Lilium Rajan

Historical ambiguity: a lens for approaching outdated terms

Abstract
Knowledge organization systems attempt to find a place for every resource, yet assorted leftovers seem inevitable. Focusing on the aspects that render something difficult to describe, rather than on the end result of their description, the author previously offered a taxonomy of types of ambiguity (Rajan, 2017). Among these types of ambiguity are resources that display historical ambiguity due to their use of terms that have changed in meaning over time. Here the author considers three cases of term change documented by scholars around eugenics, Asian American identity, and neurodiversity. The concept of historical ambiguity is proposed as that which collocative integrity seeks to address. However, while collocative integrity imagines some concept stability at specific moments in time, historical ambiguity also considers the fluidity of concepts in a particular moment. This fluidity may be particularly present in cases of human identity. The challenges that human identity presents to knowledge organization may be seen as related to its position as a thing-oriented rather than an experience-oriented discipline.

1. Introduction
The ideals of knowledge organization imagine a universe in which everything finds a place and can thus be readily discovered and obtained. We seek to create an order in which everything is properly accounted for. Practitioners know well the challenges of the misfits, the errant, defiant or unknowns. Bowker and Star’s Sorting Things Out highlighted the multiple effects that these supposedly neutral systems have, including the ways in which they exclude (1999). In recent decades, many scholars in knowledge organization and beyond have illuminated the existence of myriad others. In knowledge organization, others may be evident via explicit labeling as such but more often they disappear from view through alternative placements. We have come to understand a range of consequences of othering, including misrepresentation, invisibility, exploitation and reification. Following on the work of scholars who have documented these consequences, I have begun to ask what characteristics render some things other. In a previous paper I suggested framing these characteristics as ambiguity (Rajan 2017). By considering these characteristics rather than the consequences of representation, I hoped that we might find new solutions toward future design. In that taxonomy, I proposed four broad types of ambiguity, each of which might have a different solution. In this paper, I revisit what I termed historical ambiguity to see how the concept overlaps with or extends work that addresses a similar work, especially subject ontogeny.

To do this comparison, I examine three papers that engage changes in term use over time: the ontogeny of eugenics in the Dewey Decimal Classification (DDC) (Tennis 2012); the history of Asian American terms in the DDC (Higgins 2016); and a proposed
taxonomy of terms related to neurodiversity (Zolyomi and Tennis 2017). These cases each illustrate different aspects of the challenges of term change over time, though they are far from exhaustive in documentation of these issues. Nonetheless, they allow us to consider the ways in which the concept of historical ambiguity (or ambiguity more broadly) may serve those engaged in the work of categorizing and designing systems of representation. Finally, I will briefly consider two ways of engaging with the concept of ambiguity and ask how these approaches highlight specific challenges in the way that knowledge organization considers what is possible and necessary.

2. Background

In classification, there should be a place for everything. What then of those things that inevitably defy ready categorization? There are many ways that these challenges are handled, from being scuttled into a junk drawer category such as “other” or being forced into another category that may or may not have a clear relationship to the resource in question. In addition to being confusing or useless, these misrepresentations can perpetuate and enforce power over marginalized identities, as has been illustrated by Olson (2002), Adler (2009) and Fox (2016b), among others.

There are several ways resources can end up as others. In the first case, one might know what something is, but the system has no place for it. In other cases, the issue is not merely a missing term. Instead, something remains opaque or confusing. I have characterized this quality as ambiguity. In looking at how ambiguous others are handled by classification systems, it is helpful to consider the many ways in which a thing can be ambiguous.

This focus is an extension of questions brought forth by Star and Bowker in their discussion of residuality, a term they use to describe that which remains unclassifiable due to issues of temporality and personal experience or perspective, such as fluctuating physical pain (2007). It is not possible to pin these things down in representation, rendering these realities as formally non-existent. This work has been taken up by other scholars in relation to resource description, including Feinberg, Carter and Bullard’s work on video metadata (2014).

