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DOCUMENTATION AUTHORITY AND RELIABILITY
IN THE CULTURAL SPACE OF THE WIKI

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Abstract

The wiki is an online collaborative document that requires analysis and consideration from scholars of digital documentation. The wiki's authority style is based on reliability instead of authority. In a wiki, information becomes stable through discourse and conversation to produce a stable truth within the wiki itself. The wiki is unique for open-source access style, meaning all users are equal and anyone can participate. When more users are able to participate, more information is created, making the wiki an almost unlimited source of information creation. Also, the wiki has little to no barriers of entry, so wikis become a space for undesired information storage. Fan wikis, for example, store niche information about popular culture TV shows, books, movies, and video games. These fan wikis become cultures in and of themselves that allow users greater immersion into their favorite virtual worlds through access to important information.

The practical origins of documentation were formed centuries ago when the initial need included legal and judicial proceedings. Documentation was used in many governmental situations, from tax collection to debt creation, because social situations required physical evidence. Noted University of Tromsø scholar Niels Windfeld Lund begins his overview of Western Civilization documentation practices by tracing the modern era's governmental documentation back to the "emergence of the European state bureaucracy from the seventeenth century onward," which required documentation to ensure order and fairness throughout disputes ("Document Theory 9-2"). During this time, the definition of a document was, according to Lund, "a written object stating and proving transactions, agreements, and decisions made by citizens" (9-2). In the eighteenth century, documentation expands into evidence for the "legitimacy of politics, economy, the court, and science [which] became increasingly dependent on actors' ability to document their rights and claims" (9-2). The scholarly study of documentation lags until the late nineteenth century when bibliography and research scholarship grows in popularity because philosophers and scientists need to "demonstrat[e] that they had empirical proof as a basis for their claims and arguments" (9.3). As a result, the document becomes a physical statement of fact or truth.

Documentation as a denotative word is problematic, as it derives from the Latin verb *docere*, meaning to teach, so the noun form signifies a lesson or proof. Cases of *documentum* in late Latin show the definition as "official paper," but eventually Middle English and Anglo-French adopt the Latin denotation, continuing the definition of "precept" or "teaching." The etymological origins of the word do not match the contemporary connotations, so says Lund (9-2). Documents today consist of paper-based physical objects that range from informal, private letters to formal, governmental passports. Since the beginning of the digital age, a document has

become more immaterial and less physical. E-books, PDFs, and digital files replaced the physical book. Computers and laptops have replaced typewriters. Online databases have replaced card catalogs, and text messages and emails have replaced letters. The advent and speedy adaptation to the digital age has wreaked havoc upon documentation scholarship, leaving scholars to ask: *What is a document, and what is a document in the digital age?* The dynamism of digital media and communications now complicates the field because the problem of how to study both physical and digital documents remains contentious. In short, documentation in the twenty-first century is hard to determine. The instability is, in and of itself, as enticing as it is intimidating for scholars who want to study, analyze, evaluate, and taxonomize twenty-first century documents. Documentation studies, as an interdisciplinary junction between information science, literature, psychology, rhetoric, and writing and composition, offers tremendous development, progress, and stability for understanding digital media documents—especially alternative and niche digital documents. Unfortunately, as will be shown below, the opportunity is difficult to navigate as document analysis requires scholars to choose an avenue of philosophy while alienating others. The contention over documentation began in the late 1800s when the library, as an institution, became the academic center for bibliography and reference.

The first major scholar of documentation is Paul Otlet, a Belgian lawyer from an upper middle class family in Brussels. Born in 1868, Otlet grew up highly educated, becoming a legal clerk when his interest in information science began. Contextually, Otlet worked during a time when "many international scientific associations as well as international journals were founded.... This endeavor also created an urgent need for tools to locate colleagues' work, to find publications, and to use collections of data, collected by scholars," a situation which Otlet pursued strongly (9-3). In 1892, Otlet writes "Something about Bibliography" in which he

acknowledges both this growing popularity and overlap of scholarship. In particular, Otlet notices how the natural sciences have exemplary data classification while sociology has rather poor classification. When addressing the proliferation of scholarship, Otlet says, “[if it is] necessary that all of these individual works be registered and classified, so that anyone can retrieve them immediately in order to use them and to push ahead, to know at every moment what has been done and what remains to be done. How little has been accomplished along these lines!” (14). Otlet’s frustration over the classification of scholarship leads him to research an improved system of information storage and retrieval. In particular, Otlet was annoyed at the inferiority of books as classifiable storage containers of knowledge, noting, “What does the title of a book and the name of its author conceal? It is just as important to be familiar with a work as to know of its existence” (16). The title and author of a book simply were inadequate for thorough and swift classification. In 1907, Otlet partners with his good friend Henri La Fontaine who works within the Society for Social and Political Studies and uses his position to create a branch devoted to bibliographic research. In particular, scholars desire collaboration which “created an urgent need for tools to locate colleagues’ work, to find publications, and to use collections of data, collected by scholars” (“Document Theory” 9-4).

Both Otlet and La Fontaine open the International Office of Sociological Bibliography in 1893, then the International Institute of Bibliography (IBB) in 1895 with the goal of creating an exhaustive catalog of bibliographic data for international collaboration. As Niels Lund notes, “Neither Otlet nor La Fontaine was a theoretician. They were reflective practitioners,” seeking an intuitive and easy way to navigate large numbers of documents (9-4). Even though this happens at the beginning of the twentieth century, the actual notion of a document still proved contentious. Scholar Niels Lund describes Otlet's perspective upon what a document is, saying,

“if Otlet wanted to realize his ideal and improve the practical organization of documentation, he first had to define what exactly was meant by the term document” (9-4). Otlet’s definition came from his seminal 1934 information science work *Traité de Documentation*, a collection of essays on his beliefs of the goals and futures of burgeoning bibliography studies. Even writing in the early twentieth century, Otlet acknowledges the proliferation of unorthodox documents such as photos, drawings, maps, and films. These documents differ from the quintessential book yet still demand consideration. Otlet’s definition reads:

The science of bibliography can be defined as that science whose object of study is all questions common to different kinds of documents: production, physical manufacture, distribution, inventory, statistics, preservation and use of bibliographic documents; that is to say, everything which deals with editing, printing, publishing, bookselling, bibliography, and library economy. The scope of this science extends to all written or illustrated documents which are similar in nature to books: printed or manuscript literary works, books, brochures, journal articles, news reports, published or manuscript archives, maps, plans, charts, schemas, ideograms, diagrams, original or reproductions of drawings, and photographs of real objects. ("Science of Bibliography" 86)

Otlet’s definition certainly broadens the document to include alternatives to the book, but interestingly, Otlet remains close to documentation’s physical orthodoxy, plus his entire definition asserts the *book* as the center for documentation—all understandable considering the date written. However, Otlet’s definition lacks inclusivity.

