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PERSPECTIVE

Synthetic Ethos: The Believability of Collections at the Intersection of Classification and Curation

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This article explores the rhetorical notion of ethos, or a believable character, in the context both of classification schemes, or means of organizing documents, and of the resource collections that make use of those schemes. Ethos, the article contends, explains how a particular audience is more or less likely to accept the interpretive frame that classification or collection inscribes on its contents. Two case studies, one of a classification and one of a resource collection that incorporates a classification, show how these communicative artifacts can generate ethos despite their lack of typical textual mechanisms, such as linear narrative. The article concludes by suggesting that properties of collections—their synthesis of multiple, often independent parts, their continuous versioning—stretch the basic idea of ethos itself, and the notion of synthetic ethos is proposed to better encompass these properties.

Keywords collections, classification, curatorship, rhetoric, ethos, credibility

There are two supermarkets in my neighborhood. One is cheaper. Although I am on a budget, I always go to the other one. Why? Well, cooking is important to me, and I feel like the second market understands my values, as a cook.

How does my market (let's call it Cook's Central) persuade me to feel this way? As with all resource collections, Cook's Central communicates via the selection, description, and arrangement of its contents. These work together to convey a variety of information about the individual items, about food and cooking, and about the market itself. Here's an example: As with many supermarkets in the United States, Cook's Central has a category of shelf

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space called "Oils." At Cook's Central, the composition of this category suggests that oil is a flavoring element, an ingredient, in addition to a cooking medium. The oils section features a wide array of toasted nut oils, infused oils, and intense olive oils that have strong tastes but low smoking points and aren't suitable for any sort of frying. These oils occupy the shelf space at eye level and above. The cooking oils, including the purified olive oils, are lower down. In contrast, at the other neighborhood market (let's call it Typical Super), cooking oils are predominant, and there are more varieties and different container sizes than Cook's Central carries, while the flavoring oils have a smaller presence.

To be honest, I could probably get most of my shopping done at the Typical Super, and it would probably cost less. But Cook's Central—it sounds odd, but Cook's Central gets me. I believe Cook's Central, and I'll (literally) buy what it's selling.

What's going on here? If we look at these resource collections—the two supermarkets—through the lens of rhetoric, we might say that the manner in which Cook's Central makes use of the Oil category in the context of its collection is more successful at building ethos, one of the three means of persuasion according to Aristotle, for an audience of serious cooks. Through the way that it selects, organizes, and arrange its wares, Cook's Central shows that it understands a cook's values, so it generates a believable character for that group of people. Because of this, I, as a cook, am more likely to believe other things that the market, through the organization of its collection, is telling me, things that I am not currently aware of, or even things that I do not currently agree with. For example, amid the category of sweet spreads that centers around honey, Cook's Central includes something called agave nectar. I am pretty well versed in the world of ingredients, and I know of agave, but I have not tried agave nectar. However, based on the way that Cook's Central positions this item, I understand that it has similarities to honey. More

importantly, I wouldn't be averse to trying it someday. (It's right near the Italian chestnut honey, and I love that stuff.) Cook's Central, through its presentation of ethos, has persuaded me not only that agave nectar is similar to honey but that I might actually benefit from incorporating it into my worldview, in a manner of speaking.

It is not that Cook's Central replicates the way I see the world, except for things I am not yet familiar with, like the agave nectar; it doesn't. That Oils section, well, it, overemphasizes the olive oil, for one, and Cook's puts the sesame oil in the Asian aisle ghetto, except for the organic brand, a decision I find problematic. But the Cook's Central collection shows me that, on a basic level, it understands where I am coming from, and so I am willing to listen to Cook's Central. If Cook's Central offers me an interpretation different from what I expect, I will consider it seriously, as I would if talking to a friend whose judgment I respect. For example, the wine section is mostly organized by place of origin, and then secondarily by grape varietal, but all the rosés are segregated in their own special section, near the sparkling wines. I understand their reasoning, with the placement; both sparkling wines and rosés use the same grapes as standard wines, but the winemaking process differs. It wouldn't have been my default way of thinking about it, and I'm actually not sure whether I agree or not, but it's a decision that I can think about and appreciate.

I am less willing to accept something that Typical Super might be trying to tell me. If Typical Super also had agave nectar in its honey area, I wouldn't give it a second glance. Note that I wouldn't necessarily think that Typical Super had put the agave nectar in the wrong place—I wouldn't doubt the credibility of its basic information, in other words—but I would ignore it. Typical Super is less persuasive in making a statement to me about the agave nectar because, partly, I didn't find its statements about oils to be sufficiently nuanced, for a person with my values as a cook. Typical Super hasn't shown me that it's tried to establish some common ground for us to begin a conversation; it's not speaking to me. (It is important to note, though, that Typical Super hasn't necessarily failed at generating ethos altogether though its selection, description, and arrangement of resources. It hasn't built ethos for an audience of serious cooks as exemplified by me, but the collection may constitute a believable character for another type of audience.)

Cook's Central, on the other hand ... it may initially sound strange to say this about what is essentially a document (or text, if you like), not a person, but I sort of have a relationship with it. I will let it try to expand my horizons. I won't automatically believe it—I'm pretty skeptical about Texas wine, certainly, and they have a whole section for that—but I'll take it seriously.

