for *Computerize* and *PENGGOMPUTERAN* for *Computerisation* that get stripped of inflectional meaning in many databases and on the internet (even though a keyword search via Google for

MENGGOMPUTERKAN and *PENGGOMPUTERAN* does result in hits for their respective existence with some meanings found in context).^{xxxii} Tengku Mohd Tengku Sembok does not have all the answers, but he does suggest a semantic database structure with all its vernacular possibility may be a better structure (if there are going to be databases built on knowledge and language of local peoples) and that the more time and resources are given to database design and indexing/cataloging/classification, the better and more nuances will be the results of any search.^{xxxiii} The problem with this position, however, is that coding used in web design already assumes a written language, an arrangement which is already a code.

Baudrillard does not say that we should not engage in ethnography (the science that set the platform to be able to come behind and apply for patents and create digital databases of knowledge/systems). But he does say explicitly that to engage in ethnography is a form of murder, a confinement of the “other.” In fact, the procession of databases resulting from data collection becomes the site of knowledge after it has been digitized and made “accessible.” Again, control mechanisms are defined by the peoples who built the rules for ethnography and database languages. If we take this idea seriously, it helps us understand the discussion tensions more fully. For in engaging in ethnography (the platform required in order to collect and digitize knowledge) we have proven Baudrillard’s 30 year-old point in several ways: First, that we think there is something “new” and “other” in the peoples made into ethnographies (a new “noble savage”); two, that it will always come down to languages of the

“developed” against the languages of the “un(der)developed)/indigenous” (i.e., the ethnography <and thus the database> replaces peoples and knowledge); third, Baudrillard’s words ring true with Michel Foucault’s writing on understanding human knowledge and on the confinement of the mad. He wrote, “Classification, as a fundamental and constituent problem of natural history, took its position...between a theory of the mark and a theory of the organism.”^{xxxiv} The idea of the “organism” will be examined later, but with this last section, we see there are real issues at work here. In this theory of the mark, Baudrillard sees we advance the precession more violently if we look elsewhere for the knowledge we could have where we are and Michel Foucault understands that as we produce classifications and ethnographies, we are producing beautiful intellectual frameworks which do not necessarily have any overlap with the things-in-themselves.

To take this further, Agrun Agrawal writes at length about context, database housing and problems with use of knowledge formerly used in a different environ. He writes that though many are confident proper development is attainable through consolidation and dissemination of “indigenous” knowledge, he makes it abundantly clear that if one takes knowledge out of a context in which it was known in practice and generalizes it, all this knowledge has already become something else. The reason for this, to repeat declarations by other writers already mentioned on the subject, is that as soon as this knowledge is “...particularized...validated (abstracted)...catalogued and archived...,” it becomes stripped of its narrative

features/codified and loses the invisible items that defined it as “indigenous.”^{xxxv} The goal in this database creation/housing is universal use and appeal with a democratic rhetoric attached. One can argue that “democracy” is itself a form of tyrannic ideology itself, but the point we find here is that one must assume the ideology of universal appeal and embrace the hierarchy of that assumption from the start. In return, that ideology is thus imposed again in a way.^{xxxvi} But, again, if the goal is to think about the “indigenous,” that very element (perhaps fundamental ingredient) is killed in the process. Then what do we have left and what about peoples who have had their knowledge made “universal” via a database? That knowledge has gone through the validation process assumed to be “scientific” and ends as something that denies the unique people oriented attributes deemed valuable in the first place. Plus, the act of making knowledge useful (or appear useful) in a universal setting marks a major presupposition found at the center of globalization – which has now created a scenario through its particularization of knowledge and storing according to its own rules in which universalist ideology and assumptions tied to development have once again replaced through its own precession the unique and local found in the local populations previous scenario. And does not this situation of taking (even with permission), reforming to one’s own rules and handing back out for international use strike one as being guilty of Jean Baudrillard’s very criticism of attempts to find valuable knowledge someplace else when the rules for that knowledge were already used right there with the rules as defined by those who went

searching? If Baudrillard is right, then not only have attempts at development really failed, but have failed a second way in not recognizing that everything followers of scientism have really needed for proper development is found right where they are. Not only that, but as philosophers of science mentioned above (Gottfried Leibniz, Karl Popper, Rudolph Carnap <and others>), that line between “our” knowledge and “their” knowledge may not exist anyway.

Baudrillard’s assertions follow this same line.

One of these databases, or at least place where databases can be linked for international access is *The Europa World of Learning: The International Guide to the Academic World*. The reason for its importance is exactly its internationalist structure.^{xxxvii} It links, alphabetically, the nation states of the globe and major academic and state libraries and museums deemed relevant along an identical alphabetic structure. Not each listing contains links to institutions and many of the links open to sites that are not in English. Not a problem. There are lots of languages in the globe and there are codes that can handle nearly every writing system globally. The fundamental problem of this academic listing is that it is only accessible via subscription. I don’t know if each of the institutions mentioned are also subscribers, but payment cycle is the only method one can find this particular database. And the Europa World of Learning is not the only one. Yale University’s *Human Relations Area Files: Cultural Information for Education and Research* also features an ambitious project of cultural studies (of which local knowledge systems and examples is a part).^{xxxviii} But this too is only available upon subscription and membership.