Otlet's ideas about documents last until the mid-century twentieth-century. As University of California, Berkeley Professor Dr. Michael Buckland explains, "Documentation, then, was concerned with the management of documents [. . .] documents were of interest because they

were evidence of something" ("Document Theory: An Introduction" 4). Buckland furthers the field's progression, saying, "The compelling logic that since documents were, by definition, concerned with evidence, so too was bibliography and documentation, was advanced further by Suzanne Briet" (5). A librarian whose work focused on both documentation as a field and the role of the documentationist in the burgeoning early to mid-twentieth century, Briet records her own perspective. In 1951, Briet pens *What is Documentation?* in which she identifies what a document is by noting the Latin etymology of "an instruction or proof" (9). Briet offers this accurate yet admittedly "abstract, and thus, the least accessible" definition: "any concrete or symbolic indexical sign [*indice*], preserved or recorded toward the ends of representing, of reconstituting, or of proving a physical or intellectual phenomenon" (10). To some degree, Briet's definition expands Otlet's by focusing less on physical documents and more on why those physical documents were created in the first place. There is an emphasis on the causation of the document, which Briet elaborates is definitely not a document: "Is a star a document? Is a pebble rolled by a torrent a document? Is a living animal a document? No. But the photographs and the catalogues of stars, the stones in a museum of mineralogy, and the animals that are catalogued and shown in a zoo, are documents" (10).

Philosophically, Briet distinguishes the phenomenon from the classification of the phenomenon. In her famous antelope example, Briet notes that the discovery of an African antelope is not a document but simply an action or event, but that the act of bringing an event into "public knowledge" consequently creates documentation. Briet explains that post-antelope discovery, the press releases, announcements, lectures, catalogues, sound clips, news clips, and encyclopedia entries about the antelope discovery are all documents (10). For Briet, there are even levels of documentation, so that the newspaper announcement of the antelope's discovery

might be considered a secondary document and the anthology of newspaper articles could be termed a tertiary document and so forth (11). Briet's definition and antelope example becomes highly popular in the information sciences even though Briet is not so much concerned with documents as she is *classifying* documents. Fortunately, Briet acknowledges the expansive nature of documents and encourages broader ways of thinking about documentation which later scholars expand. Her views would dominate the information sciences until the late 1980s and into the 1990s when evolving forms of digital media force scholars to view documents as primary rather than supplementary.

At the turn of the twenty-first century, Dr. Michael Buckland revisits Briet's document distinctions, though, after Briet, Buckland himself acknowledges the gap of document theory attention:

After 1945 the documentation movement was largely forgotten until three factors led to a revival of interest in the 1990s. One was a new interest in the history of documentation and information science; another was inquiry into how digital documents differed from paper one; and, quite separately, legislation establishing a national library in Norway required the legal deposit of new media. ("Document Theory: An Introduction" 5)

Buckland reconsiders the document question in his aptly named article "What is a 'Document?'" Here, he seeks to reevaluate the nature of documents in light of Otlet and Briet. Particularly, Buckland acknowledges that documents—in the digital age—are distinguishable by their functionality, a notion borrowed from Briet:

A conventional document, such as a mail message or a technical report, exists physically in digital technology as a string of bits, but so does everything else in a digital environment. In this sense, any distinctiveness of a document as a physical form is further

diminished, and discussion of 'What is a digital document?' becomes even more problematic unless we remember the path of reasoning underlying the largely forgotten discussion of Otlet's objects and Briet's antelope. ("What is a 'Document?'" 808)

Acknowledging how physicality had dissipated by the end of the twentieth century, Buckland identifies the document less as a (physical) object and more as a unit of function, particularly in a philosophic sense. If a document is an object, then what are objects? Further, what do objects do and how do they operate? Buckland foregoes arguing about documents based upon physical parameters, instead recommending that documents be seen as objects and that scholars shift their focus to determining what defines an *object* first. Buckland's particular advancement is emphasizing that objects are defined by social meaning, that definitions are based on both an object's function and use: "One difference. . . is the emphasis that would now be placed on the social construction of meaning, on the viewer's perception of the significance and evidential character of documents" (807). Meaning is a construct, Buckland reminds, thus implying documents are social constructs too. Buckland's article influences the scholarship of the information sciences, injecting it with philosophical energy that sparks new interest in the emergent sub-field of documentation studies.

In 1996, University of Tromsø Professor Niels Lund, "anticipating the need for additional expertise in handling new media," creates "an Institute for Documentation Studies at the University of Tromsø" ("Document Theory: An Introduction" 5). Lund, encouraged by Buckland, offers a three-tier framework to study documents as socially-constructed objects. Taking into account the problems of medium, authenticity, and origin, Lund argues that all documents must be considered by their agents, their creators: "So no matter what, you have to document in order to communicate and the interesting questions are: who is documenting and

how is it being done in different modes, using different names. The main constituents of the documentation process can be seen as the human agents, the means, the modes, and finally the resulting documents” (744-745). Specifically, Lund recognizes that many documents are the result of intricate and complex processes that are hard to map and understand fully: “The crucial question is how this complex process ends in a coherent document. [. . .] It may actually be difficult to decide” (745).

Lund asserts that scholars should analyze documents' complex interactions among agents, modes, means, and products: “Within a conceptual framework of document and documentation process. . . . it may be possible to study how the complexes of agents, media, and modes in practice are interacting with each other and thus how material, social, and cultural options and conditions have an impact on the resulting documents” (746). Lund proposes that scholars forego simplifying documents through a definition; instead, Lund proposes that documents be seen as indeterminable, multiple, and dynamic entities. Lund is quick to note at the end of “Document, Text and Medium: Concepts, Theories and Disciplines” that “documentation studies should be a complementary discipline crossing humanities, social sciences, and natural sciences due to the conception of a document and the process of documentation as a physical phenomenon just as much as a *social and a cultural* phenomenon” (747, emphasis added). The proposition fascinates in scope and ambition: that documents should be evaluated by all areas of scholarship, not just the people who handle and store them. Most importantly, Lund suggests that documents be considered as social and cultural objects (747).

Dr. Bernd Frohmann, a scholar from the University of Western Ontario, responds to Buckland's earlier semiotic approach, ultimately proposing that scholars concede any attempts for a definitive document. In his 2009 article “Revisiting ‘What is a Document?’” Frohmann

argues that no definition will ever satisfy the dynamic nature of documents because attaching harsh characteristics to objects is a rare occasion:

Unless there is a demonstrable and overriding necessity to engage only in talk governed by well-formed definitions, fixed meanings, and clear rules when we think about documents, then given that we don't generally rely on such precision instruments, there ought to be ways of thinking about documents and documentation that also get along without them. (295)

Here, Frohmann deliberately turns away from semiotic discussions, a move that offers the discipline opportunity for development. Frohmann's complete denial of a definition forces new and future scholars to see documents not as an amorphous entity begging for defined edges but as a social object worthy of study. Just as sociologists study societies, anthropologists study cultures, and literary critics study texts, the documentationist should study documents as socially-constructed objects. The attention must be on documents "for what they do than for what they mean or represent," an idea inspired by Buckland (301). Another Frohmann article "Documentation Redux: Prolegomenon to (another) Philosophy of Information," published in 2004, focuses on the problem of documents' function: to offer information. Frohmann questions whether information is contained within documents, or within the minds of the reader. Frohmann declares that objective information has no meaning, thus the document containing said information has no meaning unless projected upon. Even then, the reader faces tremendous influence, called "practices," that affects how he or she produces meaning from a document (396). Frohmann organizes this philosophy of information with four practices, largely based on Foucauldian principles: materiality, "embedded[ness]. . . in institutions," "social discipline," and "historicity" (397). More importantly, Frohmann proposes that documentation studies focus

less on the document and more on the information within the document. Frohmann offers two directions: focus on the phenomenology of the information and its construction, or focus on "how it is that particular documents, at particular times and places and in particular areas of *social and cultural terrain*, become informative" (405, emphasis added). Although Frohmann's attention to information is certainly noble, the direction encouraged by Helena Francke, who posits documents as studiable dynamic social objects, provides a more useful tool for the focus of this study.

