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by

Alexander A. Hernandez

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts Department of Sociology College of Arts and Sciences University of South Florida

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DEDICATION

I would like to dedicate this work to the two people that have had the greatest influence on my life: my dad and Jess.

I love you.
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Dr. Loseke: Thank you for all the hard work that you have put into this project. This project could not have been done without you and I want you to know that I will always appreciate your insight, guidance and patience.

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Alexander A. Hernandez

ABSTRACT

In this study, I aim to examine (1) how authority is established and (2) how it is displayed. Through the use of content analysis, I investigate how the topics of “gender” and “race” within a contemporary social problems textbook compares and contrasts to corresponding Wikipedia articles. Through my research I wish to shed light on the social construction of knowledge within our modern society while also shedding light on the role that authority plays within knowledge. In order to examine how authority is established I examined the number of citations found in each topic, the publishing date of each reference and the location from which a citation emanated from. I found that authority is established differently between the two sources as each medium differed considerably in the number of citations presented, the average publishing date and the medium from which their resources were taken. To examine how authority is displayed I investigated the topics selected for both gender and race as well as the amount of space
devoted to each topic. While there were similarities in regards to topic selection between the textbook *Wikipedia* I also found a number of topics present within the *Wikipedia* articles that were not addressed at all within the textbook. I found that the disparities between the textbook and *Wikipedia* simply illustrated a difference in perspective between the two mediums. The textbook featured a large number of citations predominantly from peer-reviewed, social scientific sources as is common within the academic world while *Wikipedia* featured a large number of citations that drew from a wide range of locations. This distinction highlights the idea that while knowledge may be viewed by the general public as objective and unchanging there are in fact significant differences in how knowledge is presented and legitimated depending on its originating source.
INTRODUCTION

One of the most important skills needed by every member of our modern society is the ability to conduct and evaluate research. The traditional method used by sociologists, chemists, and engineers alike, is to read peer-reviewed journals and books. Even now, during the Internet age, there is still a heavy reliance on these tried and true methods of presenting research, while other mediums of information, such as Internet websites, are often marginalized or stigmatized as biased or unreliable. Over the last eight years, the online encyclopedia, *Wikipedia*, has become a major source of information for users around the world on a variety of topics. Unlike traditional encyclopedias, the information on *Wikipedia* can be edited by anyone who wishes to amend it. Its creators and followers believe that because of its enormous scale it is possible to create information that is “right” in the aggregate while sometimes “wrong” in specific instances. This belief is encapsulated in the words of open software advocate and author Eric S. Raymond (1998) who said, “given enough eyeballs, all bugs are shallow,” meaning that given enough people any problem is easily fixed.

Because of this unique form of knowledge production, *Wikipedia* has garnered both praise and criticism from teachers, researchers, and librarians. On the one hand, some argue that *Wikipedia* is as useful as traditional sources because of its quick editing
feature and its ability to make connections between previously unrecognized areas (Parslow, 2007). On the other hand, critics have derided it and other online tools as a research tool for the lazy and irresponsible, agreeing with Le Moyne College professor, Douglas Egerton, who states that “there is no substitute for a thick book and an overstuffed chair” (Cohen and Rosenzweig, 2005. For more criticisms see Cohen, 2007b; Denning, et al., 2005).¹

In the composition and editing of articles posted on Wikipedia, it is important for sociologists to understand how Wikipedia creates and maintains not only knowledge but also authority. In this study, I aim to examine (1) how authority is established and (2) how it is displayed.

Through the use of content analysis, I investigate how the topics of “gender” and “race” within a social problems textbook compares and contrasts to Wikipedia. More specifically, I examine how authority is displayed in these two locations. I have chosen these two forms of the dissemination of knowledge for two reasons. First, textbooks and Wikipedia articles are comparable because they both provide their readers with a basic understanding of a subject. Unlike peer-reviewed articles, which tend to feature very specialized information and jargon, textbooks and Wikipedia feature a wide-range of subjects related to a topic that are written at level understandable to a novice. Second, students, who are the most likely consumer of both textbooks and Wikipedia, are much more likely to use either the prescribed textbook or the Internet, rather than journal articles to answer their questions (Head, 2007; Chopra and Krowne, 2006; Achterman, 2005 Griffiths and Brophy, 2005; Fitzgerald, 2004; Thompson, 2003; Grimes and

¹ Interestingly, one of Wikipedia’s founders, James Wales, has actually stood on both sides of the fence in the battle over students using Wikipedia as a source (Coleman, 2007; Chronicle of Higher Education, 2006)
Boening, 2001; Leckie, 1996). Through my research I wish to shed light on the social construction of knowledge within our modern society while also shedding light on the role that authority plays within knowledge.

The Post-Modern Condition and the Problem of Knowledge and Authority

We are entering an era where everything increasingly is digitalized and computer-mediated. The case in point is Wikipedia—a postmodern challenger to the modern understanding that “experts” (scholars who have credentials from accredited universities) produce knowledge via the scientific method (Loseke, 2009). The scientific method is preferred by these “experts” to produce knowledge because unlike other methods of knowledge production it is thought to be “more structured, organized, and systematic than the other alternatives” (Neuman, 2003: 2). These alternatives include knowledge from authority (“My dad says…”; “the church says…”), knowledge from tradition (“It’s true because it’s the way things have always been”), knowledge from charismatic authority (“I believe anything this person says”), popular culture (“Oprah said it so it has to be true”), common sense (in constructionist terms, habituated—we don’t challenge things because “well, that’s just the way things are”) and practical experience (“I know it’s true because I experienced it”) (Loseke, 2009; Neuman, 2003).

Once knowledge is produced by these experts it is packaged in particular ways, most notably in peer-reviewed journals and university press books, and evaluated in particular ways. For example, among academics the knowledge produced in “scholarly” journals is commonly held in higher regard than knowledge found in other sites including magazines, newspapers, and websites. However through the rise of Wikipedia this traditional process of producing/evaluating knowledge is being challenged. In an effort to
understand how the traditional process of knowledge making is being challenged, I will be using insights from the post-modern condition and the social construction perspective. I have chosen to use these theoretical models in my examination of knowledge, authority, and Wikipedia because the epistemological foundation of each of these theories hold that knowledge is socially constructed and agreed upon by individuals and not simply discovered through the scientific method, that knowledge is not the same for everyone but is localized, and finally that knowledge is intimately connected to power and authority.

Because of its very nature, postmodernism is especially difficult to define; however there are several components of postmodern thought that are noteworthy in regards to this study: (1) a rejection of metanarratives, which present generalized explanations of their subject matter, (2) social fluidity, (3) the primacy of the local, and (4) polyvocality, which is the legitimation of disenfranchised groups such as women and minorities within the dominant discourse (Rudel and Gerson, 1999). Moreover, there is also a general challenge to authority, which is a critical element for my project. Postmodernists such as Lyotard (1993: 3) argue that metanarratives make false declarations concerning “universality, truth, and objectivity.” Like social constructionists, many postmodernists (such as Baudrillard, 1993; Seidman, 1991) contend that knowledge is a social product that is contextually situated. Because of this it is believed that knowledge can then not be universal or valid all the time as metanarratives would have us believe.

Metanarratives also do not acknowledge social fluidity. Social fluidity means that because individuals and institutions change over time these changes “discourage analyses
of essences because, with a rapid succession of changes, latent or core tendencies in people and institutions never have enough time to work themselves out before a new makeover occurs” (Rudel and Gerson, 1999: 215). Because of this counter-belief against the existence of metanarratives or universal truths, postmodernists (Foucault, 1993; Frampton, 1992; Jameson, 1991; Lyotard, 1984) place emphasis instead on local groups and their knowledge and perspectives. This embrace of the knowledge systems of so-called ‘lay-persons’ is in line with the postmodern view that there are power differentials between groups, and as a result support the idea of polyvocality (Richardson, 1991).