I want to add a few examples of databases that either are concerned with information/knowledge from peoples around the globe or that contain critical articles in which “indigenous” is used as a classification. I do not mean to analyze each one, but rather to suggest through this paper ways to think through these databases. Also, my plan, obviously, is not to exhaustively list the international spectrum of databases categorized as such, but to, again, look to the problems in the use of a specific classification. Here is a list of six databases of international scope each with some variations. 1. Native Web <<http://www.nativeweb.org/resources/>> “Resources for Indigenous Cultures around the World;” 2. Library & Information Networks for Knowledge as hosted by the World Health Association <<http://www.who.int/library/en/>>; 3. The University of Kansas Libraries “Indigenous Nations Studies” <<http://www.lib.ku.edu/databases/index.cfm?rtype=subject&page=db&bsid=1&sid=66>>; 4. National Oceanic and Atmospheric Association site, “Arctic Natives” <<http://www.arctic.noaa.gov/peoples.html>>; 5. African Journals Online <<http://www.ajol.info/>>; and 6. The World Trade Organization <www.wto.org>.

As these databases have grown in number over the years and the philosophical case has been made for critique of those same databases, there has arisen a need from across the globe and across the disciplines within the academy for critique of database design, linguistic elements found within those databases and hopes in contention spring up in the discussion. The result has been a slew of articles written critiquing databasing “indigenous” knowledge, connections of knowledge system diversity/bio-diversity and linguistic diversity

(a topic to which I will return in detail below) as well as direct legal actions taken from within the house rules as set up by the legal system, development itself and other languages.

The Method and Requirement of Establishing Recognition

It is not as if totalization of the planet under the rubric of development has happened in such a way that these local peoples have given up hope or strictly fight. There have been a great number of compromises reached between legal representatives of development and local peoples who have had their knowledge taken. For instance, Otsile Ntsoane writes about African attempts to come into self-determination as the ever encroaching forces of development control information and knowledge in Southern and Western Africa. He writes how major organizations, including the World Trade Organization, have arranged situations that encourage (what he calls) colonizers to teach “Western” knowledge in schools and control the political stage to such an extent that any person who may want to fight for fair control and recompense for selling of resources and intellectual knowledge for the benefit of local (African) peoples gets ostracized.^{xxxix} It is not clear from the article the degree to which South Africans shoulder the responsibility in embracing “Western” knowledge systems at the expense of local knowledge systems. But, clearly, Ntsoane believes this current trend in Africa (western and southern) follows an ongoing colonizing action. The question of degree of responsibility for the amount of “western” science dominating life and local school curricula is

important for the future. And to add to that question is the blurry line between “western” knowledge and “indigenous” knowledge. The databasing of knowledge in this area of tension is no small factor.

Above, I mentioned an example from Martin Khor in which we find a number of patents have been applied for all around the world on a bunch of naturally occurring items. But in that same quote, we find an example of where the Indians who fought for rights over their use of Turmeric and won.^{xi} And in the late 1990s when the Human Genome Diversity Project was underway to gather gene samples from each human genetic population (via blood extraction), there were so many serious objections and political obstacles put into place by peoples around the globe, that the whole project has had to be shelved despite the massive international funds poured into it by major nation-states.^{xli} It was dubbed the “vampire project” by many in speeches to get it stopped. It seemed that many local groups affected by the project were excluded from most of the important early planning meetings and one group used its own religious sense to argue that blood taken and “given” was a sign of witchcraft – something this group would never have wanted to go along with. This is an example of the multiplicity of peoples looking for ways to stop an encroaching monolithic, generalized action.

The observation that a group’s own identity could be used as a “weapon” against encroachment of this large scientific project is meaningful because this project was trying to determine bloodlines and “diversity” via standardized

scientific modeling and tracking DNA differences –a structure that may work against more powerful, invisible forms of identity. Two major critiques used against the Human Genome Diversity Project were that it is not clear what factors are really used to determine “diversity,” and, two, that any data realized from this project could then be used as a bioweapon against those same populations later. Also, I ask if this does not seem a strong example of one ideology of knowledge justifying taking parts of people out of context, stripped of all the narrative elements of their lives that may already be used to think about (not necessarily determine) what is already unique and “diverse” in these populations.

There are a lot of people on this planet and there are a lot of competing knowledge systems at work. One of the most relevant sections of the globe in terms of questions of development, legal frameworks, direct actions by local populations amidst encroachment is part of Brasil. Some sections within Brasil are referred to as mega bio-diverse and there are plenty of examples from this corner relevant to the dialectic I am developing here. Manuela Carneiro Da Cunha writes that as ethnographers have built definition(s) for culture, these definitions have then been passed back out into the world and those “cultures” (unnamed previously) then feel the need to perform those definitions in action.^{xlii} In other words, the Categorizer and the Categorized come into being simultaneously. One of the examples of a named group is the *Mākrare*, which was named a uniquely originated group of people among a listed order of groups called the *wayaka*. Histories of peoples seem a worthy dream, but these

groups and this listing did not exist before the forces of development came along to write ethnographies and develop. One example is that development factions came along after social scientists wrote ethnographies of these peoples. It was that language(s) now used to organize interactions with these populations – languages that did not completely exist before.^{xliii} And these development factions have come for a lot of reasons. But one was for the use of a chemical found in a frog found locally. This chemical has important medicinal properties though the source does not describe them or what companies were involved in the ordeal. But Da Cunha's major observation relevant to this section is that turmoil like this shows overlapping of ethnography with biology. And of course, this metaphor very much relates to the databasing of knowledge as discussed above as databasing knowledge follows on the heels of ethnography.