Dr. Helena Francke believes that scholars "need to avoid a restrictive, essentialist definition of the concept [of a document]" and to instead "study the cognitive models that guide our way of viewing documents in different situations" (61). Francke's 2005 article "What's in a name? Contextualizing the document concept" finds echoes in Lund's eventual philosophy; Lund saw documents as delineated by the physical, mental, and social, and Francke highlights the mental aspect of the document through social psychology. Francke describes her approach:

What distinguishes my approach to document architecture. . . . is that I look not only at document structures and how they can be used by programs, but at how these structures relate to its social context, with regards to for example, time (in terms of both production, preservation, and dissemination), space, user interaction, and the interactions and relations between document. (62)

Here, Francke echoes the retreat from the document question to focus, instead, on the complex interactions between "aspects of the individual document. . . . when managing large document collections" (62). Francke, in particular, coins the phrase "document architecture," analyzing how documents function as parts of a whole (62). Francke references Roger Pédauque's 2003

essay “Document: Form, Sign, and Medium,” which proposes that documents be analyzed based on three criteria: form, sign, and medium (Pédauque 3).

Pédauque argues that while documents are not based upon materiality with the coming of the digital age, a document’s materiality still is extremely important as to how it is understood because form provides many unspoken rules about the relationship between the reader and the document. Pédauque calls these rules “contracts”: “Here, the document is viewed as an object of communication governed by more or less explicit formatting rules that materialize a reading contract between a producer and a reader” (4). For Sign, Pédauque says simply it is “the processing of the [document’s] content” to make the document meaningful (12). Finally, for Medium, it involves “analyz[ing] documents as a social phenomenon, a tangible element of communication between human beings” (17). Pédauque is largely concerned with how to correctly and adequately analyze documents through a consistent and unified document theory. How, for example, could a document theorist study an ancient scroll in the same manner as an online catalogue? Pédauque attempts to solve this problem by encouraging researchers to focus on the evolution of documents when facing massive document disparity and difference, and to always be aware that documents are “nothing more than [contracts] between people whose anthropological (legibility-perception), intellectual (understanding-assimilation), and social (sociability-integration) properties may form the basis for part of their humanity, their capacity to live together” (24). Overall, Pédauque’s criteria is very useful for analyzing documents because Pédauque identifies the need for an encompassing theoretical framework for analyzing documents, one that applies to both physical and digital texts. Pédauque recognizes how documents, especially in the digital age, are highly evocative platforms for interaction between entities, actors, and contexts. In other words, documents are no longer just dead material; here, in

the digital age, they are organic, living organisms of social, direct and indirect, human interactions.

The theory around documents improved extremely in the twenty-first century, and a brief foray will illustrate why documents are considered significant in contemporary academia and valuable objects worthy of study. After all, documents have an intriguing academic history, but what is the need for such an extended analysis? Maurizio Ferraris' *Documentality: Why It's Important to Leave Traces*, published in 2007, offers a way forward. Ferraris argues that documents have inherent social value because they are themselves social objects; specifically, documents are inscribed social objects and act as ways of physicalizing immaterial social contracts made between entities (164). Common documents, the ones we see the most often, offer inscribed information: a sale sign in a clothing store, for example, informs the reader of the sale itself, the discount offered, and perhaps other criteria. In the same way, a bank bond is an inscribed social act of debt adherence, of who owes the debt to whom. Thus, documents are not simple pieces of paper but extensions of social reality, of how society operates. Ferraris' theory, then, offers tremendous reason to consider documents valuable because they constitute an aspect of complex social interaction. But what about the digital documents specifically? When addressing the difference between paper and online documents, Pédauque reminds that "what is important is therefore to have a better idea of the concept of document in general, whose electronic form is both revealing and a factor of evolution" (24). That is to say, part of contemporary document scholarship should focus on "revealing" the electronic aspects of documents.

Scholars David Koepsell and Barry Smith, in their article "Beyond Paper," published in 2014, discuss how documents are phenomenologically different if they are online. For Koepsell

and Smith, a completed document turns an immaterial social act into a physical reference point: “Documents serve a performative role for example when the completion of a document creates a social object such as an easement or an award of damages” (222). The result is often a concretized social object, as in a marriage certificate or a passport. Importantly, Koepsell and Smith declare that electronic documents are unquestionably vulnerable to fabrication: “while the distinction between original and authentic can still be drawn in the realm of e-documents, this distinction is gradually losing some of its purchase because of the existence of perfect copies” (228). Indeed, the problem of authenticity is a major component of online document evaluation. Traditional paper documents “can be carried on your person and used for purposes of validation” (228). In addition, measures like “the chemistry of paper and ink,” all aim to prevent “fraudulent manipulation” (228). Alternatively, electronic documents “can be very easily copied and redistributed” leading to “perfect copies” maintained in simultaneous places (228). Essentially, Koepsell and Smith assert that easily copied electronic documents lead to fraudulence. The problem is how to reconcile insecure electronic documents: are online documents meant to provide evidence and authenticity? If so, how does one know if digital documents are trustworthy?

Jean Michel-Salaun, in his 2014 article “Why the Document is Important... and How It Is Being Transformed,” argues that documents used to be based on, and defined by, the information within. However, with the digital age, documents are now determined by *user experience*, a topic Michel-Salaun finds in the computer science discipline: “Among the new professions that have emerged with the web, that of ‘information architect’ perhaps best illustrates the new documentary state of affairs which now faces us. Information architects emphasize what they call the ‘user experience’” (196). Michel-Salaun is particularly interested in the user-experience

taxonomy of the seen, read, and known, all characteristics he takes from Pédauque, admittedly, but which all serve to act as an interactive experience with the reader. Michel-Salaun knowingly draws attention to how online documents are more software than they are book, and as such, any rightful evaluator of online documents should be aware of how documents interact with the reader to create a socially-engaging encounter; as he says, “Whatever its form and content, the document must have some social function” (192). Indeed, Michel-Salaun is accurate here, and as shown above and throughout the literature review, documents are undoubtedly *social* objects worthy of analysis and evaluation—but digital documents must be evaluated—and *evaluated differently*—because they *are* different, as Pédauque, Michel-Salaun, Koepsell and Smith, and Buckland all acknowledge. The proliferation of digital documentation possibilities in the twenty-first century exist beneath the umbrella term, Web 2.0. According to Michael Mazzei, “*Web 2.0* refers to the second stage of the World Wide Web (Web or WWW). This stage allows for more user interaction than the first stage of the Web, known as Web 1.0, did. Web 2.0 enables users to share information and collaborate through social media and other interactive websites.” Alternatively, Web 1.0 is “the stage of the Web prior to the existence of Web-based applications, social media websites, blogs, and wikis” (Mazzei). Most importantly, Web 2.0 differs from Web 1.0 through user interaction and engagement (Mazzei).