In this article, I examine this phenomenon in more depth. I look at classifications and collections as rhetorical objects and attempt to understand how they generate ethos, or believability, in an audience. I begin by briefly defining ethos and contrasting it with credibility, as typically manifested within information science. I present two case studies that illustrate how ethos can be generated in classifications and collections, both nonnarrative information systems that lack many of the standard mechanisms available to more typical written texts. In one case study, I examine a classification scheme by itself, and in the second case study, I look at a resource collection that is structured with a classification. In the first case study, I demonstrate how a classification, one component of the descriptive infrastructure of a resource collection, works as a stand-alone rhetorical artifact in expressing its own ethos. In the supermarket context, this would be like extracting the category system that defines a class called Oils and subsequent classes called Vinegar and Salad Dressings, without considering how that system has been applied (that is, what resources get put in the Vinegar category) for any particular market. (Similarly, it is common to discuss, say, the Library of Congress Subject Headings as a discrete descriptive system, instead of how that system is deployed in different library catalogs.) In the second case study, I examine how the particular aggregation of such discrete components (which have a rhetorical character on their own) is then combined with situational elements, such as resource selection, to create a unified ethos for a compound rhetorical object, the resource collection (in the supermarket context, for Cook's Central or Typical Super). I then use the insights derived from these complementary case studies to discuss how certain properties of collections—their synthesis of multiple, often independent parts, their continuous versioning—stretch the basic idea of ethos itself, and I propose the notion of synthetic ethos to better encompass these properties. Instead of conferring believability on an authorial persona, as with traditional understandings of ethos, I contend that synthetic ethos pertains to the collection itself, as a system through which many episodes of composite authorship (such as putting the agave nectar near the honey and the sesame oil on the Asian aisle) coalesce. Finally, I discuss how an understanding of synthetic ethos can inform both the interpretation of existing information systems and the design of new ones.

CREDIBILITY, BELIEVABILITY, AND PERSUASIVENESS

Within information studies, research on credibility has often focused on how users determine if information can be trusted and on the enumeration of factors that users consider in the application of such judgments (e.g., Rieh, 2002; Rieh and Belkin 2000; Fritch and Cromwell 2001; Wathen and Burkell 2002). Such research tends to imply

that there is a generally valid perception or standard of credibility that is equally applicable by all users to all documents, or at least to all documents associated with a particular task situation (as described by Hilligoss and Rieh 2008) or in a particular genre (as suggested by Savolainen et al. 2011). Information science research on credibility has been less likely to explore how credibility factors might interact in particular cases, for example, if an eminent Shakespeare scholar is a climate skeptic, or if an otherwise credible-seeming text is self-published.

Moreover, despite a document's adherence to generalized credibility standards, perceptions of a document by a particular audience as less believable and persuasive may be principled and consistent. It is not irrational, for example, for a religious audience to be skeptical of a document that presents its author as an atheist, even if the author holds impeccable academic credentials on the subject matter at hand; it is quite natural to wonder whether someone with widely divergent values really has an audience's best interests at heart. When Typical Super proposes an argument to me about agave nectar, I shrug. When Cook's Central proposes the exact same argument to me, I pause. These collections are equally credible to me, in terms of general accuracy, and yet Cook's Central is more persuasive, in terms of potentially changing my beliefs and generating potential action, because I feel like it has a better understanding of my cook's way of thinking abut things. This apprehension of shared values on the part of author and audience is a key, and reasonable, element in persuasion, as described in classic texts of rhetoric by Toulmin (1964) and Perelman and Olbrechts-Tyteca (1969). Perelman and Olbrechts-Tyteca contend, for example, that a persuasive argument for a particular audience is based not in the presentation of facts but in the invocation of appropriate values and in the identification of salient relationships (or hierarchies) between these values. While all book reviews in *The New York Times* might be equally credible according to general standards (they all convey accurate facts about the books, such as who wrote them and elements of the plot or argument), I personally am more inclined to find certain reviewers more believable than others, for example, those that share my endorsement of forthright honesty in rendering opinion. However, this preference remains situational. Because I also believe that any author's effort deserves respect, if I find that a critic often indulges in an arrogant, obnoxious tone, I am less likely to believe that particular review, this time due to discordance in perceived values.

For rhetoricians such as Perelman and Olbrechts-Tyteca, the persuasiveness of a book review can be discerned through a textual analysis that pulls out the web of values and associated reasoning; this critical exercise characterizes both the argument and the particular audience that its strategy is oriented toward. The audience and the argument are to some extent both constructed in the text itself. In other words, a book review that concludes "this sequel lacks the punch and freshness of the author's first novel" and one that contends "this sequel is so frightful, it makes one wonder if the author's first novel was produced through a deal with the devil, as opposed to any talent whatsoever" appeal to different values and thus, to different readers. In the first, the text implies a caring reviewer who regrets there is not a better verdict to report; the implied audience is a sympathetic one who hopes the second novel reaches the heights of the first. In the second, the text implies a reviewer untroubled or even gleeful at the novel's failure, and the implied audience enjoys a little well-deserved *schadenfreude*. While both reviews might provide similar assessments of the work at hand, their rhetorical strategies orient around different values and are differently believable for different readers.