Vendana Shiva has a lot to say on this topic of removing knowledge from local populations and streamlining it for different use, use which she believes also transforms and erodes the power potential for those local populations and their knowledge systems.^{xliv} In this general point, she very much falls in line with Arun Agrawal's theory of hierarchy and neo-colonization as mentioned above. But she takes Agrawal's theorizing further by asking if local populations really do need to fuel the international economy.^{xlv} In asking this question, she as an academic and somebody who believes herself to be a member of the Indian "indigenous" population, questions the fundamental assumptions found within development's regime. I believe she takes too seriously ideas that

“indigenous” are better conservators than development (it seems she may be guilty of this common classification error), but her staking out the lines of demarcation (though philosophically questionable), she has also shown the other aspect of Jean Baudrillard’s to which I referred earlier – that of the indestructible dialectic of criticism and action. For as development follows on the heels of ethnography (which is itself conducted by university researchers who tend to grasp at funding through the knowledge-as-commodity model even amidst the constant moral tensions which exist in the field)^{xlvi} and commits “murder,” control and validation through its own hierarchical means, the fact that Shiva, as well peoples in several examples above, can demand the world look at globalization as an ideology with real impact upon real peoples’ lives, means that just as totalization may be promoted as desirable, there are many others who do not fall sway to that promotion. These antagonistic swells exist together.

The Death of Linguistic Diversity amidst Globalization

Above we have read how global totalization is accomplished by creating legal definitions and classifications through which knowledge is given to groups. Sometimes this is legal, but sometimes it looks more like piracy. But we also read of the perceived moral implications of legal frameworks and “rights” traded and agreed upon with local peoples – peoples who did not create these legal frames and classifications. One of the major problems with this development regime’s classificatory/legal framework is that it “sets” both

standards for knowledge validation and products. These categories were often not part of the language used by the local population affected. And of course, the development regime was made possible because it followed on the heels of ethnographies and work by social scientists.

The next step in this process (which seems by all evidence to be moving at irreversible high-speed) is the creation of databases in which would be held knowledge recorded from assorted local populations. Databasing is also an international process that involves groups such as the World Bank and the World Trade Organization. Much of the efforts behind database creation are not strictly tied to rights and monies, but most efforts on this front still assume the positive effects of “development.” Some believe these databases will ensure transparency and fair sharing via free access. And of course, these databases also follow on the heels of ethnography. But theoretically, these databases are criticized for stripping all narrative elements, all “indigenous-ness” from the knowledge stored therein. If this critique is valid, then it reiterates Jean Baudrillard’s comment that ethnography is a form of “murder” which strips life out of all it scientifically investigates and classifies.

What positive thing did Baudrillard say about ethnography? He said that if ethnography were possible, it could only happen right where we are. Phrases such as this have a multiplicity of meanings – and a good thing too. But one implication of such a statement is that ethnography must take into account language and each language’s built-in grammar and classification. If this is

true, then database languages, both at the coding level and at their near standardization in English are in trouble of falsifying ethnographic work even if the local peoples' knowledge represented in the databases is there by permission. The issue taken up in this section is the death of linguistic diversity, its relationship to bio-diversity and global totalization. Andrew Dalby writes about the 5,000 known languages/dialects of the globe and how they are rapidly reducing yearly.^{xlvii} He points to quite a few important factors in this trend. For instance, ubiquitous radio/television and mass communication, internet pages being written mostly in English, computer technical books “grudgingly” translated into other languages, and the “swelling” use of National Languages.^{xlviii} He also writes that as languages disappear, so does culture, practices and thinking itself.^{xlix}

The issue of mass communication is only generally related here, but the issue of the internet and the national languages are much more important because they reflect the structure of two things: One, that the internet, which hosts assorted databases (a few of which are named above) is already mostly structured according to the logic of English and is doubly structured in the logic of coding as well. Secondly, the legal framework of the Nation State (and its official language) is sometimes not the language used by local peoples who live within its artificial boundaries. And according to Dalby's reading of the Sapir-Whorf Hypothesis of Linguistics,¹ the logic upon which any language is structured is also the determiner of what is seen and known. If this is true, then the disappearance of language diversity suggests erosion in the number of

knowledge systems and knowledge itself since these two may be unified. Dalby has a great deal to say about language relativism and approaches to understanding believed to be inherent in linguistic diversity, but he does allow me to draw a very clear connection from his text to mine by suggesting that even as words are taken and given back in new structures from outside forces (European colonizing in Africa), so are natural resources (“...especially in the area of useful medicinal plants...”) ⁱⁱ removed from local peoples taken and given back “re-packaged,”

For example, *Nama* (oft times called *Hottentot*) and *Khoe* (Latin-script representations), languages of South Africa have words that are used by the English and Dutch as well as the resource to which the words refer: “...gogga ‘insect’ comes from Nama xo xo;...buchu or boegoe ‘medicinal leaves,’ often infused in brandy...a so-called Old Dutch Medicine...” These words are used locally but have been re-packaged by the Dutch and English, even referred to as Dutch medicines when in fact they were used for different purposes and had their own names which have now in part changed due to efforts of colonization and “foreign” linguistic structures (history included). It is not my intention here to decry changes in language over time. That seems inevitable and denies interactions of people. No, my point here is to note the connections with language loss and movements of development and assumptions of access to local knowledge (systems and products) via databases. All these elements have room for critique. But as ethnology and development work hand-in-hand, linguistic usage changes as well.

This overlapping of linguistic relativity, knowledge-system relativity and natural-resource appropriation finds support through the literature as well. For example, Marcia Langton and Zane Ma Rhea state in their article, that most of the world's bio-diversity is located in the same locales as the areas of the highest linguistic diversity and where perhaps 80% of local (indigenous) peoples live.^{liii} One cannot gather every example of language loss and there is some question as to whether documentation of languages and their loss even preserves them because this action may be seen to be as guilty as "development" itself. So I will follow a line of thought built on suggestions and moments only to leave it for future thought. Case in point, Christopher Scanlon and Michael Singh mirror above comments that mass communication erodes local nuanced use of language and dialect but add that the rise of technologies used as interfaces where once people interacted more relationally has sped up the rate at which language-use vanishes.^{liiii} These two authors say there are 6,000 languages in the world whereas Andrew Dalby referenced above say there are 5,000. I don't know if this is a definitional/classificatory problem or what accounts for the discrepancy. Dalby's book was published in 2003 as this article was published in 2006. Unsure what to make of this exactly.