Narrowing the focus, Ann Majchrzak, an information science scholar at the University of Southern California, provides these directions for Web 2.0 researchers:

[F]or the IS (information science) field to advance, IS researchers should try innovative technologies and practices. Trying innovative technologies not only provides closer connections to the students, but often stimulates ideas for research as well as an appreciation of the challenges faced by users in working with new technologies. While

the authors focus on wikis, I would argue that this assumption should apply to all Web 2.0 technologies. Web 2.0 consists of much more than wikis: social networking tools, mashups, blackberries, MMORPGS (massively multi-player online role-playing games), online prediction markets, tagging, folksonomies, jam sessions, and virtual worlds. While I am quite supportive of the notion of a Wikipedia project on IS, I would suggest that IS researchers not be constrained to Wikipedia for creating publicly accessible IS projects.

(18)

Majchrazk's call-to-arms for Web 2.0 suggests that scholars should evaluate digital documents, as Buckland, Michel-Salaun, and Koepsell and Smith all proposed, but, more importantly, that the contemporary scholar should acknowledge the *online digital documents* gaining tremendous popularity in the twenty-first century. Specifically, Majchrazk says, "[scholars] should not simply try wikis, but treat them as a scholarly pursuit" (18). A wiki, according to Mark Dziak, "is a type of Web site that can be written and edited by its visitors. Wikis grow and thrive mainly through user contributions, so they encourage accessibility, participation, and collaboration." The original wiki was invented by Ward Cunningham in 1995 for "concept of Web software that could be created, used, and modified collaboratively" (Dziak). Despite the software origin, wikis "exist on a wide range of topics" and "[the term wiki] became a popular computing term for a publically modifiable Web site. The most famous application of the term was in the name *Wikipedia*, a massive online encyclopedia with millions of entries on a virtually unlimited number of topics" (Dziak). In evidence of wiki popularity, Harrysson et al. note wikis as one of the top three "appropriated technologies for developing strategy" in their decade-long study of 2,700 global executives' technology use and evolution.

Dr. Joseph Michael Reagle, a major wiki theory scholar, addresses the nature of wikis and the culture of Wikipedia in *Good Faith Collaboration*, published in 2010. Reagle, like Dziak, categorizes wikis as a type of collaborative culture meaning "a set of assumptions, values, meanings, and actions pertaining to working together in a community" (47). Reagle's appellation of the cultural to the wiki is connected to his understanding of media scholar Henry Jenkin's suggestion that "consumer-only fans of commercial genres (e.g. sci-fi) are now creators within their own 'fandom' communities" (47). Reagle's and Jean Michel-Salaun's earlier ideas initiate a new theoretical terminology for the wiki: wikis have become virtual communities *based around* documentation. Although the term *wiki* does not remind readers of the wiki's documentation function, wikis are still documents, so, instead, *wiki-documents* are enhanced documents. Significantly, Reagle's theory expands the wiki-document into a culture—documents have become a cultural center. The highly nuanced perspective of wiki theory promotes wikis as virtual online collaborative documents that act as "wonderful repositories of a community's practice and discourse" (51).

Reagle, as indicated above, suggests that the collaborative aspect is an important part of the wiki-document, and Reagle uses Michael Shrage's definition of collaboration as "shared creation" to acknowledge the wiki-document's reliance upon mutual complementary skills to "come to a shared understanding that none had previously possessed or could have come to on their own" (Shrage 40). Wikis, then, rely on user interaction to foster creation on a virtual level. After all, collaboration is not a new phenomenon, but wiki-documents follow Web 2.0's mantra of "enabl[ing] users to share information and collaborate," according to Michael Mazzei. Wikipedia, for example, is the new collaborative compendium that mimics the existing encyclopedia: "Wikipedia is both a community and an encyclopedia. And the encyclopedia, at

any moment in time, is simply a snap-shot of the community's continuing conversation. [This conversation] reveals what I call a good faith collaborative culture" (Reagle 1). Additionally, most wikis are not as extensive as Wikipedia. Instead, niche wikis cover smaller topics, such as a college course or a musician artist. Because anyone can create a wiki, wiki topics vary widely. As such, wiki-documents represent a worthy and fertile avenue of virtual collaborative documentation, and evaluating the wiki-document directly responds to Majchrzak's call for a theoretical analysis of wikis: "as researchers, we need to push ourselves in understanding what is different about wikis—in terms of affordances, functionalities, and behavioral use patterns—compared to existing collaborative technologies, which will help us derive new theories or refine our existing theories (18).

To begin to offer new ideas about wiki theory, a good place to start is common criticism. Wiki-documents, despite their popularity, contain their fair share of drawbacks. According to Dziak, "public perception of wikis also varies; many people consider them useful research tools, but others frown on their lack of authoritative information." Dziak continues, "critics have charged that the lack of central authority in a wiki means that wiki information is inherently not authoritative and therefore potentially unreliable. Many have cautioned that material on wikis should be confirmed before accepted as factual or correct." While wiki-documents "invigorate knowledge sharing," a common caution of wiki-documents is unverified or untrustworthy knowledge (Harrysson et al.). Web 2.0 is often guilty of being overly-interactive: "Web 2.0 offers features that Web 1.0 does not. The biggest distinction is that Web 2.0 websites are interactive and Web 1.0 websites are not. Wikipedia is an example of a Web 2.0 website because it allows visitors to contribute to entries and make alterations" (Mazzei). Balancing the positives and negatives of open virtual collaboration is ultimately an important task for wiki-documents

because "[wikis] cannot exist without user contributions; without active users to add and edit material, wikis would cease to be interactive and dynamic" (Dziak).

In an attempt to reconcile the wiki-document's authority system, scholar Milag Doueihi in *Digital Cultures* devotes a chapter to approaching the wiki's unique authority system as the "wisdom of the crowds" (78). Doueihi approaches digital culture, including the wiki-document, as an evolving city of interactors all longing for increasing authenticity to mimic reality, so that geography becomes cybertography, and a wiki-document community can mimic a real-world city becoming a sort of digital city (53). The wiki-document's authority style relies on a shared communal sense of participation and togetherness, though this style does not solve all the problems. Doueihi even notes that despite Wikipedia's success, the site "has to manage its own version of digital violence, represented by slanderous or inaccurate information about individuals, events, and historical narratives" (78) and which Dziak also mentions as "vandalism and conflict between users." Doueihi's comments remind that wiki-documents impact the natural authority of information publication and storage. Authority is not an uncommon aspect of documentation as any document presupposes a hierarchy of creation. The agents at play are, at their most basic, creator and reader, but wiki-documents are unique because of their hierarchical malleability.