These postmodern ideals are discussed within the academic literature both in general and in reference to Wikipedia. For example, according to Miller (2005) Wikipedia has cast aside the idea of metanarratives in support of polyvocality. Miller argues:

Wikipedia is a democratic project allowing anyone regardless of age, race, sex, nationality, income level, etc., to edit...Postmodernism among other things believes that knowledge must be set to accommodate the multiple perspectives of class, gender, race, etc...Wikipedia allows all to contribute to the knowledge base.

Miller concludes that Wikipedia has created a medium in which “we no longer say we ‘are’ authors. Instead we periodically author, read, and share information.”

In addition to Miller (2005), other scholars have noted Wikipedia’s postmodern role in the democratization of knowledge (Elvebakk, 2008; Stacey, 2007; Braman, 2006; Noveck, 2005; Keats, 2003; Stalder and Hirsh, 2002; Rudel and Gerson, 1999). More specifically, they argue that, unlike traditional knowledge sources in which knowledge is disseminated by a few, Wikipedia has created a space for hundreds of individuals to come together to share knowledge, and while it must be noted that these interactions are not
always peaceful or cooperative (Denning et al., 2005), simply having a space that allows for the discussion of knowledge is a major feat (Adams, 2007; Surowiecki, 2004).

Social constructivism as described by Berger and Luckmann (1966), in their seminal work titled *The Social Construction of Reality*, also is relevant to my project. The main thrust of their argument is that all of reality and knowledge is a human product. According to Berger and Luckmann, the study of knowledge and how it is created and characterized as “knowledge” is at its core an analysis into the social construction of reality. They define “knowledge” as “a body of generally valid truths about reality” that are produced through human interaction, and “any radical deviance from the institutional order appears as a departure from reality” (66 & 87).

In addition, Berger and Luckmann argue that over a period of time institutions “by the very fact of their existence, control human conduct by setting up predefined patterns of conduct, which channel it in one direction as against the many other directions that would theoretically be possible” (55). This results in the institutionalization of habits (or behaviors), such as the practice of publishing scholarly material in academic journals or in university published books. Over time this institutional world and its practices become objective reality that are external to and coercive over the individual and hence difficult to change. In order to maintain or legitimate this objective reality there emerges a group of “experts” and, as time progresses, this division in society between “experts” and “laymen” tends to create conflict. According to Berger and Luckmann, the conflict results from “experts’ claim to know the ultimate significance of the practitioners’ activity better than the practitioners themselves” (118). As a result, these “rebellions on
the part of “laymen” may lead to the emergence of rival definitions of reality and, eventually, to the appearance of new experts in charge of the new definitions” (118).

There is a wealth of contemporary literature which echoes the social constructionist sentiment that knowledge has been and will continue to be socially constructed and institutionalized (Tatum, 2005). Scholars note that while we as a society have a vast number of resources at our disposal, the ones which are considered to be ‘quality resources’ by experts have become, as Berger and Luckmann would say, typified as the most appropriate (Harley, 2007; Nature, 2007; Nature, 2006a; Nature, 2006b; Maranta, Guggenheim, and Pohl, 2003; Steinmetz and Chae, 2002; Locke, 2001; Schmidt, 2001; Reyna and Schiller, 1998). Because of this understanding we cannot simply say that a piece of knowledge is a “fact.” Knowledge, according to the social constructionist perspective, is not discovered but evaluated. These concepts regarding who constructs the “real” reality and knowledge are at the heart of the present study. By examining the textbook and Wikipedia, I may be able to demonstrate the degree to which certain sources and by extension their knowledge have been evaluated and ultimately granted authority.

**Knowledge and Authority in College Textbooks**

For this study I will be comparing the knowledge found in Wikipedia articles on “gender” and “race” to chapters on the same topics in a contemporary social problems textbook. A textbook has been chosen as a point of comparison not because it is necessarily “better” than anything else but because it is the traditional (modern) canon. Moreover, as previously mentioned, students are some of the most frequent consumers of both textbooks and Wikipedia (Head, 2007; Chopra and Krowne, 2006; Achterman, 2005
Griffiths and Brophy, 2005; Fitzgerald, 2004; Thompson, 2003). As a result, I chose to examine two mediums of knowledge that are frequented by students.

According to Loseke and Cahill (2004), there is an observable pattern among those manuscripts that are published, be they scholarly articles, monographs or textbooks. For example, while academic scholars may choose to publish their work in commercial or popular presses, it is generally understood that “academia…does not reward popularized writing” (582). Moreover, “academic careers most often depend on the quantity and quality of publications in scholarly journals and by university-sponsored presses” (582).

However, not all journals and book publishers are equal in the eyes of academia. In the case of journals, there exist ranking systems that are observed and followed by academic disciplines. These ranking systems are generally based on one of two factors: impact factor, which is determined by measuring “how often articles in the journal are cited by other researchers in their published work” or reputation, which is assessed through a survey of scholars who have a well-known publication record within the discipline (Loseke and Cahill, 2004: 582). Likewise, a book is judged by where it has been published. If published by university presses this generally carries more weight within the academic community than one published by a popular press. As a result of these institutional habits, it is no surprise that scholars who then choose to write textbooks would also choose to base the majority of their text on the findings presented in scholarly journal articles and university press books. And, while this explanation may seem unnecessary, an understanding of the visible and often invisible hierarchy that exists within the academic community is of absolute importance to this study because
what is under investigation is how authority established and displayed within a piece of knowledge or medium of knowledge.

**Knowledge and Authority in Wikipedia**

The idea that power and authority play a central role within mediums of knowledge such as textbooks is not new. In fact, there have been tens of studies which examine almost every facet of the sociology textbook (Corrado et al., 2000; Taub and Fanflik, 2000; Kendall, 1999; Babchuk and Keith, 1995; Agger, 1989; Eitzen, 1988; Hess, 1988; Lamanna, 1988; Wright, 1985). However, because of its relatively recent construction and rise to popularity, Wikipedia has yet to garner the same level of attention. As a result, very few people understand what Wikipedia is and why it was created. Because of this fact, it is important to contextualize Wikipedia through a short history of its development and mission as a source of knowledge.

Wikipedia was created by James Wales and Larry Sanger as an offshoot of a now defunct internet encyclopedia known as Nupedia, the purpose of which was to create a free online encyclopedia that would be edited by experts through a traditional multi-step peer review process (Willinsky, 2007). However, because of a lack of productivity due to the time required to review each submission, Wales and Sanger chose instead to create Wikipedia which, like Nupedia would be free, but unlike Nupedia could be edited by anyone who wished to edit it no matter their credentials. Wikipedia was created on January 15, 2001. By September 7, 2001, Wikipedia housed more than 10,000 articles, and by the end of its first year over 20,000 articles had been created – at a rate of over 1,600 articles per month.
According to the Pew Internet & American Life Project, *Wikipedia* is one of the top ten most visited websites in the world.\(^2\) Each month it is visited by about 36% of Adult (18+) internet users who utilize the over nine million articles, which are written in over 250 different languages including English, Spanish, Japanese, Dutch, Polish and Zulu (Rainie and Tancer, 2007). *Wikipedia*’s popularity is due in large part to its prevalence in the top-ten search results of many of the internet’s most popular search engines including Google and Ask.com with as many as 70% of visits to *Wikipedia* coming from these various search engines. It can then be assumed that if Google and other search engines continue to grow, as is projected (Shaker, 2006), *Wikipedia*’s role as the source for knowledge on topics ranging from Machiavelli to Milhouse, from Sociology to Socrates will continue to grow.\(^3\)

One of *Wikipedia*’s most important features according to its followers is that, unlike many traditional sources like the *Encyclopedia Britannica* and academic textbooks and journals, *Wikipedia*’s articles provide readers with free access to many different articles that offer users different vantage points from which to view a topic, as well as the possibility for up-to-date information. For example, on April 16, 2007, Seung-Hui Cho systematically murdered 32 people and wounded several others on the campus of

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\(^2\) Several Web traffic measuring firms say that *Wikipedia* is one of the most heavily visited sites on the internet including Alexa.com, comScore Media Metrix, and Hitwise. Moreover, the Raine and Tancer (2007) also state that “in the cluster of sites that are focused on educational and reference material, *Wikipedia* is by far the most popular site, drawing nearly six times more traffic than the next closest site.”