Taking otherness and residuality to refer to the same struggle in representation, there are several ways in which resources with these characteristics may be handled. Such a resource may be up-posted, in which case its particulars are lost. It may be discarded. In other cases, it may be falsely named, in which case it may disappear while counting as a representation of something else entirely. It may be declared other or some variant, usually nested within a classification. I have characterized this problem as one of ambiguity. The terms other and residuality both emphasize where things are left (or left out), while ambiguity shifts the attention to the moment before resources are described and asks us to imagine what has confused the description process.
In this paper, I will extend my previous work that proposed a taxonomy of four types of ambiguity (Rajan 2017), one of which, historical ambiguity, I will consider further here. Each type is united primarily by potential solutions. This taxonomy is system agnostic, with examples gathered from literature and conversations with practitioners in multiple disciplines. The first type of ambiguity is perhaps the simplest: *multiplicity*. This is used to describe resources that have a large number of equally relevant aspects or concepts, which challenges most knowledge organization systems. Nonetheless, a solution would be to assign as many terms as possible to arrive at an adequate representation. The next type of ambiguity I called *emergence*, the formation or arrival of a concept. This is particularly common in scientific communities. The solution would be something like patience. What I called *privacy-related ambiguity* is seen in cases where humans are engaged in their own classification, or description of resources from their community. This kind of ambiguity arises largely from lack of trust of the system of categorization. The solution is building trust between the community and those who seek to describe them. Finally, I introduced *conditional ambiguity*, which describes resources whose identity is so context specific that they may not be accurately represented without some form or narrative description. While otherness may be related to all four types of ambiguity, residuality corresponds most closely to this final type.

Within conditional ambiguity, I offered several examples, including historical ambiguity. This term was intended to describe resources that use terms considered out of date. For this project, I considered how historical ambiguity maps with other ideas about challenging representations.

To do this work, I considered three papers published in the past decade that look at changes in terms over time. These papers do not exhaustively map the field. In the following sections, the term “resource” will be used to refer to that which is classified or categorized. This term is not always a perfect fit, particularly in reference to people.

3. Historical ambiguity: three cases

3.1. Tennis

We begin with the subject ontogeny of eugenics by Tennis (2012). Since it was published, the approach that Tennis takes has been replicated by numerous others in analysis of historical changes to classification systems. In this paper, Tennis traces the wide range of subject locations for works on eugenics in the DDC from 1911 to the present. After being banished from the biological sciences in the 1950s, the subject does not have a tidy new home. Instead, it is characterized by lumping and splitting from edition to edition. Further, Tennis notes that at times resources are classified in defiance of the most recent editions of DDC, sometimes conforming instead to earlier editions, perhaps in order to maintain coherence in collections.

While there are many concerns with the representation and misrepresentation of a
subject with so fraught a history as eugenics, Tennis notes that from the perspective of knowledge organization, this creates particular challenges to the goal of *collocative integrity*, or the appropriate and comprehensive gathering of related resources in a collection (2012, 2013).

If we apply the lens of historical ambiguity to this case, we might note that there are two particularly challenging aspects. First, the subject may become illegible to users, who may find resources on eugenics in places that are contradictory or confusing, without being able to understand or reconcile these contrasting perspectives. Secondly, as Tennis highlights, the professional who seeks to classify a resource that indicates a biological scientific perspective on eugenics is prevented from doing so in accordance with the current edition of the DDC. Thus, the subject loses salience.

### 3.2. Higgins

Many scholars in recent years have put an ontogenetic lens to terms related to human identities and traced the consequences of these classifications. Representation of Asian American subjects, as explored by Higgins (2016) is particularly interesting for the expansiveness of the communities which this term covers. While Higgins examines editions of the DDC for placements of Asian American subjects from 1876-1996, she notes that the term “Asian American” didn’t emerge as a collective identity until the late 1960s, and it only makes an explicit appearance in that form in the 1996 edition. Therefore, the ontogenetic question in this case is how a multitude of identities that may be now described as Asian American were represented in the DDC in this period. While many identity terms appear and disappear over time, most are inadequate at distinguishing Asian subjects from Asian American ones. Further, in those cases where the context clearly indicates an Asian population in the United States, it tends to be negatively formed. Higgins notes that the emergence of terms stems from literary warrant, so if multiple resources address the notion of cheap Chinese labor, for example, it may make an appearance as a subject term. While bibliographic classification systems aim to be able to represent all possible knowledge, they do so as need arises, rendering incomplete the range of possible subjects.