But Scanlon and Singh's observations (as well as Dalby's) do not stop with a discrepancy in scholarship observed. Their paper also points to print culture (another example of mass communication) and that abstractions necessary for mass technology such as the internet to work require local nuances to be averted. If anything, this observation overlaps with Arun

Agrawal's (and others) that creation of databases strips narrative elements in knowledge as well as linguistic features. Development factions are clearly seen to be destructive even as they produce their own new rules and structures. For instance, as the Dutch colonized Indonesia, they also forbade the use of local dialects and imposed the use of Malay on the population. And the development of the Nation State legalized/classified linguistic use in a way that was never there before.

I recommend a full reading through the relevant literature on language-diversity loss to see the full scope of this troubling facet. For even UNESCO has been given a draft of a manifesto arguing for protection and preservation-in-context of languages (this action goes side by side with recognition/protection of intellectual rights of knowledge and knowledge) systems because languages could be defined as resources.^{liv} Frank Exner Little Bear writes how European contact in North America has recast all naming systems into a different mold since. He reflects this in his own name. He argues that names in North American Native American oral culture, the technologically un-classifiable except maybe through oral means, have had to adapt to print and technology based classification systems – classifications and listings that represent all states of interaction between pre-European contact and something akin to total assimilation linguistically.^{lv}

Strictly Definitional/An Examination of Classification

Above, we have examined, sequentially, bio-piracy, ethnography, databasing, peoples' reactions to legal and database frameworks and how these life events/issues relate to language. In so doing, I have laid out a sequence of sentences made up of words, thought/speech objects. In this section, I plan to open the article to notions of definitions, words, classifications of people that have been critiqued and would like to point toward assumptions built within these classifications and definitions. My article is not the first to critique classification. Others have found specialized topics to expose and suggest improvements. Some of these improvements have been embraced by the authorities. And when I say authorities, I do mean a nod toward the Library of Congress Authorities of *Subject Authority Headings*, *Name Authority Headings*, *Title Authority Headings*, *Name/Title Authority Headings* and *Keyword Authorities*.^{lvi}

As a student of the "library" I have examined controlled vocabularies. Library of Congress Subject Headings is one such example, but there are controlled vocabularies for Art & Architecture, Geography and other items such as Rare Books & Manuscripts.^{lvii} Each of these intends to build browseable lists of objects that collocate according to the terms entered in the search tool. They are not "inherent" terms, though there may be inclusion of the terms in the items resulting from any given search. Depends on the search result of course. But these are artificial vocabularies designed to force a browseable structure of a catalog or Online Public Access Catalog. Otherwise, there would need to be some other way of organizing the items available to any given search

string. And there are lots of ways to organize resources. But these Controlled Vocabularies are created as such to form a type of control over results from possible search strings. This is valuable as there are many ways to think about these “artificial” languages. Though there is often a disparity between design and use. And after a design is put into use critics surface and explore what works. Before I get to my exploration, I want to set the ground by examining other critics of artificial languages built to “describe” people.

Sanford Berman wrote a now famous book, *Prejudices and Antipathies: A Tract on the LC Subject Heads Concerning People* (1993), in which he sheds light on the Library of Congress Subject Headings for people. For instance, he critiques the use of “mixed Blood” as a subject heading for Indians [Native Americans] from all over the Americas. He suggests a more nuanced canvased term that allows for more represented differences between assorted groups.^{lviii} With these critiques, many of which have been adapted by the Library of Congress Subject Headings (LCSH) Committee. In fact, LCSH now has a button on its site to suggest new uses or new terms to replace the ones in current use.^{lix} This shows that Berman and others have made an impact and that classification has a political aspect. And with this example of “**mixed blood**,” above, we see that even Berman saw the limitations of such overarching context-stripped terms applied to resources on “**Native**” **Americans** – people that are also referred to in North America as “indigenous.”

But later in the same work, Berman brings to light other terms more relevant to my exploration here. For example, he critiques the use of **Native Races** and other used terms such as **Ethnological** or **Sociological** to blur unique features which are not about race. Berman believes use of this term slides between issues of biology and culture with too slippery a grade.^{lx} I think this is valuable because not only do we see major voices pointing out the ideological relationship between classification and biology, but we also see that he pulls ethnology [ethnography] into the mix as well. He believes some of these Subject Headings are de-humanizing. Does this de-humanization not harken back to Jean Baudrillard's comments about science and "murder?" Not real murder of course, but a metaphorical type, an ideological weapon imposed from outside and above. Not only do Berman's comments refer to Jean Baudrillard's, but they also refract Michel Foucault's critique of archaeology and the human sciences. Foucault writes, "Classification, as a fundamental and constituent problem of natural history, took its position historically, and in a necessary fashion, between a theory of the mark and a theory of the organism."^{lxi}

The first relevance is that classification must have a place in the sciences. It seems inescapable. But the most important relevance is that Foucault's terms refer to "organism" as an object in nature, the slippery slope of "classification" allows for that blurring - just as Berman suggests. Foucault was available in Translation in 1994, the year after Berman reissued his book (originally published in 1971). I relate this data only to contextualize the use of

constructs and concerns. Baudrillard's essay referenced above was written 12 years before (in French) in 1981, but was also available in translation in 1994. These critics use some overlapping ideas in their writing. Baudrillard carries on with his ideas until the mid-2000s. There are others who took inspiration from Berman's work with other topic attention. For instance, Joan K. Marshall put together a critique and produced a new thesaurus to follow a different line of thought related to subject access and classification of people. She wrote, *On Equal Terms: A Thesaurus for Nonsexist Indexing and Cataloging* (1977), in which she writes a thesaurus (where as Berman's text is more a critique with suggestions of sexist language in the LCSH). She notes that as consciousness was raised on women's issues in general, librarian's minds were made aware of how these same tenses are reflected in library services such as indexing/cataloguing. Though she also writes, "...we [also] recognized that the problem of bias in the LCSH is much broader than sex bias..."^{lxii}