\(^3\) If you were to search for any of these terms on Google as of March 9, 2009, *Wikipedia* will be the first article displayed: [Niccolo] Machiavelli, Milhouse Van Houten (The Simpsons television show), Sociology, and the philosopher, Socrates. Moreover, while the articles on topics such as sex, popular culture, and current events are the most commonly searched for subjects on *Wikipedia* (Spoerri, 2007; Spoerri, 2007), this does not diminish the fact that if one were so inclined to search for an academic subject like the Peloponnesian War that *Wikipedia* would be the first search result found.
Virginia Tech University. This incident, which from that day on became known as the Virginia Tech massacre, is not only the deadliest school shooting in United States history but it is also the deadliest shooting rampage perpetrated by a single gunman, ever. While news stations from around the world scrambled to figure out the details behind the tragedy one source was being edited and reedited at break-neck speed by thousands of different writers. By April 23, just one week after the incident, the article titled “Virginia Tech Massacre” on Wikipedia had been edited by more than 2,074 people and had been viewed at a rate of four visits per second during April 16-17. In addition to the text featured in the main article on the “Virginia Tech Massacre”, contributors had also added more than “140 separate footnotes, as well as sidebars that profiled the shooter, Seung-Hui Cho, and gave a timeline of the attacks” (Cohen, 2007a). The development of the article on the Virginia Tech Massacre as well as the subsequent offshoots illustrates the ease at which users were able to edit Wikipedia’s content. While the product of all this effort may not have been 100% accurate, focused, or exhaustive in its use of reputable and reliable sources, it clearly demonstrates the fact that the content was not restricted by any of the obstacles faced by textbooks, journals, and traditional encyclopedias.

Although Wikipedia is regularly depicted as a lawless environment where rules and order are sacrificed in the name of ‘knowledge by the people and for the people,’ there are in fact a number of policies that Wikipedia urges its users to abide by. These policies are intended to standardize the construction of articles so that they can be used more efficiently as well as to “improve the credibility of Wikipedia” (Wikipedia: Citing Sources).
Chief among these is the policy regarding the verifiability of sources. According to this policy, the most important guideline regarding references should be “verifiability, not truth” (Wikipedia: Verifiability). While it is understood that truth is important, its importance is overshadowed by its need to be able to stand up to attack from possible critics. This statement is particularly important to the present study because one of the questions under investigation involves the verifiability of sources by the examination of the citation information that would aid in the verifiability process.

A second guiding policy is the belief in the reliability of sources. Unlike verifiability which simply asks that interested parties can use the information provided to verify the statements made, the reliability policy revolves around the notion that there exists a hierarchy of sources and that users should try to cite from those sources deemed to be most reliable before using references lower on the hierarchy. According to “Wikipedia: Reliable Source Examples,” the hierarchy ranges from peer-reviewed texts including journal articles, university press books, textbooks, encyclopedias, and dictionaries to websites, unsigned documents and original research much like the institutionalized hierarchy found in academia (Lofland, 2007; Loseke and Cahill, 2004; Nature, 1982). This hierarchy is also important to this study because I will be examining the medium types of each reference found within the social problems textbook and its comparable Wikipedia articles.

The purpose of discussing the various policies that govern Wikipedia is to highlight the importance of authority within the construction of knowledge. As is the case with “good textbooks” and journal articles, certain rules have been observed (Loseke and Cahill, 2004) within the work done by scholars including the acknowledgement and
replication of a hierarchy of authority in reference to a site of knowledge. Similarly, *Wikipedia*'s policies mimic many of these same rules. This similarity is worth noting because of *Wikipedia*'s reputation as a knowledge source free from the institutionalized thought found in academia. However, it must also be noted that although *Wikipedia* provides its users with a rubric with which to create and evaluate knowledge, it is unclear to what level users are actually following these guidelines. Further, research shows that students increasingly are using Wikipedia as the sole source of their information. And, although research also shows that students are quite inattentive to questions about “reliability” and authority (Head, 2007), this nonetheless is an important issue: What is “true” knowledge? What can be accepted? One way of addressing this is to ask questions about authority.
METHODOLOGY

The aim of this study is to understand the nature of authority. More specifically, I propose to investigate the following fundamental questions regarding authority as it pertains to knowledge: (1) how is authority established within mediums of knowledge and (2) how is authority displayed with a medium of knowledge.

In order to understand these questions within the context of textbooks and Wikipedia, I will be performing a quantitative content analysis of the gender and race chapters from a Social Problems textbook as well as the comparable Wikipedia articles. I have chosen to examine the most recent edition of the most popular contemporary social problems textbook from one of the largest textbook publishers in the country, McGraw-Hill: Social Problems and the Quality of Life (2008) by Robert H. Lauer and Jeanette C. Lauer (Goff, 2008). I selected only one textbook for reasons of manageability. I have chosen to examine a contemporary social problems textbook because, unlike a textbook on race/ethnicity or women’s studies, the contemporary social problems textbook is a survey text which discusses a wide range of topics without the level of specialization regularly found in upper-level texts. Because of this reason an introduction to sociology text would have also worked just as well for this study. While there are many examples of traditional knowledge, I believe that the textbook is most appropriate because of it is
not only constructed by “experts” but it is also consumed by one of Wikipedia’s largest audiences: students.

I will be examining two topics within the two mediums: gender and race. I have selected these topics because gender and race are two of the “main social organizing principles” identified by sociologists (Corrado et al., 2000: 56). Moreover, they each have been topics of extensive previous research by scholars interested in the study of authority and power, particularly in reference to textbooks (Gender: Thomas and Kukulan, 2004; Corrado et al., 2000; Hall, 1988; Wright, 1987. Race: Stone, 1996; Shaw-Taylor and Benokraitis, 1995; Dennick-Brecht, 1993). I believe that by studying two of the most important topics within the sociological discipline I will be able to contribute to this already extensive literature by providing a bridge between the textbook literature and the burgeoning literature on Wikipedia and other Wikipedia-like mediums.

Because Wikipedia does not categorize topics in the same way as the textbook, I have chosen to use a number of Wikipedia articles that correspond to the textbook. These have been selected from the “key terms” which are found throughout each of the social problems textbook’s chapters. The decision to use key terms as the basis for my sample was derived from a variety of other options that ultimately did not provide adequate data for analysis. For example, I originally began by examining Wikipedia articles that corresponded to section titles within each of the textbook chapters. This started off promising as I quickly found comparable Wikipedia articles on “gender inequality,” “homosexuality,” “racism in American history,” and “the meaning of race, ethnic groups

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4 Chapter names for the two topics are: Chapter 7 – Gender and Sexual Orientation; and Chapter 8 – Race, Ethnic Groups, and Racism.

5 For a similar explanation of the difficulties presented in comparative analysis see Keith and Ender (2004).
and racism.” However, as I progressed, I realized that the majority of the section titles were unsuitable as many of them were not in the form of terms or concepts but rather were general statements such as “public policy and private action” or questions like “why are some people homosexual?”