Traditionally, information centers on institutions, based on prestige, and enacted through economic resources. For example, *Encyclopedia Britannica* (EB) has been an information authority since its inception in 1768, but *EB* limits who can add to its content. *EB* is a *bona fide* corporation, complete with multiple brands and divisions, a prestigious board of directors, and a group of contributors ("Encyclopædia Britannica, Inc. Corporate Site."). *EB* epitomizes a centralized information authority. The centralization is strategic, certifying expertise, authority,

and erudition in the product, which convinces customers to trust *EB* as a source for information. Documentation scholar Tim Gorichanaz, when speaking about document authority, asserts persistence as the basis for authority: "we inherently understand things that are persistent as trustworthy. Documents are persistent, and they also have a long cultural history as sources of authority and trust" (302). Applying Gorichanaz's ideas to institutions, *EB* lineage implies trustworthiness, and the longer the institution survives, the greater its authority grows. Gorichanaz uses media scholar Robert Cialdini's theory of influence to assert "people tend to obey figures of authority simply because they are figures of authority" (303). Obviously, *EB* is not successful solely because of its authority. Instead, *EB* represents the predigital past's centralization of authority and control when documents were seen as fixed objects. With documents now seen as fluid, document authority also has become fluid, leading Gorichanaz to ask "What sort of documents are authoritative?" (303). As documents, wiki-documents are valuable examples of alternate authority because as user-created, managed, and edited documents, wiki-documents directly oppose centralized information and authority. Particularly, wiki-documents promote expertise rather than formal certification.

The absence of a central authority raises the problem of trustworthiness, which Gorichanaz above reminds is a primary aspect of documents; that is, without a clearly defined and persistent authority, most would not see wiki-documents as credible. Trustworthiness can be problematic for a wiki-document operating in an open environment where the barriers of entry for creators are low—and are supposed to be. After all, the wiki-document is based on an open-source content management system, purposely differing from the traditionally closed style of its predecessors. There are many possibilities for disingenuous, biased, or unscrupulous individuals to tarnish the wiki-document, though most wiki activity is monitored, and editors are both swift

and dutiful in their edits. Still, the wiki-document is prone to biases when creators hide their agendas, and even more possible is collaboration between editor and creator to form an almost nepotistic relationship (Gorichanaz 302). The wiki-documents, then, have problems with trustworthiness where one bad part may ruin the whole. Wikis themselves exist as a cycle of endless checks and balances due to the lack of a central authority which allows for both freedom and violation.

The freedom of the wiki includes the variety of wiki subjects and topics. For example, wikis can focus on anything from psychology¹ to the video game Minecraft.² There can be a discrepancy in the examples listed: the detailed entries of many niche wikis require exposure to content rather than formal education, so niche wikis must rely upon the community itself—regardless the risk for violation or bias. The traditional style of information publication excludes many expert individuals who lack official certification and, thus, are excluded. For example, famed TV show *Law and Order* has a wiki to which any fan or viewer can add content.³ There is no official certification for expertise of a TV show, so the *Law and Order* wiki relies on smart individuals to participate, discuss, generate, and edit content. Because certain wiki-documents lack central authority, the first concern, as Gorichanaz suggests, is how wiki-documents prove their trustworthiness.

The problem of credibility is important not only for wiki-documents, but for the Internet as a whole. The digital age, though beneficial in many ways, has physically removed the user from many interactions, often helping to increase productivity, reduce cost, and increase adaptability. However, the disconnection renders many online users not confident about the interactions. Still, society undoubtedly has accepted the ease and benefits of the digital

¹ See the Psychology Wiki (http://psychology.wikia.com/wiki/Psychology_Wiki).

² See the Minecraft Wiki (http://minecraft.wikia.com/wiki/Minecraft_Wiki).

³ See the *Law and Order* Wiki (http://lawandorder.wikia.com/wiki/Law_%26_Order_Wiki).

experience. University of Syracuse Professor R. David Lankes explains this shift as “only partly a response to citizen demand for more self-service” (668). Society’s push towards self-sufficiency is risky considering how limited online decisions are as compared to physical decisions. Lankes notes that typical decisions, as in buying a car, were based on tangible information, such as paperwork and physical judgment, examining the car, feeling for imperfections, or recognizing problems or flaws. However, online decisions are detached from “physical sources,” and removing this tangibility from sources eliminates “physical examination and testing”—the natural basis for judgment (670). In short, without being able to physically interact with an object, the basis for judgment is limited, placing the majority of the decision-making process on provided information.

Here, then, is where information—digital information—invokes problems of credibility, for there is no such thing as an *online judgment* because there is no way to *judge* something online; instead, online decisions are based upon information—so the attention turns to how to determine information credibility considering the level of self-sufficiency online; as Lankes supports, “people are more self-sufficient in decision making, but also more dependent on the information that others are providing to them” (671). Online information is mediated through “software tools,” so no information, as mentioned before, derives from a physical origin. The result is problematic as Lankes describes: “This is the great paradox in information self-sufficiency on the internet: end-users are becoming more responsible for making information determinations, but because they have fewer non-mediated cues [. . .] to work with, they are becoming more dependent on the information being provided to them by others” (671). The collaborative wiki, a space of grounded, mutual information interaction, has grown in popularity since the twenty-first century, largely operating through what Lankes references as Gordon

Pask's "conversation theory," where "learning and knowledge are gained through the interaction of two agents around ideas as they go back and forth describing an idea until they reach agreement. This common agreement can then be used to develop new understandings and new knowledge" (671). On a wiki-document, users post their views, beliefs, or knowledge on a subject; other users respond, agree, disagree, and make suggestions; and this cycle continues until it creates a fixed, stable, and accepted piece of information available for publication—"knowledge acquisition through conversation" as Lankes puts it (677). The wiki-document's own conversation theory creates information in a localized way. Wiki-documents do not create universal truth so much as they create an accepted truth in often niche subject areas. Although the wiki-document is based on collectivism, community, and collaboration, many historical projects have been collaborative. For example, in the seventeenth century, the *King James Bible* was translated, edited, and assembled by English writers, editors, and translators. A contemporary and notorious example is WikiLeaks, a collaborative website known for publishing high profile news leaks and secret government documents. The distinction is not collaboration alone: documents today are mutable while documents historically were immutable.

The wiki-documents' fluid collaboration has fewer barriers and restrictions, allowing originally-alienated individuals to participate and interact. This is true whether the wiki is about something as serious as government secrets or as trivial as a TV show. The popularity of social media sites proves humans' desire for community interaction; as Lankes says, "Increasingly users are looking to user-submitted comments, editorial reviews, and open conversations on a given topic, artifact, or idea to determine trust and expertise" (677).

Most importantly, Lankes recognizes that online interaction marks a shift in online determination of authority. Lankes delineates the shift as one from authority to reliability, since

“Of the two, reliability is a much more powerful concept, in that reliability is one path to becoming an authority, and lack of reliability can destroy one’s authority” (680). For Lankes, trust and authority are not the same: when we trust something, we give it authority. Traditional authority posits its own authority through education and expertise while wiki-document communities create their own authority through discussion and interaction. Allowing the masses, or just disparate groups, to manage information has increased productivity in information creation. Even though the shift toward reliability over expert authority is significant in and of itself, what is of importance here is how the shift influenced wiki-documents, particularly, in how the shift has opened up digital conversation spaces. Because trustworthiness is always a factor with online documents, reliability has become the new style of information authority, as Lankes says, “Authority and reliability also have halo effects, meaning that a person can be seen as an authority in one area, may be presumed to be an authority in other domains as well without proven performance” (681). Lankes notes that authority often overstretches its own ethos because of its isolated and centralized qualities, so the countercultural style of the Internet and niche topics of the wiki have rejected it in favor of a conversation style, which the wiki, in particular, facilitates (681-682).