She was right and to bring it back to my thesis through her words, one looks at the use of meaning found in the classification, **Indigenous**. The LCSH defines their use of "indigenous": "Here are entered works on the aboriginal inhabitants either of colonial areas or of modern states where the aboriginal peoples are not in control of the government. General works on the ethnological composition of specific places are entered under [Ethnology] with local subdivision. Works on a specific indigenous people or group of peoples are entered under the ethnic group."^{lxiii} The preceding definition shows that LCSH is aware of the general tensions found in the literature – tensions which draw

attention to differences between peoples & nation states and peoples & effects of colonization. And this tension between nation state/colonization & peoples reflects Arun Agrawal and Andrew Dalby's comments referenced above on ethnography as a form of colonization and tensions when nation states interact with peoples who are maybe not members of it. Secondly, it draws attention to the notion that ethnic groups can (or should) be named individually in relation to resources being consulted. I also note that ethnography is (as Berman critiqued) still tied to place as opposed to people. This observation is no small thing because not only does it conflate people with place, but it also draws connections to Michel Foucault's comments referenced above on theories of the mark and the organism. For as soon as we start examining place in this light, we are able to see that "indigenous" also has connotations to nature and that "indigenous" people are considered natural objects instead of as moving adapting humans.

Two terms commonly used in databases and catalogues are "indigenous" and "Native." Both have severe limitations of use in light of the examples we are seeing here. The Oxford English Dictionary Online defines "indigenous" as, "Born or produced naturally in a land or region; native or belonging naturally to (the soil, region, etc.). (Used primarily of aboriginal inhabitants or natural products.) / Inborn, innate, native."^{lxiv} I don't want to spin my wheels too long in this final section, but I don't think we can point out too loudly this notion that this definition draws identity of peoples to the land – as if there are peoples whose identities are not tied to the land (or Vice Versa). This definition

opens Michel Foucault's comments referenced above on a theory of the organism in disturbing light.

First of all, if there is some overlap between peoples and nature, this seems another example of the noble savage in which classifiers (and the academy) create a framework through which people are separated, people who may or may not already be "separated" by other such frameworks such as Nation States and national languages. At least the LCSH definition does not explicitly state this philosophical assumption. The LCSH definition of "indigenous peoples" at least draws attention to the people status in their classification schema. I agree the dictionary is not an artificial language (controlled vocabulary) in the same way as classification schema are, but it simply mirrors the fears held by critics of databases, ethnography in general and actions such as the Human Genome Diversity project. It seems their fears are not wholly unfounded if "indigenous" is used in such a way because it may actually reflect (in action and use) assumptions about people.

In tandem, the Oxford English Dictionary defines "native" as, "I. Senses relating to natural state or condition. 1. a. Inherent, innate; belonging to or connected with something by nature or natural constitution. b. inherent in the nature of, belonging naturally to. 2. a. Left or remaining in a natural or original state or condition; free from or untouched by art; unadorned, simple, plain. 3. a. Of a metal or other mineral: occurring naturally in a pure or uncombined state; (also) occurring in nature, as opposed to having been formed

artificially.”^{lxv} This definition is almost verbatim the OED’s definition of “indigenous” except for the addition of one very important difference. I want to point out that in the literature, “native” and “indigenous” are used nearly interchangeably. And that very important difference I alluded to after the definition of “native” is that this definition draws a clean distinction between things of nature and those created artificially. Classification schema are controlled.^{lxvi} This means they are artificial. Except these artificial classifiers are attached to people who are deemed to NOT be artificial. I see disingenuousness here. And, if people are replaced by the precession of ethnography, then they have, again, been “murdered” by ethnography. For if classification schema are controlled, and thus artificial, then they exhibit the meaning of definitions as have been seen here. But if people being described and classified are not artificial, but in fact are “innate” with their land or with their locale, then the use of artificial classification to describe them forces them into a category of “other.” Above we read that if ethnography is possible (and resulting classification), it would only be possible right where we are. I read this to mean that ethnography is only possible within the confines of the precession of controlled vocabularies/classificatory schema only as a tool to observe and analyze the population that produces such artificial technology. I see this artificial/natural divide as the most scary of all because not only does it presuppose vanity on the part of the classifiers (read: developed <as opposed to und[er]developed or developing>)^{lxvii}, but also presupposes a type of ism.^{lxviii} Maybe not racism, but something of the same type. I see this as a form of

“murder” in the vein of Jean Baudrillard’s meaning of the term. This “murder” applies to ethnographies as well as to classificatory tools built to structure records for those ethnographies.

But it is not as if these classificatory tools are only used only by societies that create artificial vocabularies. These same classification schema have been internalized by formerly colonized nations, now “independent.” We have already seen the use and assumption of these classes played out in Vendava Shiva’s (from India, a former colony), Arun Agrawal’s and many others’ writings referenced above. In fact, the use of “indigenous” and “native” are so ubiquitous, that writers from formerly colonized areas (now legally constructed nation states) such as Africa’s nations, India and Brasil. For instance, Basil Amaeshi assumes the use of this term in his article on indexing in a Nigerian library, Dharm P. S. Bhawuk does so in his article using old Indian religious texts to inquire about the effect of globalization as a homogenizing machine, Manuela Carneiro D Cunha does so as she examines the impact of legal frameworks upon local populations that live within the legal borders of the nation state Brasil and Shiva Kanauja Sujuka does so writing on what it means for India to develop databases for “indigenous” knowledge.^{lxix} “Indigenous” is assumed to be the normal term of classification around the globe. But as we have read above, one type of knowledge and practice exists in a different context from another knowledge or practice. It is not productive if it’s ubiquitous (homogenized/standardized). In other words, if classification of peoples is to be taken seriously it needs the same nuance Sandford Berman

hope to gain with his critique of the LCSH. The totalization of the globe is not just about patent applications and bio-piracy, creating databases of knowledge in the name of development or connections of development with the loss of linguistic diversity, but is also about the words used to say what something “is” or is “about.” Honestly, the monolithic use of this classification is a sign of language death.