Because of this problem I had to find a sample of concepts to examine both the textbook and Wikipedia. Luckily, each chapter within the textbook features a number of “key terms” which are not only found throughout each of the examined chapters but that also provide comparable topics for comparison within Wikipedia (Keith and Ender, 2004). From the chapter on “gender,” the key terms selected are: bisexual, gender, gender role, heterosexual, homophobia, homosexual, sex, sexism, sexual harassment. One additional topic was selected that was not a key term, but a topic which was heavily discussed within the textbook chapter was the concept of ‘gender inequality.’ While the list of key terms found within the chapter featured more terms including ‘innate,’ ‘lesbian,’ ‘sanctions,’ and ‘sodomy,’ I did not include them in the present study because I believed them to be either too far removed from a study of sociology (innate and sanctions) or redundant (lesbian and sodomy). In other words, because the terms ‘innate’ and ‘sanctions’ may have a loose connection to the topic of gender and sexuality they are much more general than the terms included. Moreover, as the articles on “homophobia,” “homosexual,” and “sex” are already being examined I do not believe that the inclusion of two more terms adds any new or interesting results. For the chapter on race, I selected the following topics: ethnic group, institutional racism, prejudice, racism, and race. The terms that were excluded are: biological characteristic, disfranchise, exploitation, life chances, morphological, and stealth racism. Once again these were not all of the available
key terms but, like the chapter on gender there were a number of terms that were much more specific to the book than to the study of contemporary social problems or that the terms not used were simply redundant.\(^6\)

Before I continue, I would like to discuss in a little more detail the problem I encountered in finding proper matches. Not unexpectedly, because textbooks and Wikipedia have different aims, it was not always possible to find a Wikipedia article which mirrored a term found in the textbook. For example, one term from the race chapter that was excluded because of this problem was ‘stealth racism.’ This term in Wikipedia’s search engine turned up no search results. Wikipedia does not have an article with that title. I will return to this in my methodological reflections at the end because these problems in “matching” textbook keywords and Wikipedia entries reflect the very important differences in how knowledge is displayed in each site.

Based on the many dimensions of authority identified in the previous sections, I will be examining a number of questions that fall under two broad categories: (1) what constitutes authority and (2) how is authority displayed? In reference to the first question regarding what constitutes authority I will be examining:

1. How many citations are featured in each topic (gender or race)?
   a. Measured: Number of citations, number of unique works cited, and percent of cited works available/not for retrieval

2. How current is the information?
   a. Measured: Dates of works cited

3. From what location is the citation?

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\(^6\) The Wikipedia articles used were accessed between October 3, 2008 and January 31, 2009.
a. Measured: Location of work cited

In reference to the question, how is authority displayed within a particular site, I ask:

4. How do the textbook and *Wikipedia*’s articles differ in terms of topic selection?

   a. Measured: Which topics within the two mediums are the same? Different?

In order to examine what constitutes authority within both the textbook and *Wikipedia* articles, I have operationalized authority as references or citations. I have decided to use citations as a marker for authority because they are one of the main components of reputable academic texts (Fowler and Aksnes, 2007; Porta, Fernandez and Bolumar, 2006; Porta, Fernandez, and Puigdomenech, 2006; Case and Higgins, 2000). Similarly, *Wikipedia* has always been very concerned with ‘proper documentation’ in its articles as represented by its extensive policies on editing and maintaining articles. Within *Wikipedia*’s ‘policy handbook’ there are a number of entries such as: citing sources, reliability, verifiability, no original research, attribution, etc. Because of this, I investigate the sources cited by both textbooks and *Wikipedia* through a process of manifest coding or counting. In addition to examining the number of references presented in each textbook chapter and each *Wikipedia* article, I will also be enumerating how often sources are repeated within the text and how often sources listed in the text are missing within the bibliography. The former question was developed when I discovered that both the textbook and the *Wikipedia* articles featured large sections that had only one or two sources cited multiple times. The latter question was developed after I found that both the
textbook and the *Wikipedia* articles had a number of sources that were listed within the text but not in the accompanying bibliographies.

In order to be counted as a legitimate reference I devised a minimum set of standards that a citation must meet in order for it to be counted. For journal articles, books (both university press and popular press), magazine articles, newspaper articles, and government documents, these sources must at the very least contain an author’s name, the title of the work, and a date or volume and issue number (for journal articles). Because many organization papers and miscellaneous texts such as encyclopedia entries do not normally feature dates I do not require it from them as long as they are clearly labeled as an organization or a reference tool like a dictionary or encyclopedia. In the case of websites, I have made a working hyperlink the only criteria. While this may seem too lenient, it must be remembered that *Wikipedia* is an online resource and as a result would not be nearly as useful or dynamic if it was not able to cite websites that, unlike traditional sources which simply list the URL, could be accessed immediately. However, if the provided links did not work when accessed then they were deemed unusable and thus did not qualify as a reference. I believe that these two points of investigation are important because, as previously noted, references are an important marker of authority for mediums of knowledge like textbooks and *Wikipedia*, and as such I believe that it important to not only investigate how many references are listed but also to parse these references to determine how often references are repeated and how often sources are missing.

According to the *Wikipedia* policy on reliability, while it is important to cite reference sources when they directly relate to a topic it should also be noted that
“scholarly material may be outdated-superseded by more recent research” (Wikipedia: Reliability). What this illustrates is that as a text changes so should its references in order to maintain authority. In an effort to evaluate how this understanding is enacted within the textbook and Wikipedia, I investigate the publication dates of each reference to see the extent to which the sites of knowledge are updating their references.

For this study I have categorized the publication dates in the following way: 2009-2008; 2007-2006; 2005-2004; 2003-2002; 2001-2000; 1999-1995; 1994-1990; the 1980s; the 1970s; and the 1960s+ which includes all years back from 1969. I have chosen to group the dates this way based on assumptions about publication dates and authority. First, I split the dates from 2009-2000, which is the most recent decade, into two year blocks so that variability would be much more prominent. This is important because Wikipedia regularly boasts about its ability to update sources instantly. After this initial ten year block, references were grouped in categories that were much broader because the difference between a citation published 17 years ago and one published 19 years ago is negligible. I believe this categorization system strikes the necessary balance between understanding how publication dates within each medium differ and being able to present this detailed data in a way that is accessible and readable.

Previous scholars (Fowler and Aksnes, 2007; Porta, Fernandez and Bolumar, 2006; Porta, Fernandez, and Puigdomenech, 2006; Case and Higgins, 2000) have noted how important references are when considering issues of authority and verifiability, both of which are important in the study of knowledge and knowledge construction. Because of this I believe that by examining the works cited I may be able to answer one of the core questions of this project: which authority is considered to be most important and
from whom does it emanate? For example, within a section on intersexed individuals in
the United States there may be a number of sources cited. These sources may be from
peer-reviewed journals, academic texts, popular novels, magazines, newspapers, and so
on. Based on which source is cited I may be able to understand which medium is seen as
an authority figure within a particular text. More specifically, if one medium only uses
academic works while the other regularly features sources ranging from the American
Sociological Review to popular novels then this tells me that within the former, only
work from academically rigorous sources are considered acceptable, and that within the
latter, a much wider range of sources is acceptable.

In order to understand the similarities and differences between the textbook and
the articles found in Wikipedia, I have noted the medium type of each reference and
categorized them into ten different categories: (1) peer-reviewed journal articles; (2)
university press books; (3) popular press books; (4) magazines; (5) newspapers; (6)
government documents; (7) organization papers; (8) websites; (9) dictionaries and
encyclopedias; and (10) miscellaneous, which includes references from any source that
could not be easily categorized. This categorization process emanated from the references
themselves as each was put into a group based on the way it self-categorizes itself. For
example, if the source considers itself to be a magazine then it was put into the magazine
category. I believe that an understanding of these outcomes may provide clues to a few of
the central questions of this work: What is authority and what is an ‘acceptable’ form of
scholarship? Because if people are using Wikipedia then it must be that the authority in
Wikipedia is accepted.
There also is a more subtle authority that quantification only begins to make visible: what is and what is not included as knowledge? This is the authority of the text, the authority to determine what does and what does not constitute “knowledge.” In order to answer this question I examine the basic structure of the gender and race chapters as well as the corresponding Wikipedia articles. I believe that this is directly related to a study of authority because the basic structure of a text illustrates its relative importance within the subject (Loewen, 2008; Thomas and Kukulan, 2004; Dennick-Brecht, 1993; Hall, 1988; Wright, 1987). In other words, the size of a particular section identifies its authority as well as how much value it is given within the discipline. For example, according to Thomas and Kukulan (2004), within the study of classical theory, one group that is regularly marginalized or left out of textbooks entirely are the early female sociologists including Harriett Martineau, Charlotte Perkins Gilman and Julia Cooper. Thomas and Kukulan (2004: 262) argue, “this limited view has prevented us from having a more complete picture of the social world during the development of the discipline.” Similar conclusions have been made regarding the exclusion of certain ethnic groups within race and ethnicity textbooks (Dennick-Brecht, 1993) and the superficial coverage of family violence found family and marriage textbooks (Glenn, 1997). In order to study how this is enacted within the examined mediums, I counted the number of lines for each topic as well as the percentage of the entire chapter/article those lines took up. Noting the percentages was important because this then allowed me to make comparisons between the textbook and Wikipedia. Without this calculation I would have been limited to only making comparisons within the textbook and within Wikipedia but not between the mediums. And, while it would have also been possible to count the number of words per
topic, as with the categorization of publication dates, I try to balance having the most amount of detail with manageability.
FINDINGS