Conversation and interaction are at the core of the wiki-document which has rejected traditional authority. The wiki-document could offer general information valuable to mass audiences or niche information to small communities. Wiki-document information does lend itself to Lankes’ notion of reliability because the information is not stable. Lankes says of information stability: “In authority, as mentioned, pre-existing agreements are in place and assumed: the conversation is over. In reliability, by contrast, the conversation is open and ongoing. Users are seeking out information and other people to come to a credibility judgment”

(681). In niche wikis, for example, most participants would shun an authoritarian-based rule over the media as users' pride and passion simply contrasts with traditional authority. Instead, wiki-documents operate within themselves, forming pockets of information deemed reliable through repeated conversation and interaction. The whole process is highly successful because it plays to users' desires to engage in a community based upon a shared interest or topic, plus users feel part of the community's success. Considering the exclusivity of traditional authority, the wiki-document embraces a model of authority that allows for more community involvement and interaction. While editors do function as authority, their authority is unstable because anyone can be an editor for an open wiki-document: anyone can *edit* the editors. Writers' decisions are checked by editors who are checked by other writers and editors, and so on. At no point is anyone higher in authority than the other, so the conversation continues until agreed upon, and then the information is accepted for the time being.

Interestingly, the lack of authority in a niche wiki boosts the measure of its community. Lankes' mention of an "open conversation" illustrates how information in niche wikis is unstable. This style is unacceptable for certain situations such as legal proceedings or medical-based decisions, but for the wiki-document, information instability actually prolongs the community's existence. After all, without something to discuss, an intellectual community will fade. Luckily, the wiki-document community continuously converses, evaluates, decides, and re-evaluates information, producing an almost never-ending stream of activity for the community, as Lankes' describes "The internet is, in a very real sense, an agreement, and an ongoing conversation where organizations and individuals agree to share information" (674). In essence, the wiki-document community, reliant on conversation and interaction, produces reliable information without the need for an overseeing authority. The wiki-document solves the problem

of trustworthiness by *relying* upon its members to be integral, participatory, and conscious members of the community in order to create an accurate, yet unstable, information environment.

The success of the wiki-document's participatory style does cause tension when the shift from traditional authority to reliability allows for more abusive opportunities. Does the increased freedom of collaboration facilitate abuse? Eminent digital media scholar Joseph Michael Reagle evaluates Wikipedia's collaborative basis in his book *Good Faith Collaboration*. Wikipedia, perhaps the largest online repository of encyclopedic information, is a far cry from niche wikis, but Wikipedia still is a wiki, so the same collaborative principles apply. Reagle terms Wikipedia as part of *good faith collaborative culture* where "a technology-inspired vision [seeks] to wed increased accesses to information with greater human accord" (1). The dangerous part appears at the end of Reagle's definition, for "human accord" is not without its infractions, especially on the Internet where anonymity and responsibility for content may be problematic. Often, arguments and disagreements form because of information fluidity, and tensions rage through overly-discussed opinions. Reagle accurately reminds that there is a difference between collaboration and cooperation, the latter being problematic without the presence of a central authority (46). In a large-scale wiki, such as Wikipedia, conflicts over controversial topics are bound to happen, so the interaction and conversation among the community is, in a way, the wiki-document's self-righting mechanism.

But how should information be presented as to diminish controversy in the community? Reagle tells of Wikipedia's neutral point of view (NPOV), saying, "The stance of neutrality implies that contributors should abandon efforts to convince others of what is right or true, and instead focus on a neutral presentation of what is commonly understood about the topic" (53). Even though Wikipedia embraces NPOV, Reagle questions NPOV's approach to information,

responding, “there is still a margin for disagreement about the proportionality of even ‘neutrally’ presented views” (53). The NPOV remains a controversial practice because it supposes that neutrality is possible in an environment that thrives upon opinion. All readers are familiar with sensationalized news headlines, opinionated blog posts, and unprofessional Twitter posts. Still, most niche wikis do not deal with controversial topics. That said, the *South Park* Wiki, based on the long-running, mature and animated TV show, for example, inevitably will struggle with the community guidelines against vulgarity. Where the niche wiki differs from Wikipedia is in reader demographics, for the niche wiki should rightly presuppose that its readers are involved, and want to be enticed further, into the tensions of its subjected virtual world. Alternatively, Wikipedia’s mass audience demographic requires a neutral information presentation in order to facilitate reader interpretation and personal evaluation. The niche wiki avoids this controversy, for its niche status and limited authority allow for greater play of information, and thus, more immersion in its virtual world. In short, while NPOV is necessary for mass readership wikis, niche wikis need not worry about objectivity because it would tarnish the immersive tension that entices readers to virtual worlds in the first place. Therefore, the lack of traditional authority may pose some problems, but, paradoxically, not every problem is detrimental for the niche wiki.

At the core of the wiki-document is information, and having discussed how the wiki-document upsets traditional authority, another effect worth mentioning is how wiki-documents upset traditional information demand. Each niche wiki focuses on a particular virtual world, and users document that world through a variety of different media, including text, image, video, and audio, but not all information is created equal. Obviously, information divides according to multiple distinctions, such as popularity, as in how appealing is the information to millions of people, or importance, as in how much significance is placed upon the information in order for

entities to function. Wikipedia is one of the most popular sites on the Internet because it provides a tremendous amount of desirable information. But what about the niche wiki and its information? To some degree, niche wikis, just on the basis of their Internet popularity, offer less valued information generally speaking. This is not to say their information is useless as it is certainly valued by a specific demographic of fans and players or viewers—just that the *Mortal Kombat* Wiki only offers information valued by players of the game series, a rather small demographic. As a result, wiki-documents do something significant: they become repositories for outcasted or rejected information.

Fandom wikis provide important information for worlds that very few people care about or have experienced. Being knowledgeable of the game *League of Legends* offers very little practical value; the game is, after all, just a game. Yet, fans knowledgeable in their favorite media can utilize the wiki to offer their knowledge to an appropriate audience. Virtual worlds do not have the same merit as other academic disciplines. Initially, the astute fan of *Grey's Anatomy*, for example, had no place to offer his or her knowledge, but luckily, the fandom wiki has become the necessary pocket for niche media information storage. This niche information, then, has a digital place where it is accepted, encouraged, and enjoyed because fan wikis allow in more voices. In this way, too, those users who were once thought to only have useless information are now valued based upon their knowledge, having been given an adequate display space. In the fandom wiki, the *othered* becomes the *accepted* and, more importantly, the *valued*. User information that is overlooked by mainstream standards are elevated by the wiki's niche acceptance. Perhaps another approach is to say that the fandom wiki upsets traditional authority by appreciating the generally unappreciated.