The rhetorical notion of ethos captures these elements of situatedness and specificity for particular audiences. Ethos explains, for example, why I am more willing to listen when Cook's Central says "agave nectar is similar to honey . . . think about trying some!" than when Typical Super says precisely the same thing. Note that it's only the "think about trying some" part of the argument that is at issue here; I'm quite willing to accept Typical Super's credibility in terms of making accurate category assignments. But generalized credibility isn't enough to explain how one collection is more likely to persuade me to alter my initial beliefs and then act upon that new understanding in a way that the other collection is less likely to succeed with. Ethos helps untangle this.

For Aristotle, ethos, one of three forms of persuasive appeal, involves the representation of a speaker's (or author's) character so as to increase the trust between speaker and audience and, ultimately, to increase the likelihood that the audience will believe the speaker's case and accede to the action proposed by the speaker. To inspire this believability, Aristotle claims that a speaker needs to exhibit practical wisdom, moral character, and goodwill.

Practical wisdom involves being able to use one's knowledge and sense to make decisions that lead to successful outcomes (Smith 2004; Garver 1994). To return to the example of a book reviewer, a critic might generate practical wisdom by showing how the current review fits into an overall pattern of accepted judgments: how the newest summer comedy, say, is yet another instance in a recent set of previously reviewed, essentially misogynistic films that rely on the affirmation of traditional gender roles. Moral character includes the qualities that lead a person to choose actions that produce long-term contentment, as opposed to quick gratification of desires. In the case of the book critic, a review that indulges in snotty put-downs may sacrifice moral character, and thus ultimate persuasiveness, in its pursuit of the easy laugh. In

Aristotle's sense of goodwill, the speaker shows a sense of wanting the best outcome for the audience in that particular context, even if that outcome does not appear to benefit the speaker personally. To show goodwill, a book critic might clarify how the opinions expressed in a review are not idiosyncratic preferences but are achieved through systematic analysis and an informed discernment.

For an audience to perceive these qualities and thus be more inclined to accept the position that a speaker advocates, the presentation of character in the text at hand, be it a speech or some other text (including classification schemes, resource collections and other forms of information system, such as supermarkets), must match the tendencies of the audience. What's important is not that an author possesses such qualities but that the author is able to show these qualities in a way that a specific audience appreciates. Having, say, practical wisdom is not sufficient; the author must demonstrate it.

An author's reputation may contribute to such a demonstration, but as a form of intertextuality rather than as the mere addition of factual information into the current rhetorical situation. This relationship can be described using the concepts of authority and reliability as proposed by David Lankes (2008). The expertise and events that contribute to reputation constitute Lankes's notion of authority, while the ongoing experience of this reputation through multiple texts contributes to reliability—or to the decline of reliability, as the case may be. For example, an author who constantly brings up past wartime heroics may find that ethos decreases in subsequent texts, depending on the audience and other contextual factors (some groups-veterans, for example-may be more likely to favor continual references to military service, or such reminders might be more generally acceptable during a period of conflict). Ethos depends, in other words, on the careful use of rhetorical choices at one's disposal (which may include either allusions to past actions or the conscious decision not to make such references) to show practical wisdom, goodwill, and so forth, and thus to cultivate believability with a particular group. Furthermore, because ethos is more successfully produced when the values of a more specific audience can be identified and targeted, a document that effectively cultivates ethos with one group may sacrifice believability for another audience. In the case of this very article, apparently casual discussion of supermarkets and agave nectar may increase believability for readers who think that descriptive infrastructures like classifications are boring, arcane constructs that are the province of crotchety librarians and in any case obviated by Google. On the other hand, readers who expect clearly defined hypotheses investigated through scientific methods may look upon such extended personal anecdotes with skepticism. The textual choices perceived in this article

suggest that I have oriented my case toward one audience as opposed to another.

Understanding ethos in this way, as the result of rhetorical mechanisms that can be identified through close reading and interpretation, it follows that the identification of ethos in a text can be accomplished by determining how the audience has been characterized and the ways in which various elements of the text complement this characterization, leading to an overall sense of believability. This form of analysis is similar to that employed by the rhetorician Edwin Black (1970) to illustrate his notion of the implied audience, or the set of audience attributes and behaviors constructed through a text. Black dissects a political metaphor of the time, "the cancer of communism," to show how it both reacts to and reinforces certain audience values and sets these in opposition to communism. There are parallels between this mode of rhetorical analysis and the form of literary criticism connected to ideas of reader response and interpretive communities as initiated by literary scholars such as Wolfgang Iser (1978) and Stanley Fish (1980). As the rhetorician Park explains, however, the sense of "audience" or "reader" in this context does not refer to reactions of actual individuals (which Iser would call reception, as opposed to response) but to a more generalized notion of audience as "an ideal conception shadowed forth in the way the discourse itself defines and creates contexts for readers" (Park 1982, 250).

The deployment of ethotic strategies to define and persuade an audience, in this perspective, is identified through critical inquiry, as opposed to user studies. This is not an uncommon approach for rhetorical criticism, which has a long tradition of interpreting historical texts as well as current ones. For example, Applegarth uncovers the construction of ethos in 19th-century writer Mary Austin's descriptions of western U.S. deserts through close reading of Austin's book *Land of Little Rain* (Applegarth 2011). Among various ethos strategies, Applegarth notes how Austin's emphasis on the remoteness of the lands she describes both invokes an audience of those living in the less rugged eastern United States and strengthens Austin's believability as a seasoned dweller of harsh Western spaces. Critical discourse analysts also use textual interpretation in this way, to surface the often hidden interests at work in producing modes of language use. Stevenson (2009), for example, used reports produced through the Public Access Computing Project to deconstruct language of the digital divide as ultimately serving the goals of entrenched corporate interests (such as Microsoft) with the complicity of public institutions, such as libraries. The perspective of capital-bearing interests is transmitted to libraries through appeals to historical goals of individual agency and freedom as enabled through information access. In both these

examples, a construction of the audience is extracted from the text itself through detailed readings.