The purpose of this study was to examine how two mediums of knowledge, in this case a popular contemporary social problems textbook and *Wikipedia*, establish and display authority. In order to answer this question I operationalized authority as (1) the number of references per topic; (2) the number of repetitions of a reference; (3) the number of listed sources that were missing from the reference list; (4) the publication date of each reference; (5) the medium type of each reference; and (6) the topic selection, in terms of totals lines, of each individual section within the examined textbook chapters on race and gender as well as their corresponding *Wikipedia* articles. From these data I found results that were at times expected and at other times unexpected.

**How many citations are featured in each topic?**

According to table 1, the textbook chapter on gender and sexuality features 181 separate references and 192 references in total. The textbook chapter on race and ethnicity has 137 separate references with 149 references total. In comparison, the comparable *Wikipedia* articles on gender and sexuality have 417 references with 513 references total and the *Wikipedia* articles on race and ethnicity have 267 individual references with 342 references in total. As a whole, the articles from *Wikipedia* have over 684 references combined. At first glance, this massive amount of citations easily dwarfs
the 318 combined references from the textbook. By sheer numbers alone Wikipedia’s reference count should generate a tremendous amount of authority. However, as I mentioned earlier, authority cannot be adequately explained by simply counting the number of references. As both Willinsky (2007) and Wikipedia’s own policies on reliability and citing sources note, context is necessary in order to properly understand a reference as a marker of authority. Towards this end, let us now examine these numbers in the context of the text.

For the gender chapter, there are 151 paragraphs and 1,112 lines. This averages out to one reference per paragraph or every six lines. In the case of the race chapter, there are 126 paragraphs and 1,000 lines total. This averages out to about one reference per paragraph or every seven lines. These results are strikingly similar to the examined Wikipedia articles. When combined all of the Wikipedia articles on gender come out to 523 paragraphs and 2,876 lines of text. Moreover, the number of paragraphs and total lines within the race articles total 240 and 1,901, respectively. When averaged out I found that there was one reference for every paragraph or eight lines for the gender articles and one reference for every paragraph or six lines of text. What do all of these numbers tell us when we put them in context? We find that the massive number of references originally reported is no longer as impressive because when placed within the context of each text we find that in terms of appearance the difference between the textbook chapters and their corresponding Wikipedia articles are negligible.

While this might not seem particularly interesting at first, consider the fact that there are only 1,112 lines within the gender chapter of the textbook while the comparable Wikipedia articles feature over 2,879 total lines of text. This is a difference of 1,767 lines.
or the equivalent of reading the gender chapter within the textbook one and a half more times. This demonstrates that in terms of perception, authority in the form of visible references is packed more densely within the textbook than within *Wikipedia.*

| Table 1. Total references, repeated references, missing references and publication dates. |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 |               |                 |                 |                 |                 |                 |                 |                 |                 |
| **Textbook (Gender)**           | Total          | 0               | 18              | 20              | 30              | 31              | 31              | 24              | 22              |
|                                 | % of Total     | 0               | 9.38            | 10.42           | 15.63           | 16.15           | 16.15           | 12.5            | 11.46           |
| **Wikipedia (Gender)**          | Total          | 34              | 69              | 62              | 27              | 35              | 51              | 27              | 11              |
|                                 | % of Total     | 6.63            | 13.45           | 12.09           | 5.26            | 6.82            | 9.94            | 5.26            | 6.43            |
| **Textbook (Race)**             | Total          | 0               | 18              | 33              | 19              | 13              | 25              | 21              | 2               |
|                                 | % of Total     | 0               | 12.08           | 22.15           | 12.75           | 12.75           | 8.72            | 14.09           | 1.34            |
| **Wikipedia (Race)**            | Total          | 6               | 38              | 25              | 29              | 30              | 22              | 16              | 21              |
|                                 | % of Total     | 1.75            | 11.11           | 7.31            | 8.48            | 6.43            | 8.77            | 6.43            | 4.68            |

In addition to the number of references present, I was also struck by the drastically different level of consistency found in terms of the number of citations per section or article. For instance, while each of the examined textbook chapters featured at least 130 references, this type of consistency was not mirrored in the corresponding *Wikipedia* articles. Among the articles on gender from *Wikipedia,* the references ranged from 10 citations (Gender role entry) to 166 citations (Homosexuality entry). This difference of over 156 citations is even more dramatic when one considers the fact that the total lines for each of these two articles are essentially the same (344 and 384, respectively). While this difference may not be noticeable to a student who reads only the textbook or only *Wikipedia,* the difference becomes abundantly clear when both mediums
are used in tandem. And, while the previous case is by far the most dramatic example of the variability found in Wikipedia, similar patterns were observed in other articles.

This level of volatility begs the question: How much less would students know if they had not read all of the selected Wikipedia articles compared to not having read an entire section of the textbook? For example, imagine that a student had decided to not read the textbook section on sexuality. This would eliminate 75 references and over 400 lines of text. In comparison, if a student did not read the Wikipedia articles that paralleled the terms found in the textbook on sexuality they will have lost almost 350 references and over 1,100 total lines of text. When examined contextually, this leaves only 117 (formerly 192) total references for the gender chapter that were actually read and only 164 (formerly 417) total references for the Wikipedia articles that were read. Based on this simple examination of how citations are displayed, Wikipedia is essentially left looking, when examined through the lens of traditional authority, like an unreliable knowledge source undeserving of a higher place in the hierarchy of mediums of knowledge until it creates some semblance of consistency on par with the textbook.

However, does this mean that Wikipedia does not have any authority? Wikipedia, for the most part, prides itself on being an alternative to the traditional standards of authority that govern academia. And, while it does attempt to direct its users to utilize the citation style of its academic counterparts these are at most a suggestion. As a result, I have found that the differences in citation style, most notably the consistent citation of sources, have real consequences because, as I will later illustrate during my discussion of topic selection, when considering authority it is important to recognize not only how it is established but also how it is displayed.
Similar to the large differences in the number of references between the two mediums, there is also a pronounced difference between the number of repeated references and the number of missing references. Within the textbook chapter on gender there were 11 repeated references out of the total 192 references, which is about 6% of the total; while the race chapter from the textbook featured 12 references which were repeated out of 149, totaling around 8% of the total. For the Wikipedia articles on gender, 96 of the 513 total references were repeated, which comes out to about 19% of the total references; of the 342 total references in the Wikipedia articles for race, 75 were repeated, totaling almost 22% of the total references provided.

As noted during the discussion of the importance of citations, references act as a marker of authority which works to validate not only the statement being made but also more subtly, the medium in which it is found. However, when a medium creates the illusion of authority by citing a few references many times the authority of the site may be compromised. For example, the textbook chapters combined carried 23 repeated references total with no reference being cited more than three times. In contrast three separate Wikipedia articles have more than 23 repeated references, with the article on race almost doubling that total with 40 repetitions all by itself. Moreover, some references were cited upwards of 11 times in one article. And, while the repetitions may have been from a “classic” work in a particular field what is noteworthy is fact that this repetitive style was not found in the textbook at levels anywhere near those in Wikipedia.