This criticism can be easily enough answered by the pragmatic purposes of a classification system, not to mention the impossibility of imagining all possible subjects divorced of literary warrant. However, it highlights historical ambiguity in pointing to the absences of terms that the user might seek. Further, the ontogeny that Higgins traces suggests that users (and possibly information professionals) must have knowledge of terms that are no longer in use, and which may be considered unjust, in order to discover older relevant resources.
3.3. Zolyomi and Tennis

The last case that will be considered is not centered on bibliographic classification, though it directly addresses term change over time. Zolyomi and Tennis perform a domain analysis of neurodiversity, with a particular focus on autism (2017). From this work, they offer a taxonomy of terms related to experiences of neurodiversity, both social and medical. The case of autism shares characteristics with our previous examples. On one hand, autism is a diagnosis and therefore linked with the scientific community. Terms related to autism are found in multiple classifications, including the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases. In this sense, the existence or reality of autism may be seen as related to the case of eugenics. On the other hand, a diagnosis (or lack thereof) of autism has an impact on human identity. Thus, if the scientific view of autism changes, it has a direct effect on those whose identity is related to that diagnosis. Indeed, this can been seen in the case of Asperger’s, a diagnosis related to autism until it was eliminated in the DSM-V in 2013. Many people found the diagnosis and the identity useful for understanding and advocating for themselves or their communities. Under the guidelines of the DSM-V, there would not be any “new” individuals with Asperger’s, even if they fit the criteria previously associated with the diagnosis. The taxonomy offered by Zolyomi and Tennis retains this term and includes many concepts that are related to autism but are not formally accounted for in current classification systems. This taxonomy includes concepts about lived experiences of neurodiversity, including an in-between state of identity in relation to autism, which is given the term neurocurious. If we consider this state in relation to historical ambiguity, agnostic of any particular knowledge organization system, we may appreciate the challenge of representing identities that are subject to multiple temporal perspectives. That is, terms may change in their denotation and connotation, as eugenics has. They may also change in actual terminology, as illustrated by Higgins through terms of Asian American identity. Finally, they may change in and of themselves, and not necessarily in a linear fashion. Identity can be contextual and contingent. If our systems are unable to note context, it is possible that resources will become misrepresented or invisible.

3.4. Summary

In each of these cases, we have seen examples of terms that are not easily understood over time, and thus ambiguous. I characterize them specifically as historically ambiguous because they highlight the challenges of consistently describing certain concepts and related resources over time. These examples bring our attention to two very different sources of subject terms. In the cases of eugenics and neurodiversity, the terms of use have emerged from scientific and medical literature. Their use claims the reality of the perspectives they represent. Tennis has traced the move eugenics made in the DDC, from its origins in biological sciences to its current banishment from those
classes. Zolyomi and Tennis bring our attention to the medical origins of terms related to neurodiversity and note that as the official medical classifications change, our sense of what is real, what can count, is troubled. Is eugenics science? Does Asperger’s exist?

Bibliographic classification systems are generally inclined to support literary warrant and thus to continue use of terms that are frequently used in the literature. Therefore, in spite of the elimination of Asperger’s in the DSM-V in 2013, we still find Asperger’s syndrome as a topic (a narrower term of both Autism spectrum disorders and syndromes) in the Library of Congress Subject Headings. At what point do these classifications intersect, or does the scientific discourse become preferred over the social discourse?

The cases of Asian American subjects and neurodiversity illustrate the ontogenetic challenges of representing human identity. Both of these terms contain a multitude of communities with identities that may or may not align with terms used by classification systems. Deciphering the perimeters of these terms requires much greater engagement with these communities than mere consultation with the latest scientific literature.

In all of the cases examined here, the primary challenge they present is one of collocative integrity (Tennis 2012, 2013). If we assign terms to resources in different ways over time, we will fail to bring them together in ways that benefit the user. While Tennis highlights this problem, it is imagined to be potentially solvable through phoenixing, or reclassifying entire subjects and all related collections. Alternatively, one might consider legible notes in the record that would alert the user to ontogenetic changes and direct them to related relevant resources. However, especially in cases of human identity, phoenixing can be just as harmful as leaving offensive or inaccurate terms in place, as has been explored by Furner (2007). Ontogenetic annotations may miss the point, too. In these cases, ambiguity may be more perpetual and less easily resolved. Even if we accept the concept of literary warrant, how do we want to reconcile terms that have been used violently with terms that are liberatory?