In the next two sections, I adopt this type of approach to demonstrate the ways that ethos manifests in two case studies. These analyses illuminate some of the textual mechanisms through which two related forms of information—classification schemes (e.g., the Oil, Produce, and other categories that are similar in many supermarkets) and resource collections (e.g., particular supermarkets that may use such classifications as ordering tools, such as Cook's Central and Typical Super) generate ethos. The two case studies were selected to be illustrative and comparative, not to be representative or comprehensive. The first case study, the Women's Thesaurus, looks at a classification scheme on its own and shows how this single element of an information system works by itself as a rhetorical object. The second case study, the University of Texas at Austin Center for Women and Gender Studies guide, considers a simple but complete collection, where a classification scheme is one part of a descriptive infrastructure that works in the context of a set of selected resources. Although these two examples treat similar topic areas, they use different strategies to cultivate ethos with different audiences, which highlights the situational nature of rhetorical success.

My goals in presenting these case studies are twofold. First, I show some of the ways that nonnarrative information systems, such as the classifications and resource collections examined here, facilitate rhetorical communication. While scholars of knowledge organization have long contended that information artifacts of this type present arguments, such research has not emphasized how this occurs. Because classifications and collections lack many of the textual devices available to conventional documents, describing their rhetorical capabilities is not a trivial enterprise. In doing so for ethos, I extend previous work that discusses argument, authorial voice, and genre in this capacity (Feinberg 2009; 2010; 2011). Second, I lay a foundation for a refinement of the concept of ethos itself as it appears in these complex documentary forms. Resource collections are dynamic aggregations that encompass within themselves fully formed rhetorical objects, such as classifications. Although the rhetorical experience of a resource collection may be cohesive, authorship is composite, and the ethos itself accordingly reveals a synthetic character. Moreover, synthetic ethos contributes to the character of the system that enfolds the components, as opposed to the character of an authorial persona. While choices about the composition and arrangement of the Oils section in the supermarket are made by people, the ethos generated from those choices accrues toward the market, not the various employees who independently construct it, or even the corporation who may produce policies that guide such decisions.

ETHOS IN THE WOMEN'S THESAURUS: INFILTRATION OF THE MAINSTREAM

The professionally constructed *Women's Thesaurus*, issued in 1987, was sponsored by the National Council for Research on Women, a network of research and advocacy centers (Capek 1987). (Material in this section has its basis in Feinberg 2009a.) It was created to describe bibliographic materials by and about women, in the thought that existing comprehensive systems, such as the Library of Congress Subject Headings and Library of Congress Classification, were not adequately accomplishing this task.

Although the idea of a women's thesaurus may seem motivated by a progressive, feminist agenda, and contrary to the existing status quo, the *Women's Thesaurus* appears to target a mainstream audience and, as such, builds ethos by constructing a character centered on reform, not on revolution. In my reading, the *Women's Thesaurus* shows how the perspective that it adopts corrects, but does not challenge, mainstream epistemology. The audience is perceived as preferring a scientific, objective orientation toward knowledge, and the thesaurus presents itself as the ultimate expression of this scientific objectivity.

The introduction and usage guide to the Women's Thesaurus emphasize goals of accuracy, completeness, and neutrality, all core elements of scientific thinking, where correct, full, unbiased accounts of existing phenomena are sought. The thesaurus preface cites research that shows how epistemological assumptions previously thought to be objective were instead based on the experiences of a single group, white men. According to the thesaurus's self-description, because of their basis in these mistaken assumptions, former indexing vocabularies have been insufficiently complex, incomplete, and biased, and this thesaurus will correct those faults, to be a "common language" that "empowers users without prejudice" (Capek viii, xvi). The *Women's Thesaurus* will aim for true gender neutrality and associated objectivity. Given these stated aims, it is perhaps not surprising that the word feminist, which is often not associated by mainstream audiences with a gender-neutral position, is used sparingly throughout the thesaurus's introductory material. This attempt, via both argument and word choice, to situate the thesaurus as a means to correct errors, and not to overturn the essential basis on which the knowledge structures represented in the thesaurus rely, can be seen as an effort to increase ethos through the exhibition of goodwill toward the implied audience: The thesaurus will gently mend gaps in your worldview, not force an alternative worldview upon you.