In addition to examining the repetition of references within the text, I also examined the number of missing sources. The listing of sources within the body of text without their inclusion in the works cited may work to diminish, instead of establish,
authority for a medium because if its users wanted to verify a claim made in the text yet were unable to find its citation then the authority of the text as a location of knowledge is compromised. Further, while Head (2007) does note that college students tend to be less interested in verifiability than academics this does not mean that verifiability is completely unimportant. In this study, I found that neither the textbook nor *Wikipedia* were able to completely avoid this occurrence. The textbook contained a total of six missing sources from two chapters. The *Wikipedia* articles on the other hand had a total of 139 missing references from the gender and race articles. When these figures are understood in concert with the number of references listed and the number of references repeated we are once again left with a clear juxtaposition: within the traditional medium of authority, the social problems textbook, knowledge is given authority through the consistent listing of references. These references, while repetitive on occasion, are more often than not available to users to verify their reliability and validity, two ideals which are intimately associated with authority. On the other hand, *Wikipedia* entries often include a tidal wave of references, yet many of these cannot be verified or located by readers.

**How current is the information?**

*Wikipedia* supporters boast of *Wikipedia*’s ability to instantly update its references (Chesney, 2006). They argue that while the articles examined may be lacking in bibliographic sophistication, at the very least they offer knowledge that is more current that any other knowledge source. In order to investigate this claim I examined the publication dates of each of the references found with the textbook and the *Wikipedia* articles. The textbook was printed in 2008. In comparison the *Wikipedia* articles
examined ranged from October 3, 2008 to January 31, 2009. Given these dates, it must be
noted that the most current source within the textbook is from 2007 while the most
current source in Wikipedia entries could be 2009.

In regards to the publication date of each source, table 1 shows that within the
textbook chapter on gender, more than 51% of the references were from 2000-2009.
Within the chapter on race, this number rises to more than 55%. From the comparable
Wikipedia articles, 44% of the references in the gender articles and 35% for the race
articles were published within this time frame. Further, over 80% of the references within
the textbook gender chapter and 86% from the textbook race chapter were from the last
20 years (1990 – 2009). Compare these numbers to the publication dates found in the
Wikipedia articles where their numbers only rise to 59% and 50%, respectively, when one
counts the citations published over the last 20 years.

While interesting, these figures do not tell the entire picture as Wikipedians argue
that their references will be as up-to-date as possible and in this regard they are correct.
The results show that 20% of the gender articles’ references and 12% of the race articles’
references found in Wikipedia were published in 2009 or 2008. In comparison, none of
the references found within the social problems textbook were from the same period –
they could not be. This is due to the fact that the process of publishing causes there to be
a lag between the most current edition and the publication of a new book.

In this context, Wikipedia’s articles on race and gender can be seen as
authoritative in regards to having the most contemporary knowledge, which according to
the social constructionist perspective would imply that Wikipedia and its content has the
ability to most immediately construct reality and knowledge. Because Wikipedia is online
and can be edited at any time and because the textbook has to be published the textbook will always lag behind Wikipedia.

**From what location is the citation?**

The next component that I have examined is one that is most commonly associated with knowledge and authority and that is an examination of the location from which each reference is derived. Within academia, the general understanding is that citations within academic works including peer-reviewed journal articles and university press books should almost always come from other peer-reviewed journal articles and university press books. This understanding is well established not only within the academic literature (Willinsky, 2007) but also within Wikipedia’s policies. I believe that the results obtained from my current study only solidify this understood institutionalized habit. For example, according to table 2, over 72% of the total citations within the two textbook chapters were from peer-reviewed journals. The Wikipedia articles on the other hand, presented substantially fewer references from peer-reviewed journals. For instance, only 26% of the total references stem from academic journals. More specifically, of the gender article’s references, 20% of the total emanated from journals and 36% of the race article’s references were taken from journal articles.

While these figures may show that Wikipedia does not possess the traditional markers of authority granted to mediums of knowledge that cite almost exclusively the academic literature, they also make a particularly intriguing statement regarding knowledge and authority outside of the academic milieu. According to the data, 16% of the references found in the gender chapter and 32% of the references found in the race chapter are from sources that are considered to be lower on the hierarchy of authority.
than peer-reviewed journal articles and university press books. These sources include popular press (books, magazines and newspapers) government documents, organizational papers, websites, dictionaries and encyclopedias. In comparison, 74% of the references found within the gender articles in Wikipedia were from these sources as well as 54% of the references found within the race articles. What these differences between the two mediums may be telling us is that for Wikipedia users, authority is particularly related to context.

Table 2. Reference location.

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<tr>
<td>Textbook</td>
<td>141 (78)</td>
<td>11 (6)</td>
<td>21 (12)</td>
<td>2 (1)</td>
<td>4 (2)</td>
<td>2 (1)</td>
<td>-</td>
<td>-</td>
<td>181</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>84 (20)</td>
<td>22 (5)</td>
<td>138 (33)</td>
<td>7 (2)</td>
<td>72 (17)</td>
<td>68 (16)</td>
<td>14 (3)</td>
<td>12 (3)</td>
<td>417</td>
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<tbody>
<tr>
<td>Textbook</td>
<td>90 (66)</td>
<td>2 (1)</td>
<td>29 (21)</td>
<td>10 (7)</td>
<td>4 (3)</td>
<td>1 (1)</td>
<td>-</td>
<td>1 (1)</td>
<td>137</td>
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<td>25 (9)</td>
<td>88 (34)</td>
<td>9 (3)</td>
<td>18 (7)</td>
<td>17 (6)</td>
<td>5 (2)</td>
<td>8 (3)</td>
<td>267</td>
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<tr>
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<td>13 (4)</td>
<td>50 (15)</td>
<td>12 (4)</td>
<td>8 (3)</td>
<td>3 (1)</td>
<td>-</td>
<td>1 (0.3)</td>
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<tr>
<td>Wikipedia</td>
<td>181 (26)</td>
<td>47 (7)</td>
<td>226 (33)</td>
<td>16 (2)</td>
<td>90 (13)</td>
<td>85 (12)</td>
<td>19 (3)</td>
<td>20 (3)</td>
<td>684</td>
</tr>
</tbody>
</table>

(n) = % of total

*Popular Press = Books, Magazines and Newspapers

For example, in reference to the topic of sexual harassment, the textbook author most likely will rely on the wealth of literature that can be found within academic journals. This is because they believe in the authority of that source. Conversely, Wikipedia editors may cite Oprah Winfrey in reference to sexual harassment because they have deemed her to be an authority within that context. Another example can be found in reference to the issue of racism. There have been hundreds, if not thousands of peer-reviewed journal articles written that examine the issue of racism. However, an individual who may not have been institutionalized to acknowledge the hierarchy of authority related to mediums of knowledge may choose to cite as a reference in the Wikipedia
article on racism a memoir or a website or a magazine article. To them, the knowledge found within this memoir, website, or magazine article may hold as much authority as any peer-reviewed article. While the issue of whether this action is right or wrong is not under consideration in this study, what is important to note is that the interpretation of data requires an acknowledgement of the context in which it is being presented. In other words, the results do not have meaning until context is considered. In this regard, while the Wikipedia articles do not have the same authoritative markers as the textbook this does not mean that they have no authority. Seen through the lens postmodernism, which argues that knowledge and authority are not the same for all people, Wikipedia’s articles accept a different type of authority than textbooks.