This paper does not seek to answer this question but notes that the conversation is well captured in recent work by scholars in multiple disciplines. Adler has proposed the concept of taxonomic reparations as a means to bring greater justice in representation of historically marginalized groups (2017). This work aligns with the concept of cognitive justice, especially in relation to indigenous knowledge organization (Mouliason, Sandy, and Bossaller, 2017). The challenges of representing intersectionality have recently been explored by Fox (2016a). The problem of intersectionality is not necessarily historical, yet it has always existed and adds another challenge to our analysis of historical term change, as alluded to by Higgins. An applied approach to reconciling multiple representation requirements can be seen in the double sets of metadata used by Glass in relation to First Nations objects housed in museum collections around the world (2015). These are but a few conversations related to the
problems of historical ambiguity. All of these approaches recognize the problem of collocative integrity, but they do not necessarily privilege it. The question remains who this form of integrity serves, and how. This exploration of historical ambiguity suggests that some cases may be more readily assessed in terms of this metric than others.

My interest in considering ambiguity is in capturing the residual. In this case, it might be said that the method of ontogeny maps historical ambiguity. However, the work of ontogeny is always backward-facing and two-dimensional. It is determined by the systems that have organized the universe and recorded how resources fit into it. These systems always have bias, as well documented by numerous scholars, and so ontogeny work still can only highlight what has been done, not what could have been at any point in time. As such, it may suggest a greater fixity in concepts of the past, even as they change in time. In many cases, especially of human identity, the semantic values of terms can multiply swiftly without losing their primary meaning, as in cases where slurs are reappropriated by marginalized communities.

More than simply being the landscape that ontogeny maps, historical ambiguity should include the unmapped territory, the terms that might have been, or that are so contextual that they hold for only a moment.

Further questions

In creating this taxonomy, I acknowledged multiple sources of ambiguity: that of the indexer, that of the user, and, perhaps, that of the resource itself. In attempting to parse these questions, there are two ways of considering ambiguity. First, we can see ambiguity as a thing, or as a property of a thing. This is the assumption embedded in much of my taxonomy, derived from the thing-oriented discipline of bibliographic classification. In this field, we look to resources to derive our descriptions. We try to remain objective and descriptive in our use of concepts. We want to be able to create rules that can be used by multiple professionals and be consistently understood by most or all users. There is inevitable compromise in this, but it is generally acceptable and domain-specific (Hjørland 2009). However, human identities are not a domain. People are not resources in which one can find precise attributes that allow us to make the right call. Furner grappled with this in his analysis of identity (2009).

This tension suggests that in some cases, ambiguity can be understood as a thing or a characteristic of thing, but more often it is an experience. We encounter, as professionals or end users, and wonder to ourselves what precisely something is. In some cases we can point to the sources of our confusion, but the confusion is ours. The world is not entirely concrete, yet knowledge organization wishes to render it so. What are we failing to capture? Gorichanaz (2016) has characterized this split as one between veritas, which emphasizes factuality, and alethia, or uncovering, and suggests that knowledge organization is preoccupied with veritas at the expense of the much more
challenging alethia. This may map well to the differences between ambiguity as thing versus experience.

It remains to be seen how useful ambiguity is as a lens for considering the challenging outliers in knowledge organization and classification. Taxonomizing the unclassified may be a perverse exercise, however suited it is to the practices of the disciplines it engages. It is possible that everything that has here been characterized as ambiguous in fact is only ambiguous to someone at a certain point in time. If we can pinpoint the precise context of both the resource and viewer, perhaps all ambiguity can be resolved. The question then is: is it possible for anything to be ambiguous to itself? Can ambiguity be an inherent trait? We might look to conversations about the relationships between thoughts and words, to the champions of representation who claim that we cannot be what we cannot see. It seems possible that there are situations in which an identity cannot easily be positively asserted, where a total absence of vocabulary renders representation impossible but through the act of opting out of available terms. The cases where this holds may be too infrequent to be of concern to knowledge organization professionals. However, it may be helpful for us to be able to triangulate our unsettled confusions by specifying a vocabulary for ambiguity.

References