These strategies continue in the thesaurus itself through nomenclature and selection of related terms. The *Women's Thesaurus* structure is relatively flat hierarchically—unusual for a thesaurus—and instead

relies on a web structure created through many associative relationships. These related terms are described as being chosen to be illustrative, not exhaustive; that is, they were selected to provide a sense of the variety of possible relationships that a concept might have and not to enumerate all relationships of a particular type. Given the emphasis placed on the purposeful selection of these related terms, analysis of term choices provides a key window into the persuasive strategies exhibited by the thesaurus. For generation of ethos, the related terms for abortion, reproduced in the following, are an indicative example:

Abortion

Related terms: abortifacient agents, abortion movement, antiabortion movement, attitudes, contraception, dilatation and curettage, fetuses, hospitals, laws, medical ethics, miscarriage, population control, pregnancy prevention, religious law, reproductive freedom, unwanted pregnancy, viability

It is striking that the commonly used terms pro-choice and pro-life are not used, with abortion movement and antiabortion movement appearing instead. Focusing on the procedure itself as opposed to the broader goals of the movements associated with the procedure's legality (i.e., choice and life), gives the thesaurus a sense of being rational, balanced, and clinical, as opposed to overtly political. Even the related terms most closely connected to the goals of pro-life and pro-choice movements, viability (the ability of a fetus to live outside the womb) and reproductive freedom, are at a fairly high level of abstraction, and neither of these encompasses the idea of rights, either of a fetus or of women who would control their reproductive capacities. While two related terms, attitudes and medical ethics, hint at associated political controversy, these terms are also extremely abstract, giving no sense of the specific attitudes, for example, that might be at play here. The restriction to *medical* ethics likewise defuses the potential for disagreement among readers of different political or religious stripes. So one can see in this entry the construction of an ethos that attempts to portray the thesaurus as focused on accuracy and completeness, without is own political agenda.

However, to complicate matters somewhat, it is also possible to glimpse an additional, alternate construction of ethos aimed not toward the mainstream audience, but toward a secondary audience of feminists or women's activists. Five of the related terms refer to concepts associated with contraception, an issue of importance to pro-choice activists (contraception, population control, pregnancy prevention, reproductive freedom, and unwanted pregnancy), while only two related concepts represent issues of special concern to pro-life activists (religious law and viability). In addition, while the term pro-life doesn't appear anywhere in the thesaurus, the term pro-choice does exist, although it refers merely to the be-

lief that a woman has a right to choose to have an abortion and not to the associated political and social movement. Such moves might be perceived as reassurances to a secondary audience of feminists and activists that although compromises have been made in order to render the project persuasive to a wider audience, the *Women's Thesaurus* remains sympathetic to feminist ideals.

This secondary appeal is limited in scope, however, by the primary focus on the larger audience. To frame the pro-choice position, in the context of the Abortion entry, as focused on issues related to contraception may avoid controversy by keeping the associated concepts at a clinical, instrumental level—avoiding a medical condition and its associated social consequences. However, this means of delineating the Abortion concept's expanse is also to omit the notions of autonomy and personal control that form the deeper (and more radical) core of pro-choice politics. Indeed, while the *Women's Thesaurus* might have hoped to construct an ethos acceptable to all feminists or women's activists, the success of its appeal seems limited to those who might accept and agree with the Women's Thesaurus strategy of mending holes in current knowledge structures, as opposed to the creation of completely new structures. An adherent of feminist-standpoint epistemology, for example, in which women's ways of knowing are privileged as unique and different, may not be easily persuaded by the Women's Thesaurus strategy here. This example shows the difficulties involved in attempting to generate ethos with different audiences; in achieving believability for one group, the Women's Thesaurus sacrifices ethos with another constituency.

Although it is novel to describe a classification scheme such as the Women's Thesaurus as speaking to a particular audience via the textual fulfillment of an ethos strategy, it is relatively standard to examine classification schemes as discrete objects, even as they are only experienced by users when applied to a particular resource collection. Both design practice manuals, such as Broughton (2008), and scholarly discussions of classificatory decisions, such as Olson (2001), take this approach. While Hulme (1911) suggested that classification schemes must be adapted for and integrated with the collections they organize, this has been an outlier view. As the next case study suggests, however, although classification schemes do indeed have a particular rhetorical character of their own, this character is malleable upon implementation in a collection, as additional decisions of resource selection and description contribute their own layers of meaning to the whole.

ETHOS IN THE CENTER FOR WOMEN AND GENDER STUDIES GUIDE: INVITING DIALOGUE THROUGH DEFINITION

The collection instantiated by the University of Texas Center for Women and Gender Studies (CWGS) (Hogan 2010a) guide gathers and describes faculty research and teaching in women's human rights. The guide comprises a set of faculty profiles that introduce each professor and his or her pertinent work, and that relate each profile through a system of four category clusters and associated descriptors.

Although there is topical overlap between the subject domain defined through the *Women's Thesaurus* and the CWGS guide, the two systems otherwise have significant differences. In some ways, the CWGS guide is much more limited in scope than the *Women's Thesaurus*; it is restricted to a single topic (women's human rights) and created with an initial, limited set of particular resources in mind (CWGS affiliate faculty working in the subject area). It was also created by a single person as an independent project. However, while simple, the CWGS guide is a complete collection: a set of selected resources, a full descriptive infrastructure (including the classification scheme, which could be used to organize another set of items), and a means of arranging and accessing the resources through a Web interface.