Conclusion

I don't know if there is a panacea to global totalization. But we have seen that many people think it a problem and that there are a multiplicity of rationales to antagonize it. We have seen connections develop and ideologies carry over from development to database creation to linguistic loss. I see these topics and ideas connected through a major problem of classification – a classification that must be made as nuanced as the diversity of the languages in the world if it is not to abet in the death of language. Not just classification of artificial language in a catalog or ethnography, but of a more philosophical kind. And we have seen some of those classification divides critiqued from different thinkers. I do not see the use of “indigenous” as productive. I mentioned that above. I do not think it productive for reasons other than mentioned above. I do not see this as productive a classification because to use this term after we have critiqued the ideological assumptions built within its common use is to realize it is used as a “Not - ” classification instead of a proscriptive/descriptive one. If classifications are meant to describe, then it has

failed. I recommend dropping it as a term of use for all these reasons or at least letting it slide into blurry meanings (through deliberate re-writing) to reflect blurry philosophical and knowledge divides. I see my position as an art-of-life position. Sanford Berman suggested making headings reflect ethnic groups more clearly. That works up to a point. But it fails at the same point because some of these peoples may not have any “names” except for the ones created at the time of ethnographic “study” and we can’t default to the legal name of the nation state in whose borders a population resides. And each population has to live someplace. So we may not be able to trust those either. I don’t know if the answer is to form a whole new kind of thesaurus in response. But I do know that if we drop this gigantic classification, **Indigenous**, we must simultaneously embrace a new kind of uncertainty.

ⁱ “postulate, n” “2. a. A fundamental principle, presupposition, or condition, esp. one assumed as the basis of a discipline or theory; (also) a proposition that is (or is claimed should be) taken as granted; esp. one (to be) used as a basis for reasoning or discussion, a premise.” The Oxford English Dictionary. 2nd ed. 1989. OED Online. Oxford University Press. (accessed 13 Oct 2010). / Kafka, Franz. 1993. “A Report to an Academy.” Collected Stories. Ed. Gabriel Josipovici. Trans. Willa and Edwin Muir. New York: Alfred A. Knopf. 195-204. / On a personal note, I want to state that I will use names of people such as tribes or nation states as representational of a people. Clearly, this label does not work well in this context. So, I have to acknowledge the limitation of writing and that some of the conundrums explored in the paper are in fact committed by this writer. Maybe that is the point?

ⁱⁱ Thank you Leigh Estabrook (http://web.mac.com/lse2/Leigh_Estabrook/Home.html) for your guidance through this study.

ⁱⁱⁱ McBride, Alonzo. “The Pumping Heart of a Brand New Language,” published 06 Oct 2011. Loose Gravel <<http://theloosestgravel.blogspot.com/2011/10/pumping-heart-of-brand-new-language.html>> (accessed 06 Oct 2011).

^{iv} I would be interested in pursuing in the future an entirely new classification framework that takes into account my criticisms here as well as the assorted legal definitions already in use – definitions used because of nation state and legal borders.

^v Baudrillard, Jean. 2005. The Intelligence of Evil, or the Lucidity pact. Trans. Chris Turner. New York: Berg. 21.

^{vi} Baudrillard, Jean. 1994. "The Precession of Simulacra." *Simulacra and Simulation*. Trans. Sheila Faria Glaser. Ann Arbor: University of Michigan Press. 7.

^{vii} Britz, Johannes J., and Thomas A. Lipinski. 2001. "Indigenous Knowledge; A Moral Reflection on Current Legal Concepts of Intellectual Property." *Libri: International Journal of Libraries & Information Services* 51, no. 4: 234-246. *Library, Information Science & Technology Abstracts*, EBSCOhost (accessed October 5, 2010). 237.

^{viii} "development, n." The process or fact of developing; the concrete result of this process. / A gradual unfolding, a bringing into fuller view; a fuller disclosure or working out of the details of anything, as a plan, a scheme, the plot of a novel. Also quasi-concr. that in which the fuller unfolding is embodied or realized. *The Oxford English Dictionary*. 2nd ed. 1989. OED Online. Oxford University Press. (accessed 12 Oct 2011)

^{ix} Britz and Lipinski.

^x Ibid.

^{xi} Ibid.

^{xii} Whitt, Laurelyn. 2009. *Science, Colonialism, and Indigenous Peoples: The Culture Politics of law and Knowledge*. Cambridge and New York: Cambridge University Press. 154.

^{xiii} Falcon, W.P., and C. Fowler. 2002. "Carving up the commons—emergence of a new international regime for germplasm development and transfer." *Food Policy* 27, no. 3: 197. *Academic Search Premier*, EBSCOhost (accessed October 5, 2010). 199.

^{xiv} United States Department of Agriculture. Revised: 2006. "Plant Variety Protection Act." <<http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3002796>> (accessed 13 Oct 2011).

^{xv} Falcon and Fowler, 200.

^{xvi} World Trade Organization. < <http://www.wto.org/>> (accessed 13 Oct 2011). Performed keyword searches through documents and publications for the keyword: "indigenous."