**What is the difference in topic selection of each medium?**

The final facet of authority that I have examined is how authority is displayed. This straightforward examination of which topics were covered within both the textbook chapters and their corresponding Wikipedia articles was, admittedly, one of the most interesting investigations into authority of all of the issues examined. As I argued in the methodology, a significant aspect of authority is derived from the structure of a text (Loewen, 2008; Thomas and Kukulan, 2004; Dennick-Brecht, 1993; Hall, 1988; Wright, 1987). In this vein, I have examined the structure of each chapter and article in order to see which topics were discussed and how much space, quantified by the number of total lines, was devoted to each topic. Throughout this section I continuously asked myself “Why is this particular topic here?” and “How do these topics differ between the two mediums?”
To begin, the gender chapter within the textbook covers a wide range of concepts related to gender and sexuality within 1,112 total lines of text. The chapter is divided into two main sections: gender inequality and sexuality. A number of topics fall under the scope of each of these main sections. For example, there are sections on “Gender and Biology,” “Men’s Issues,” “The Beauty Myth,” and “Harassment and Violence.”

What is particularly fascinating about this chapter is the relative importance given to certain topics. According to table 3, the textbook authors spend 102 lines (9%) discussing the biological aspects of gender. While this may not seem like a significant amount of space, when one contextualizes this within the chapter as a whole it becomes clear that this topic is one of the largest in terms of space utilized.

<table>
<thead>
<tr>
<th>Gender</th>
<th># of Lines</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>102</td>
<td>9</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>279</td>
<td>10</td>
</tr>
<tr>
<td>Sexuality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>364</td>
<td>32</td>
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<tr>
<td>Wikipedia</td>
<td>705</td>
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<tr>
<td>Gender Inequality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>562</td>
<td>51</td>
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<tr>
<td>Wikipedia</td>
<td>487</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>84</td>
<td>8</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>1405</td>
<td>49</td>
</tr>
</tbody>
</table>

This large amount of space, according to the literature on authority, allows us to assume that this topic is worthy of authority due to its large size. Six of the 10 Wikipedia articles also feature at least a cursory discussion of biology in relation to gender and sexuality. In context this amounts to 279 lines of text devoted to this single subject or
10% of the total lines. This is very similar to what was found within the textbook chapter on gender. Because Wikipedia can be edited by anyone and not just sociologists or biologists one would assume that there would be a much more pronounced difference between the two mediums. Another major similarity, in regards to topic selection and devoted space, between the two mediums are the sections on sexuality. More than a quarter of both the textbook chapter and the *Wikipedia* articles on gender cover sexuality in some form or another. This illustrates that the concept of sexuality is extremely valuable during a discussion of gender and as a result it requires significant attention.

While there were similarities in topic selection between the textbook and *Wikipedia* there were also differences. For example, one of the most prominent topics within the textbook chapter on gender is the discussion of gender inequality. This is not unusual as this is a social problems textbook. What is particularly interesting is that while over 50% of the textbook chapter covers gender inequality, only about 17% of the *Wikipedia* articles on gender discussed it. This illustrates that even though the *Wikipedia* articles on gender were taken from a social problems textbook *Wikipedia* editors did not focus their attention on discussing the issues as social problems.

In addition, the *Wikipedia* articles examined regarding gender featured a number of concepts that would almost assuredly be seen as being outside of the scope of the study of gender and sexuality as presented in sociology social problems textbooks (table 3 – Other). For instance, six of the 10 gender articles taken from *Wikipedia* feature a discussion of the etymology of a term. One clear example of this practice can be found within the article on “gender.” This article, while also covering expected topics such as “gender and feminism” and “sexual differentiation,” uses over 22% (137 lines) of its text
to discuss the different dimensions of the word gender in the English language including
gender “as kind,” “as masculinity or femininity,” and “as a grammatical term.” In
addition, this examination of gender and language is not limited to a study of its role in
English but also includes discussion of the term gender in German, Dutch, and Swedish.
Other topics within the Wikipedia gender articles include a discussion of the legal
guidelines surrounding sexual harassment in the state of New Jersey (Sexual Harassment
entry), a discussion of gender and how it relates to “connectors, pipe fittings, and
fasteners” (Gender entry), and an extensive list of countries that have a death penalty for
homosexuality (Homophobia entry). These differences in topic selection are important
because they highlight the fact that by themselves these different topics are not strange or
unusual. They are instead seen as unusual only when compared to a sociology social
problems textbook, particularly one that spends over 90% of its allotted space devoted to
three subjects. If instead, I had compared the Wikipedia articles on gender not to a
traditional medium but to other Wikipedia articles the topics selected may not seemed
unusual at all. While this question is out of the scope of the present study it is an
important issue that I will address further in the conclusion.

In the case of race (Table 4), the textbook and Wikipedia do feature some overlap
regarding topic selection including the defining of race, race in history, and race and
institutions. However, the extent to which each medium covers a particular topic differs
dramatically from what was found within the gender section. For example, within the
Wikipedia articles on race, over 24% percent of the text (453 lines) is devoted to a
discussion of the biological aspects of race.
Table 4. Topic Selection (Race)

<table>
<thead>
<tr>
<th>Race</th>
<th># of Lines</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>90</td>
<td>9</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>342</td>
<td>18</td>
</tr>
<tr>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>453</td>
<td>24</td>
</tr>
<tr>
<td>Defining Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>52</td>
<td>5.2</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>257</td>
<td>14</td>
</tr>
<tr>
<td>Race &amp; Institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>328</td>
<td>32.8</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>123</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>530</td>
<td>53</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>726</td>
<td>38</td>
</tr>
</tbody>
</table>

This includes an examination of “race as subspecies,” “population genetics,” and “molecular genetics.” While this discussion of the biological aspects of race has a prominent position within the *Wikipedia* articles on race, a discussion of race and biology is entirely absent from the textbook. This is to be expected as the public tends to view race as biological while sociologists tend to only discuss the links between race and biology in order to criticize them.

Another topic worth closer examination is in regards to race and institutions. Both the textbook and *Wikipedia* cover similar concepts such as the role of race in various social institutions including education, mass media and the government; however, where the textbook and *Wikipedia* divide is when the *Wikipedia* articles feature examples of the role of race in non-American cultures. For example within the *Wikipedia* article on
“institutional racism” there is a discussion of the role that race plays in the Metropolitan Police Service in the United Kingdom (11 lines) and the presence of institutional racism in Sri Lanka (20 lines). Combined these two sections make up almost 27% of the article. While these topics may be important to individuals interested in the way that race and institutions interact in other parts of the world, what is particularly interesting to this study is that they were not even mentioned within the textbook.

These sections on the United Kingdom and Sri Lanka also bring to light the fact that the textbook tends to offer very little detail on non-American issues of gender and race while non-American issues are featured in many of the examined Wikipedia articles. For example, six of the 10 Wikipedia articles on gender and four of the five Wikipedia articles on race contain at least a cursory discussion of gender or race outside of the United States. In comparison, the textbook contains only a few minor discussions of gender or race outside of the U.S. This is an important finding in regards to the display of authority because international issues and cultures are regularly excluded from the textbook while at the same time being featured in a majority of the Wikipedia articles. What this says about the textbook and by extension traditional authority is that American culture and institutions are valued more than international ones. Like the excluded early female sociologists discussed previously, American issues are granted more authority by their inclusion in the textbook while non-American are marginalized.

When the textbook chapters and the corresponding Wikipedia articles are examined as a whole what becomes clear is that while the topics being examined were taken from a social problems textbook the Wikipedia entries were not organized around the concept of a “social problem” or even sociology in general. This is a marked
departure from tradition as we as sociologists tend to place issues such as racism, discrimination, and homophobia squarely within the purview of the sociological world. However, because Wikipedia articles are not written exclusively by sociologists topics generally regarded as purely sociological are fitted within new contexts. The textbook features a focused and methodical approach in regards to its selection of topics. Wikipedia’s articles on the other hand, while featuring many topics similar to the textbook ones presented in the textbook a number of other topics were found only in Wikipedia. It is important to note that in a vacuum Wikipedia and its topic selections are not unusual. They only become unusual when compared to a traditional medium of knowledge like a textbook. However, neither Wikipedia nor the textbook exist in a vacuum. As a result, issues of power, authority and purpose become extremely important as each medium has the power to define what is and what is not important thus affecting what is knowledge and what constitutes authority.