Moreover, the audience conceptualized by the CWGS guide, and, accordingly, its ethotic strategy, are strikingly different from the Women's Thesaurus. While the Women's Thesaurus appears to address an audience that esteems objective accuracy, the CWGS guide seeks an audience that questions the possibility of such authoritative accounts. In its supporting documentation, Kristen Hogan, the guide's developer, describes it as "participat[ing] in evolving definitions of women's human rights" (Hogan 2010a, 1). In this characterization, the guide aims to provide a catalyst for productive debate in an area that might never achieve stability. It neither documents an established viewpoint, nor, as the Women's Thesaurus does, proposes a clear, fully developed alternative; instead of making claims as such, the CWCS guide attempts to, in Hogan's words, "spark discussion and excitement, along with perhaps inevitable disagreement in some places" and so to provoke dialogue as to the content, scope, and structure of its subject domain, women's human rights (Hogan 2010a, 2). The implied audience suggested by the guide and its accompanying materials includes members of the university academic community who are interested in topics that may constitute the domain of women's human rights—even if they don't (or don't yet) define their work in those terms. Moreover, the audience suggested by the guide is open to discussion about what constitutes the related domains of women's human rights, human rights, and women's studies. In accordance with such beliefs, the implied audience is more likely to accept certain approaches to scholarly inquiry of these topics, those in which multiple, plural accounts of the same phenomena are encouraged.

In generating ethos for this audience, the CWGS guide presents a character that encourages suggestion over statement, and that emphasizes fuzzy, open boundaries over clear, marked edges, preferring questions over answers. To convey this character, all the guide's components as a collection work together. In addition to the construction of the classification scheme, these components include the selection of resources, the application of the classification to the selected resources, and the definition and application of additional descriptive attributes, such as selected publications and selected courses taught.

As one means of conveying this sensibility to the implied audience, the guide demonstrates moral character by refusing to present a definitive position on the subject matter it treats. In this manner, the guide prioritizes the long-term contentment of negotiation and dialogue over the quickness of persuasion. The classification scheme, conceptualized as an overlapping set of four category clusters—Identities, Literacies, Place, and Representations—forms one way of representing this character. Each of these clusters represents a complementary but not entirely distinct means of perceiving and expressing class, disability, gender, race, and sexuality through the context of human rights. The Identities category cluster, for example, includes descriptors (a descriptor is a category term used to index, or describe documents; these clusters identify related groups of descriptors) that might suggest constructions, deconstructions, and combinations of these concepts. Example descriptors within the Identities cluster include Constructions of Indigineity, Aging, and LGBTQ Narratives. The Literacies category cluster includes descriptors that provide means of understanding and interrogating these concepts (such as Economies, Education, and Rhetoric).

The guide conveys goodwill, and complements this moral character, by making risky assignments with the classification scheme and thereby establishing provocative juxtapositions of its resources. For example, the guide assigns the descriptor Empire and the State, in the Places cluster, to eight faculty profiles: two sociologists, two historians, two English professors, and one each from government and American Studies. The research projects of these faculty members range from family law in North Africa to constructions of gender and the nation in Appalachian literature. Such class assignments prompt the guide's users to interrogate the suggested relationships, and the associated category identity, instead of merely accepting such decisions.

In sparking a questioning attitude in its readers, the guide knowingly calls attention to itself as a typically ignored and invisible element of information infrastructure. The guide then shows practical wisdom, or the ability to produce successful outcomes, through the complementary selection and application of additional descriptive attributes. These additional attributes provide evidentiary traces that, in accordance with the guide's pluralistic

orientation, hint at, but do not provide explicit rationale for, category determination. For example, a sociologist's record tells us that she is preparing a book called Skin, about surveillance technologies and race, and that she has taught courses in surveillance and social control. Here we can discern rationale for the Empire and the State designation in the idea that this scholar's work treats state-sponsored segmentation of its citizenry through technology as a form of internal colonialism. In contrast, an English professor's record documents her research on "public feelings" as a mode of discourse and her teaching on gender, sexuality, and migration (Hogan 2010b). One can see a shared element of category resemblance in these two characterizations of scholarly activity through the evocation of fragmented national identity in each. For the English professor, the personal experience of particular groups-immigrants, women, queer-requires new forms of public expression to gain attention and legitimacy from the state. For the sociologist, state-sponsored activities such as targeted surveillance promote continued social fragmentation. And yet there are also distinct differences apparent in characterizations of the state, and of human rights, that flow from the intersection of these two scholars in the same category. The English professor's work seems to portray the state as blind to the particular situations of its inhabitants, while the sociologist's work depicts the state as frighteningly aware of such divisions. While the guide's application of the Empire and the State descriptor is certainly systematic and purposeful, the boundaries of the category enacted by the descriptor are kept loose, and the notion of Empire and the State remains somewhat open and fluid.

When deployed in a coordinated fashion, the various textual elements that form the collection—including the application of descriptive infrastructure to selected resources, in addition to the development of this infrastructure—work synthetically to produce a compelling rhetorical object. However, the delicate balance between parts can be easily upset by nothing more than the passage of time. In the case of the CWGS guide, with its avowed intentions to be continually imperfect and yet responsive to audience challenge—in other words, an evolving artifact—initial rhetorical success suffers if the collection is not regularly updated, and these updates should potentially affect all parts of the system, both in the definition of structural elements, such as the classification scheme, and in the application of those elements to existing resources, as well as the addition of new resources. As the guide nears its anniversary of implementation, its moral character already begins to wane, as the evidentiary traces that appear through the additional descriptive attributes (publications, courses taught) are not refreshed, and the application of descriptors are not revised in the light of new work performed. Indeed, such activities

are only the beginning of potential reconfiguration, if the guide's character is to persist in its believability.