^{xvii} Khor, Martin. 2003. "IPRs, biodiversity, and the theft of indigenous knowledge." *Interdisciplinary Science Reviews* 28, no. 1: 7-10. *Academic Search Premier*, EBSCOhost (accessed October 5, 2010). 9.

^{xviii} Roopnaraine, Terry. 1998. "Indigenous knowledge, biodiversity and rights." *Anthropology Today* 14, no. 3: 16. *Academic Search Premier*, EBSCOhost (accessed October 5, 2010).

^{xix} Agrawal, Arun. 2002. "Indigenous knowledge and the politics of classification." *International Social Science Journal* 54, no. 173 (September): 287-297. *Academic Search Premier*, EBSCOhost (accessed October 20, 2010). 288-290.

^{xx} Agrawal, Arun. (1995), *Dismantling the Divide Between Indigenous and Scientific Knowledge*. *Development and Change*, 26 (3): 413–439. doi: 10.1111/j.1467-7660.1995.tb00560.x

^{xxi} As a personal side-note, I wonder if efforts by the "neo-indigenistas" are, in a small part, representative of a form of advocating a new version of the "noble savage."

-
- ^{xxii} Agrawal, Arun. 1995. "Dismantling...", 424. / Kuhn, Thomas S. 1996. *The Structure of Scientific Revolutions*. 3rd Ed. Chicago: University of Chicago Press.
- ^{xxiii} Agrawal, Arun. 2002. "Indigenous knowledge and the politics...", 293.
- ^{xxiv} Ibid, 295.
- ^{xxv} Augusto, Geri. 2008. "Digitizing IKS: Epistemic complexity, datadiversity & cognitive justice." *International Information & Library Review* 40, no. 4: 211-218. Academic Search Premier, EBSCOhost (accessed October 5, 2010). 212-214.
- ^{xxvi} Augusto, Geri. 2008. "Digitizing IKS: Epistemic complexity, datadiversity & cognitive justice." *International Information & Library Review* 40, no. 4: 211-218. Academic Search Premier, EBSCOhost (accessed October 5, 2010). 213-214.
- ^{xxvii} Augusto, 214.
- ^{xxviii} United Nations Website. <<http://www.un.org/en/>> (accessed 15 Oct 2011).
- ^{xxix} Gadgil, M., F. Berkes, and C. Folke. 1993. "Indigenous knowledge for biodiversity conservation." *AMBIO - A Journal of the Human Environment* 22, no. 2/3: 151. Academic Search Premier, EBSCOhost (accessed October 5, 2010). 151.
- ^{xxx} Baudrillard. "The Precession of Simulacra." 8-9.
- ^{xxxi} Sembok, Tengku Mohd Tengku. 2003. "Character Strings to Natural Language Processing in Information Retrieval." *Digital Libraries: Technology and Management of Indigenous Knowledge for Global Access Lecture Notes in Computer Science*, 2003, Volume 2911/2003. 28.
- ^{xxxii} Google Keyword Results for *MENGGOMPUTERKAN* and *PENGGOMPUTERAN* (shortened with bit.ly): <http://bit.ly/ulQeog> and <http://bit.ly/t8TIZV> (respectively) (accessed and shortened 29 Oct 2011).
- ^{xxxiii} Sembok, Tengku Mohd Tengku, 32.
- ^{xxxiv} Foucault, Michel. 1994. *The Order of Things: An Archaeology of the Human Sciences*. New York: Vintage Books. 145.
- ^{xxxv} Agrawal, Arun. 2002. "Indigenous knowledge and the politics...", 291.
- ^{xxxvi} Agrawal, Arun. "Introduction: in favour of indeterminacy." *International Social Science Journal* 54, no. 173 (September 2002): 283-285. *Academic Search Premier*, EBSCOhost (accessed October 20, 2010). 283.
- ^{xxxvii} The Europa World of Learning: The International Guide to the Academic World. <<http://www.worldoflearning.com/views/home.html>> (accessed 22 Oct 2011),
- ^{xxxviii} Human Relations Area Files. <http://www.yale.edu/hraf/index.html> (accessed 10 Sept 2011).

^{xxxix} Ntsoane, Otsile. 2005, "African indigenous knowledge - an academic and socio-cultural exploration for indigenization." *Indilinga: African Journal of Indigenous Knowledge Systems (IAJKS)* Vol. 4(1) 2005: 89-109. via African Journals Online <<http://www.ajol.info/index.php/indilinga/article/view/26367>> (accessed 06 Oct 2011).

^{xi} Khor, 9.

^{xlii} Reardon, Jenny. 2001. "The Human Genome Diversity Project: A Case Study in Coproduction." *Social Studies of Science (Sage)* 31, no. 3: 357. *Academic Search Premier*, EBSCOhost (accessed October 5, 2010).

^{xliii} Da Cunha, Manuela Carneiro. 2009. "*Culture*" and *Culture: Traditional Knowledge and Intellectual Rights*. Chicago, Prickly Paradigm Press. 2-3.

^{xliiii} Ibid, 44. I also have seen a fascinating overlap of government (specifically by the Pentagon and the Department of Defense) funded ethnographic studies of China and the Middle East. The United States has also been in a point of strong tension of economic struggles with China and actual armed conflict in the Middle East. I wonder about the relationship then between the Social Sciences and the Pentagon.

^{xliv} Shiva, Vandana et al. *The Enclosure and Recovery of the Commons: Biodiversity, Indigenous Knowledge and Intellectual Rights*. New Delhi: Research Foundation for Science, Technology and Ecology, 1997.

^{xlv} Shiva, Vandana. "The Living Democracy Movement: Alternatives to the bankruptcy of Globalization." *Another World is Possible: Popular Alternatives to Globalization at the World Social Forum*. London & New York: Wed Books, 2003. 115.