The wiki-document's sweeping changes to authority illustrate how placing authority in the hands of the many can offer tremendous progress and follow unorthodox participation guidelines, because they are open to any and all user participation. Wiki-documents are open access and encourage user participation with few barriers of entry. As documents and in accordance with Ferraris' theory, wikis are more than documents: they are socially constructed objects worthy of further study that, as Reagle reminds, create a shared experience community. The social aspect of the wiki-document implies that wiki-documents are a part of society. Famed media scholar Marshall McLuhan claimed "the medium is the message" and posited that "the personal and social consequences of any medium. . . . result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology" (13). The wiki-document medium allows users to extend themselves into a content community, illustrating how wikis operate socially and fulfill the need for human communication. McLuhan's original book title was supposed to be *The Medium is the Message*, but a typesetting error published it as *massage* (MarshallMcLuhan.com). Ironically, the term *massage* is more appropriate in this case because wiki users are *massaged* and made to feel good about themselves by the medium of the wiki-document.

But just as a society becomes increasingly more virtual, wiki-documents follow by documenting virtual worlds. Fandom wikis, for example, exist as the virtual of the virtual. That is to say, these fan wikis are virtual and document an already virtual world. In 2009, Ann Majchrzak of the University of Southern California reminded information science scholars that new media also includes "virtual worlds," around which a large group of wiki-documents center (18). There are thousands of fandom wikis that correspond to various fan cultures, making up Fandom powered by Wikia, a network of popular culture and media wikis that range from the hit

TV show *Game of Thrones* to the sensational Japanese video game series *Pokémon*. These virtual worlds, such as an online multiplayer video game, for example, are similar to wiki-documents because they themselves are virtual collaborative spaces—the difference is that wiki-documents *document* while virtual worlds *experience*. Fandom wikis are a new level of wiki-document that connect fans to a new level of virtual reality: they connect fans to a documented virtual world about a virtual world. To some degree, the fandom wiki experience is virtual reality of a documented virtual reality of a virtual reality.

Fandom wikis reflect a larger digital movement towards online, virtual groups. The terminology varies, from *community* to *culture* to simply *space*, but the acknowledgment of virtual communities is contentious, says Nancy K. Baym, author of *Personal Connections in the Digital Age*. Baym helps to both define a virtual community and acknowledge its shortcomings: “Many online groups develop a strong sense of group membership. They serve as bases for the creation of new relationships as people from multiple locations gather synchronously or asynchronously to discuss topics of shared interest, role play, or just hang out” (72). Wiki-documents then act as document-communities, where people come together through the wiki in order to interact and engage. To emphasize, Baym does warn that “The mere existence of an interactive online forum is not a community, and those who participate using one platform may comprise very different groups,” illustrating that before classifying a wiki as a community, it is important to see how the wiki-document community operates (72). Baym uses these characteristics to constitute a digital community: “sense of space, shared practice, shared resources and support, shared identities, and interpersonal relationships” (75). In the case of fandom wikis, the wiki operation system consists of users and creators: that is the people who create, edit, and format the articles as well as the people who consume them. The interaction

comes through the articles and pages themselves, but users cannot interact directly, which problematizes the wiki-document as a community. Users do have a *space*, the site itself, and shared practice, the consumption of a media. As far as an identity, most fan cultures would consider themselves *fans* of the particular media, so there is a shared identity through labeling with the Trekkies (fans of *Star Trek*) or Sherlockians (fans of the *Sherlock* TV show). More importantly, the biggest element to characterize wiki communities is the sharing of resources—information being the chief resource.

Fandom wikis assemble a massive amount of niche pop culture information. As an example, at the time of writing, *Wowwiki*, the wiki for the MMORPG *World of Warcraft*, offers users an enormous 293,422 pages and 104,682 articles on its site (*Wowwiki*). Fans, players, and enthusiasts flock to these wikis considering how much mass knowledge they offer, especially if the target media is not very popular in the mainstream culture. Does this make them a culture? In some ways, it does, for wikis offer the identity, space, practice, and most important, the resources to be considered a virtual community, though Baym's antithesis for virtual communities does note that those within the wiki community have no access to direct communication. Baym warns that "Digital technologies hold the potential to engage us more closely in meaningful communal connections but, inasmuch as they might take us away from embodied local interactions, they could threaten to damage the real thing" (73). Fandom wikis do act *like* communities in that they offer information to supplement the actual fandom community and provide a resource that intensifies the culture through knowledge, insight, and information. For example, many gaming wikis offer new players strategies for boss encounters, information on character development, and warnings about potential pitfalls. Knowing this information would benefit a member of the community and help him or her participate more fully in the

community itself. As small virtual communities, fan wikis form a significant part of the overall pop culture community by providing invaluable information to members, so wiki-documents operate as functional parts of a community, either virtual or physical. According to the writings of Lund, the social aspect of the wiki-document is a massive network of relationships worth analyzing further.

The players in the wiki-document culture are dialogic, consisting of the consumer and the creators. The line between these two groups is thin because the wiki, a creative space, reduces the difference between the user and creator. As with most wikis, the user can become the creator whenever he or she wishes, and the lack of difference, or ability to switch roles, poses an interesting opportunity for cultural entries. For most niche cultures, the culture often exhibits some barriers of entry which vary with the culture itself. For most video game cultures, there is owning the game, playing it completely, and paying for the game and game-playing station. Alternatively, rock climbing, for example, would incur fees from equipment, to clothing, to classes, and transportation.

Interestingly, the wiki culture does not subscribe to these boundaries, though there are requirements still in play. First, as mentioned above, fandom wikis do not create a culture themselves but, instead, inform a larger fan-culture, so the wiki acts as a barrier to entry in and of itself. Second, the wiki acts as a barrier because the presence of a digital wiki supposes the need for low barriers of entry. This second point requires some historical context. The fandom wiki comes from a place of community interaction through the Internet. In the introduction to their book *Fan Fiction and Fan Communities in the Age of the Internet*, the editors Karen Hellekson and Kristina Busse trace the history of fandom communities to the digital age:

Perhaps the most important technological advance [. . .] is the advent of the Internet. The transition of fandom to the Internet occurred during the early 1990s. Before then, fandom was a face-to-face proposition [and transmitted] from person to person through enculturation. Fan artifacts were physical, and geographical boundaries were often an issue. (13)

The technology of the Internet allowed for greater dissemination of information through easier means. After all, some fandoms lack the ability to disseminate information widely without adequate crowd-funding of resources. For every *Star Trek* convention, for example, there are hundreds of other niche groups operating at a fraction of the popularity. The wiki provides niche cultures with the information that the culture and group requires, and in order to do that, the barriers of the wiki must be low enough for anyone to enter and participate, the latter referring to sharing information, presenting materials, editing files, and collaboration on documents. To return to a previous point, the wiki-document, in some ways, neutralizes hierarchies in a culture by allowing users to perform any role at their discretion. In short, the wiki culture offers an equality to users' roles.