SYNTHETIC ETHOS: COLLECTIVE AUTHORSHIP, RESPONSIBILITY, AND RADICAL TRANSPARENCY

The preceding case studies have shown how classifications and resource collections, despite their lack of common mechanisms used in traditional print-based rhetorical objects (such as linear narrative), may nonetheless develop a sense of believability in an audience. The selection, description, and arrangement of resources into category systems can work as instruments of communication and rhetoric, as well as means of information retrieval. This article makes a scholarly contribution in showing how these rhetorical mechanisms function.

However, if databases are cultural forms, as Lev Manovich (2001) asserts, then it is not surprising to determine that concepts from traditional rhetoric, such as ethos, can enable productive analyses of resource collections and the classifications that help to structure them. A more subtle question, as Barbara Warnick (2007) poses it in her study of online rhetoric and public discourse, is to consider the extent to which such concepts as currently defined encompass different document forms and whether these concepts require adaptation for new environments. Do classifications and resource collections, in addition to showing new means of developing ethos, also suggest a reinvention of the concept of ethos itself?

The definition of ethos used in this article draws on the Aristotelian tradition, in which the believable character of the "speaker" or author is less reliant on the speaker's actual qualities and more on the way in which those qualities are presented through a particular textual performance. In both examples considered here, however, the focus of ethos is less on establishing a persona for "the" author and more on establishing a character for the system (the entire thesaurus, the entire CWGS guide) as a coherent synthesis of potentially many independent parts. In a sense it is the system as a whole that provides an authorial context, and thus a larger penumbra of believability, for its contained elements, even as the individual elements contribute to this overall, encompassing, ethos. To return to the supermarket, although all of the sections have separate identities to a degree, it is the way that they all work together that makes it more likely I'll try the agave nectar. The Cheese section, for example, shows a sort of integrity similar to that the Oils section. It is because all of these parts work together synthetically that the market's character as a whole can be generated for its target audience. The character of the whole, the synthetic ethos, is the product of a continually evolving system that aggregates many independent parts through the actions of multiple "authors" who contribute to the system in various ways.

Some of these characteristics can be seen in other media, but not at this level of combination and scale. Serial publications, for example, including newspapers and magazines, are aggregations of independent parts into an overall structure, and they are continually produced. Traditionally, serials have editions (issues, or episodes in timebased media) that are put together by an editorial team as distinct works, while resource collections do not have established versioning, and Web-based publications tend toward continuous production. More significantly, most of the components that work together to generate ethos in resource collections are created and applied as independent actions (such as the Empire and the State example from the second case study, which looked at descriptor creation, descriptor application, additional attribute creation for publications and courses, and additional attribute application). A classification scheme is, in itself, a complex system, as well as a rhetorical object that, as the first case study has shown, works to generate its own ethos. But the scheme's application in the context of any particular resource collection is a complementary act of authorship that is constantly enacted in each category assignment, in conjunction with all the other collection elements, to synthetically forge an ethos for the collection as a whole. Scholars such as Bowker and Star (1999) have shown how the decisions required to apply infrastructure elements like classification schemes and metadata schemas are far from mechanical. Any ultimate category assignment may represent complex negotiations between competing interests, the details of which are invisible to subsequent users of the system. The notion of synthetic ethos suggests that, in addition, these decisions contribute significantly to the expressive character of a resource collection and its rhetorical potential. Moreover, although each decision is independent, the effects of these decisions are aggregate, due to the complete fusion of each element in the user's experience. The user, or reader, of a complex collection does not perceive separate components but an integrated whole.

In this perspective, despite the apparent independence of any textual element (such as the separately developed classification scheme for a resource collection), the ultimate interpretation of the system of a whole, or of any part, depends on the other parts. Accordingly, all decisions about the application of any element matter rhetorically, including not making a decision (as in not updating descriptions over time in the CWGS guide). Moreover, in any implementation context, the system also contributes to its parts, just as the parts contribute to the system. At Cook's Central, the Cheese section and the Oil section, which I can read fluently and assess critically, contribute to the overall character of the market, which in turn enables the persuasiveness of the Honey category and its agave nectar, which I (as one reader) am less equipped to comprehensively assess. For another reader, this equation might work differently, with Honey and Cheese contributing to the whole, which then works down to the Oil (and perhaps this customer impulsively springs for a little vial of truffle oil, who knows?). This can work in multiple ways. If the news aggregator website Huffington Post links one of its headings to an article from The New York Times, then that story contributes to the character of the Huffington Post (along with the Huffington Post's heading, its classification scheme, its arrangement of stories, and so on); it is also possible, though, that the use of the New York Times story in the Huffington Post can feed back into the overall character of *The New York Times*, for the reader who first saw the story in the Huffington Post and then saw it incorporated into its "real" spot in The New York Times, for example. Or if one collection uses the Women's Thesaurus and assigns the Abortion descriptor to politically oriented, pro-choice materials, does this politicize the descriptor in other collections for those readers who have experience with the politicized use? The intersecting web that enacts a collection's particular ethos may become quite complex.