^{xlvi} Holcombe, Sarah. 2010. "The arrogance of ethnography: Managing anthropological research knowledge." *Australian Aboriginal Studies* 2010, no. 2: 22-32. *Academic Search Premier*, EBSCOhost (accessed September 26, 2011). 23.

^{xlvii} Dalby, Andrew. *Language in Danger: The Loss of Linguistic Diversity and the Threat to our Future*. New York: Columbia University Press, 2003.

^{xlviii} Dalby, ix.

^{xlix} Dalby, 285.

^l The Sapir-Whorf Hypothesis is worthy of full bibliography itself.

^{li} Dalby, 227.

^{lii} Langton, Marcia, and Zane Ma Rhea. 2005. "Traditional Indigenous Biodiversity-related Knowledge." *Australian Academic & Research Libraries* 36, no. 2: 47-72. *Academic Search Premier*, EBSCOhost (accessed October 5, 2010). 53.

^{liii} Scanlon, Christopher, and Michael Singh. 2006. "Theorizing the decline of linguistic diversity." *International Journal of the Sociology of Language* 182, no. 1: 1-24. *Communication & Mass Media Complete*, EBSCOhost (accessed September 26, 2011). 4.

^{liv} Maffi, L. (2002), Endangered languages, endangered knowledge. *International Social Science Journal*, 54: 385–393. doi: 10.1111/1468-2451.00390 (accessed 09 Sept 2011). 390. As a side-note, I want to add that to philosophically classify language as a resource assumes language is a thing in the same way as a plant, insect or land is a resource.

^{lv} Exner, Frank, Little Bear. “North American Indian Personal Names in National Bibliographies.” *Radical Cataloging: Essays at the Front*. Ed. K.R. Roberto. Jefferson, NC: McFarland & Company, Inc., 2008. 152.

^{lvi} Library of Congress Authorities. < <http://authorities.loc.gov/>> (accessed 29 Oct 2011).

^{lvii} RBMS Controlled Vocabularies:

<http://www.rbms.info/committees/bibliographic_standards/controlled_vocabularies/index.shtml> Getty Research Institute Controlled Vocabularies: <<http://www.getty.edu/research/tools/vocabularies/index.html>> (accessed 30 Oct 2011).

^{lviii} Berman, Sanford. *Prejudices and Antipathies: A Tract on the LC Subject Heads Concerning People*. Jefferson, North Carolina: McFarland & Company, Inc. Publishers, 1993. 39.

^{lix} Library of Congress Subject Headings. < <http://id.loc.gov/authorities/subjects.html>> (accessed 31 Oct 2011).

^{lx} Berman, 78-79.

^{lxi} Foucault, Michel. 1994. *The Order of Things: An Archaeology of the Human Sciences*. New York: Vintage Books. 145.

^{lxii} Marshall, Joan K. 1977. *On Equal Terms: A Thesaurus for Nonsexist Indexing and Cataloging*. New York: Neal-Schuman Publishers, Inc. vii.

^{lxiii} “Indigenous peoples” as defined by LCSH. < <http://id.loc.gov/authorities/subjects/sh85090174.html>> (accessed 31 Oct 2011).

^{lxiv} “*indigenous, n*” Born or produced naturally in a land or region; native or belonging naturally to (the soil, region, etc.). (Used primarily of aboriginal inhabitants or natural products.) / Inborn, innate, native” *The Oxford English Dictionary*. 2nd ed. 1989. OED Online. Oxford University Press. (accessed 13 Oct 2010).

^{lxv} “*native, adj*” “I. Senses relating to natural state or condition. 1. a. Inherent, innate; belonging to or connected with something by nature or natural constitution. b. inherent in the nature of, belonging naturally to. 2. a. Left or remaining in a natural or original state or condition; free from or untouched by art; unadorned, simple, plain. 3. a. Of a metal or other mineral: occurring naturally in a pure or uncombined state; (also) occurring in nature, as opposed to having been formed artificially. “ *The Oxford English Dictionary*. 2nd ed. 1989. OED Online. Oxford University Press. (accessed 01 Sept 2011).

^{lxvi} “*controlled, adj*” “Held in check, restrained, dominated” *The Oxford English Dictionary*. 2nd ed. 1989. OED Online. Oxford University Press. (accessed 31 Oct 2011). / “*vocabulary, n*” A collection or list of words with brief explanations of their meanings; now esp. a list of this kind given in an elementary grammar or reading-book of a foreign language” *The Oxford English Dictionary*. 2nd ed. 1989. OED Online. Oxford University Press. (accessed 31 Oct 2011).

^{lxvii} Holcombe.

^{lxviii} We also read above about the philosophy debate in which types of knowledge systems could not be demarcated, we read that one “type” of person may not necessarily be better conservators of nature than another “type” of person and we read that even crops, deemed “native” in fact have traveled the globe for hundreds of years to become staple foods of different populations.

^{lxix} Amaeshi, Basil. 2001. "Subject indexing in the Nigerian National Corporation Library: design of an instrument." *Library Review* 50, no. 9: 457-460. *Library, Information Science & Technology Abstracts*, EBSCOhost (accessed October 6, 2011). / Bhawuk, Dharm P. S. 2008. "Globalization and indigenous cultures: Homogenization or differentiation?" *INTERNATIONAL JOURNAL OF INTERCULTURAL RELATIONS* (July) 32: 4, 305-317 DOI: 10.1016/j.ijintrel.2008.06.002. (accessed 16 Oct 2011). / Da Cunha, Manuela Carneiro. 2009. "Culture" and Culture: Traditional Knowledge and Intellectual Rights. / Sukula, Shiva Kanauja. 2006. "Developing indigenous knowledge databases in India." *Electronic Library* 24, no. 1: 83-93. *Library, Information Science & Technology Abstracts*, EBSCOhost (accessed September 30, 2011).