Ultimately, a student who reads the Wikipedia entries rather than the textbook can learn both more and less than a student who reads the textbook but not Wikipedia. A student can learn more from Wikipedia because unlike the social problems textbook which organizes itself around sociological understandings and social problems, Wikipedia topics are not so limited. Because of this difference a student will learn more about non-sociological viewpoints. At the same time a student reading Wikipedia entries rather than the sociological textbook will not learn much about sociological perspectives or social problems. Stated otherwise, Wikipedia offers breadth with little depth while the textbook offers depth with little breadth.
CONCLUSION

The present study examined (1) how authority is established within a contemporary social problems textbook and its corresponding Wikipedia articles and (2) how authority is displayed within these two sites of the creation/dissemination of knowledge. How authority is established was examined by investigating the number of citations found in each topic, the publishing date of each reference and the location from which a reference emanated. I found that the textbook and Wikipedia entries establish authority in different ways. The textbook used a consistent citation style that featured relatively few repetitions and even fewer citations not included in a reference list. In contrast, the Wikipedia articles featured significantly more references in total but the references were not evenly distributed. That is, the majority of references came from a few references that were frequently cited. Further, Wikipedia articles were characterized by a large number references not described in contemporary reference texts. In addition, while Wikipedia articles featured more recent citations (2008-2009) than did the textbook; however, when the dates within the two locations were examined over a more extended period of time (four, ten and twenty years) the textbook featured a larger proportion of more recent citations. Furthermore, and as expected, the overwhelming majority of references from the textbook came from peer-reviewed sources while the
Wikipedia articles featured relatively equal numbers of peer-reviewed, popular press and website sources. I also investigated how authority is displayed by examining the specific topics covered as well as the amount of space devoted to each topic. I found that while many of the topics in the textbook were also present within the comparable Wikipedia articles, there were a number of topics within the Wikipedia articles that were not addressed at all within the textbook, any discussion of race and biology and of non-American cultures are the notable examples.

Given that the textbook and Wikipedia are so different from one another in regards to their purpose, structure and audience this project contained a number of practical and theoretical issues that had to be addressed. While the stated purpose of each medium revolved around the transmission of knowledge they each were different in regards to their intended audiences. The purpose of the textbook is to teach college students sociological views on contemporary social problems, Wikipedia is written to provide anyone with a computer information on millions of different topics. In reference to their structure, the textbook features a set number of chapters each relating to a specific social problem as identified by two expert authors. In contrast, Wikipedia features millions of different topics each written by sometimes hundreds of authors with varying levels of expertise. Finally, the textbook topics are confined to those related to a “sociological” understand of social problems, while Wikipedia articles have no such topic limitation.

As a result of these differences I continuously asked myself “Does it really make sense to compare a textbook to Wikipedia?” While I do believe that my current study generated important findings I wonder if my data would have been more significant and
less troublesome if I had compared *Wikipedia* to another source, particularly another online source. However, this line of thinking brought with it a whole new set of questions: What source is like *Wikipedia*? Would it make sense to compare *Wikipedia* to a university-run online encyclopedia like the Stanford Encyclopedia of Philosophy? Is there a sociological equivalent? If there isn’t a comparable equivalent then what does that say about sociological information? My suspicion is that sociology just does not work in the same way as an encyclopedia of philosophy, mathematics, or chemistry. I would argue that sociology is much too fluid a discipline, in that within the natural sciences there are formulas discovered 500 years ago that work just as well today as they did then. In contrast, sociological “realities,” for the most part, do not exist because the sociological world is ever changing. Even a concept as important as “race” has changed dramatically over the last 100 years. Future researchers may wish to examine these questions in order to understand how specific knowledge systems (chemistry, history, sociology) compare with one another in *Wikipedia* as well as how they each grow and change.

A second issue I addressed was coping with the idiosyncratic nature of *Wikipedia* entries. For example, one of the race articles found in *Wikipedia* focused entirely on race and genetics. Would this *Wikipedia* entry feature more peer-reviewed scientific articles because of its ‘natural science’ content than those articles discussed in this study? If there is a difference between a natural science oriented article on race and the social scientific article that I examined, then that would bring up the question of whether or not *Wikipedia* can or should only be examined thematically. In other words, If that were the case then
sociologists would have to consider making significant changes to the way that they currently do epistemological research.

A final issue addressed was similar to the question of what should Wikipedia be compared to if not traditional mediums of knowledge like textbooks, journal articles, and so on? It may prove worthwhile to use those articles which have been granted “featured article” status on Wikipedia. The stamp of approval that is granted to an article by designating it a featured article identifies it as demonstrating the ideal content/display of knowledge according to Wikipedia standards. Moreover, future researchers may also wish to examine the larger question of what constitutes quality in Wikipedia? Unlike the academic world where there is an extensive literature on the quality of academic publications (Loseke and Cahill, 2004) there is no comparable literature that similarly examines Wikipedia articles. The only real marker of quality is this ‘featured article’ mark, but who decides what makes a ‘featured article’?

As we as a society become more specialized within careers and disciplines, the ability to evaluate knowledge is becoming more important. However, with the explosion of information technology and knowledge sources, informed citizens would need to devote an enormous amount of time and energy to investigate all of these different sources without the help of a method for parsing through them. Academia tends to place higher value on up-to-date references from “reputable” (academic) sources over others such as popular magazines or newspapers, particularly when it comes to certain subjects including science, medicine, and crime. Because of this, textbooks tend to be held in higher regard by academics because they synthesize hard to understand ideas and jargon while at the same time comforting the reader with an extensive works cited list and
predictable structure. On the other hand, *Wikipedia* is generally seen as a novelty that should be used sparingly or when in a hurry and “real knowledge” cannot be accessed. Rarely is the use of only “reputable” sources questioned, especially by “experts.”

However, as post-modernists and social constructionists note, knowledge is ultimately a product of human interaction (Rudel and Gerson, 1999; Foucault, 1993). In this regard, *Wikipedia* is clearly different from textbooks: It uses more than peer-reviewed texts as authority, it does not always update its references to make sure that they are the most current source, it does not focus on expected topics associated with particular academic disciplines.

Differences are not merely differences because differences create power. As postmodernists contend (Foucault, 1993; Jameson, 1991), authority and the power that comes from that authority has been de-centralized in our world. In *Wikipedia*, true postmodern form, everyone has the ability to contribute their own localized knowledge. All voices in this space are equally regarded as “true.” In this world, knowledge truly is “by the people” and “for the people” as the social construction of knowledge is no longer be left to “experts” to create and decide upon but is a part of the everyday reality of all people.

While this democratization of knowledge is in many ways beneficial this is not always the case. One consequence of democratization is the fragmentation of authority/trust into billions of pieces. If knowledge is simply what we as individuals make of it then this could lead to anonymous cabals becoming the new gatekeepers. Unlike the traditional set of gatekeepers who attained their position by specializing in a particular field and developing their reputation, this new group of gatekeepers could gain
authority simply by possessing more numbers and sheer determination. For example, a major battle is currently being waged within the *Wikipedia* article on Israel. This page has been shut down many times because it was being relentlessly edited and re-edited by both Palestinian supporters and Israeli supporters. Because of this fighting the Israel article has become essentially worthless as constant editing has made it virtually unusable.

As a post-modern entity, *Wikipedia* has clearly added, challenged and modified the study of knowledge and authority. What has been added is that Oprah and other non-traditional authorities have been granted authority within environments that were previously reserved for peer-reviewed work produced by “credentialed” social actors. What *Wikipedia* has challenged is the idea that there is anything like universality or immutability of knowledge. What has been modified is the idea that only certain topics have a place within a discussion of gender, sexuality and race. In all, *Wikipedia* demonstrates that while we as a society are increasingly searching for answers in our ever expanding world, those answers are becoming progressively harder to identify.
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