The extent to which this synthesis is accomplished can, I think, help explain why some collections are less rhetorically successful as systems, or why they are less than the sum of their parts, in terms of the believability of synthetic ethos. Wikipedia is a telling example here. I am much less likely, metaphorically speaking, to buy Wikipedia's agave nectar, even though I am perfectly willing to believe that any single Wikipedia entry is accurate, in terms of not including false information. But the values and principles by which any one Wikipedia entry selects and arranges its material vary widely across the system, as compellingly demonstrated by Luyt (2011) in his comparison of Wikipedia articles on Singaporean history and Philippine history. In Luyt's reading, the Singaporean history article adheres closely to the dominant historiographical narrative, which has not been substantially contested by the scholarly community. The Philippine history article, on the other hand, has sections where it clings to the dominant narrative and sections where it deviates from it, reflecting a more diverse set of perspectives in scholarly Philippine accounts. The Singaporean history article relies on one set of values and principles for its construction, in other words, and the Philippine history article relies on another. Although I might not doubt the factual accuracy of any individual Wikipedia article, the ultimate believability and persuasiveness of any article remain uncertain, as the constituent values vary. In contrast, at the Cook's Central, I understand that varieties and container sizes of cooking oils are left out because experienced cooks use oils in different ways; through the synthesis of many additional such decisions, I can then also believe that the values of experienced cooks are at work in the selection and placement of agave nectar. This synthesis does not build, however, in Wikipedia. While Wikipedia does

theoretically have several core guidelines that enable its credibility as a source—that of neutral point of view and of no original research—analyses such as Luyt's demonstrate that these guidelines are insufficient to enable entries to synthesize persuasive ethos for Wikipedia as a system.

This notion of synthetic ethos as a rhetorical property of information systems has implications for both the interpretation of existing systems and the design of new ones. In terms of existing systems, the case studies here suggest considerations for both the means and scope of interpretive analyses. Systems that are used primarily as components of larger systems, such as classification schemes, can be interrogated at a number of levels: Individual entries (such as the Abortion entry in the Women's Thesaurus) and the coordination of those entries into broader classes, up to and encompassing the system as a whole, can productively be read as rhetorical texts. While the mechanisms through which expressive character is generated may differ from those studied in traditional rhetorical and literary criticism, the general approach of such scholarship can be usefully employed, as has been done in these case studies. However, because these component systems are most typically "read" only as contributing elements to an encompassing collection, the implications of an independent analysis need to be carefully determined. What does the detailed explication of a single class in, say, the Dewey Decimal Classification or the Medical Subject Headings (MeSH) really indicate, if the class is only experienced in a collection context, as applied to a resource? While I do believe that such studies are valuable—a reading of chronic disease categories in MeSH could show how the scheme contributes to a medicalizing discourse, for example—the scope of their findings may require clear delineation. Depending on the goals of the study, it may be that an examination of how the component figures into an encompassing collection is more appropriate, or that comparative readings of the discrete component and the component as implemented (perhaps in multiple instantiations) are necessary. In any case, the congruence between a component and its instantiation cannot be assumed. For a classification scheme, the rhetorical actions of the classifier may significantly alter the character expressed by the scheme in isolation.

For the design of resource collections as rhetorical objects, this discussion leads to three claims. First, because ethos is cumulatively generated through a myriad of production decisions, such as the selection of resources, the application of classification schemes to resources, and the arrangement of resources in an online interface, the rhetorical aspects of these activities need to be acknowledged; the people who conduct these activities are collaborative authors of the system, as are the people who design the descriptive schemas (which may have originally been done elsewhere, by others, for different initial purposes). The

character of an individual public library comes not just from its collection development policy or its use of the Dewey Decimal Classification but from the way its catalogers describe its items (or the way that catalogers choose to adapt, or not to adapt, records obtained from elsewhere), as well as the way its shelving plan is designed and implemented (is there a separate children's section?), among many such decisions. Accordingly, to enable a directed, coherent, persuasive ethos, I suggest that the rhetorical aspects of these activities would be coordinated via an explicit set of editorial principles. Because the resource collection is constantly evolving as new items are added and new decisions are made, even if the descriptive infrastructure of classifications and metadata schemas stays the same, these principles cannot be static but need to be continually debated and revised. At Cook's Central, for example, a decision to put chili oil in the Asian section instead of the Oils section may affect the meaning of the chili oil in the market context, as well as the meaning of each section and of the market's perspective on cooking itself. Finally, neutrality is not on its own a sufficient principle to build a coherent character. Neutrality doesn't tell us where the chili oil should go—the Asian section, the Oils section, or both—and yet this decision's consequences will ripple throughout the system. Under the cloak of neutrality, each section could operate as its own fiefdom with only minimal oversight. While the results might be locally accurate, they could equally be globally incoherent.

With the exception of experimental systems such as the CWGS guide, resource collections and the classifications that structure them are, of course, not designed this way. Instead, a key design goal for many of these systems is to enable interoperability, so that resources from one digital library can be automatically "ingested" straight into another, complete with metadata, or so that one classification scheme can be used across many similar systems (as they are, in libraries). But just because an artifact is not designed to be a rhetorical object does not mean that it doesn't function like one, either successfully, like Cook's Central, or less successfully, like the system of Wikipedia as opposed to its individual entries. Whether a particular resource collection should or should not confront its rhetorical potential is beyond the scope of this article. What this article has done, however, is to describe some of what that confrontation might entail.

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