What occurs then is an information equilibrium that brings the culture together by fostering deeper conversations and interactions. For example, by exploring a video game wiki, low-level players are able to interact with and relate to high-level players. The low-level players can access the wiki, inform themselves as to what the high-level players are, or have, experienced, and then interact accordingly. The equality offered here promotes rapport, camaraderie, and equal communication. Of course, reading about the experience and actually *experiencing* the experience are completely different and could pose further problems for members unwilling to acknowledge information and experience. Still, the wiki-document creates

a unique online space for member interaction that contributes to the beauty of the fandom community.

Users of any fandom community have the shared experience of embracing a virtual world together. Virtual worlds themselves are alluring because they operate and mimic reality. However, thinking that virtual worlds come close to mimicking the sheer intangible complexities of reality is absurd. There is an obvious disconnect between a player's real life and the character's life in *EVE Online*, for example. Despite this stipulation, any dedicated MMORPG player may insist that many role-playing games act as a second life, so the similarities are multitudinous enough to form a strong basis for analysis. Indeed, wiki-documents operate as fluid encyclopedias for popular alternate worlds, providing a much-needed resource for highly niche, unpopular, or gargantuan virtual worlds. For example, the *Harry Potter* series has seven books and eight movies; the *Supernatural* TV series has twelve full seasons; and the *Final Fantasy* video game series includes thirteen main titles, seven alternate titles, and thirty-two spin-off games (Wikipedia, "Final Fantasy"). Media franchises are becoming behemoths, resulting in complicated, engorged worlds that fans want to know, explore, and understand. Even after consuming all that media, the audience still turns to wiki-documents for information, ideas, and comprehension about the virtual world.

In these ways, virtual worlds are mimicking real life by becoming more and more complex and convoluted, forcing wikis to keep up with information demand; what Wikipedia is to real life, *Wowwiki* is to *World of Warcraft*. In addition, the wiki also offers something that often goes beyond the obvious, for virtual worlds operate on knowledge that is intrinsically hidden from players. This information can be gated based upon simple exposure or experience, as in the fact that fans cannot know what character dies at the end of a season until all episodes

are viewed, or players cannot know an enemy strategy until they experience the fight firsthand. Gated information is a major part of a wiki-document's knowledge pool, and this hidden knowledge is important for would-be members. In "Information Creation and the Notion of Membership," Ciaran B. Trace's classroom research demonstrates the ways that document creation in a school setting fosters hidden social knowledge between students. Trace begins by mentioning the distinction between the "realities that underlie human interaction (our so called 'stock of knowledge'), and the notion that there is a 'hidden curriculum' in schools" (143). Trace's declaration of this distinction certainly applies to the fandom culture and the complex string of social interactions that constitute fan bases. The problem is that, as in real life, some information is just not available for myriad reasons, which is where wikis both foster communication and provide necessary insight. Of this hidden knowledge, Trace claims that "the research on the hidden curriculum in schools has suggested that what students learn revolves around negotiating relationships with others, meeting expectations, dealing with authority, and how to simply 'get through the day'" (145). This same hidden knowledge exists in fan cultures both large and small because they are based on a culture of interactions, practice, and knowledge: whereas in school, the practice is six hours a day, five times a week, and the knowledge generally is math, reading, science, and social sciences; fandom practices are dynamic and the knowledge is just as extensive, though not as imperative.

Trace reminds that documents are social objects which "serve as relationship building entities" in how they foster or force interactions (155). Previously, hidden cultural knowledge fostered one kind of interaction. Another is how the wiki fosters these interactions through the medium of the wiki itself. Noted by Busse and Hellekson in their introduction to *Fan Fiction and Fan Communities in the Age of the Internet*, "Fannishly informational Web sites have been

supplemented with the hyperlink intertextuality of *wikis*, a medium perfectly suited for providing factual, cross-referenced data” (16). Busse and Hellekson acknowledge wikis' accessibility and intertextuality; after all, when it comes to virtual worlds, images, videos, and other media are required to provide comprehensive and accessible information. That being said, the *wiki experience* is of importance here: when browsing a fan wiki, the experience is engaging. This works to the wikis' advantage as the media they inform is also interactive. This interactive browsing style recalls scholar Jean Michel-Salaun's claims about the digital reading experience: "The user is immersed in an environment where information-carrying objects communicate with one another and spawn new information-carrying objects, so that the reader must work hard to maintain consistency in his informational experience and to avoid cacophony and loss of meaning" (196). Michel-Salaun's comments apply perfectly to the wiki-document where the informative experience is affected by the interaction of information itself *then interacting* with the user. Users have the opportunity to have information presented to them with much less effort than in traditional research. For example, research on a particular TV show character might require knowledge of his or her parents, so the wiki-document offers convenient hyperlinks to the parents' respective pages. This immediate availability of research through hyperlinking is valuable when the subjects of fandom wikis are vast imaginary worlds, but more importantly, the availability of information, such as the images, videos and hundreds of underlined hyperlinks, leads to an informative experience that privileges engrossment of information.

What should not be devalued is the significance of the user experience. Experiencing a wiki-document is, in and of itself, an interaction with a document formed through sociality. As a performance of information, the wiki experience begins to actually mimic the complexity of the world it is informing, leading to a relevant theory of how wikis actually go beyond the point of

information. That is to say, wiki-documents offer an engrossing experience through information in the same way their subject media offer an engrossing experience through narrative and aesthetics. Jean Michel Salaun, when speaking of the philosophy of digital experiences, declares that “the distinction between performance and document fades, as does that between communication and information and between conversation and publication. We record, discuss and publish with one click” (193).

Therefore, wikis operate as cultural information repositories that support virtual worlds by providing a platform for users to enrich their experiences through additional knowledge. Are wiki-documents a culture in and of themselves? Perhaps not, but wiki-documents do offer an experience that enriches the interactive media experience through insightful and helpful information. Wikis show us that while expensively produced video games, for example, would seem to be an engrossing enough, the information operating underneath, around, and in between the aspects of the game ultimately produces a truly interactive experience. As complex social objects, wiki-documents push against constrictive definitions by continually offering new aspects of their construction and destabilizing traditional notions of information storage.

Fandom wikis operate as the information of a culture, of the unspoken knowledge of a virtual world. They make tangible what is intangible; they make real what is unreal. Wiki-documents provide evidence of the worlds with which so many fans are captivated, acting as a measure of proof to worlds immaterial and virtual. In this sense, fan wikis operate congruent to Ferraris’ theory, by acting as a physical (or digital) proof to the information of a virtual world. Still, the phenomenon goes further, for wiki-documents interrupt experience by affirming understanding and order. Wiki-documents upset the natural privileging of experience over observation by rendering the experience impotent unless fully understood. For example, would

the *Harry Potter* series still be entertaining if a large amount of the lore, narrative, and details were unavailable? Perhaps not, so wikis become *experience enhancers*. To say wiki-documents are simply digital documents would be correct on a basic level, but would ignore the wiki's advancement of the viewing or interactive experience—for as shown, information and understanding are fundamental to a virtual world's effect and captivation. Wiki-documents' cultural aspects illustrate that documentation goes far beyond providing evidence: documents can create new spaces for cultural interaction, discourse, and engagement all through the dynamic aspect of online information forums.

The wiki-document ultimately creates a gathering space by allowing the expression of niche information and fostering a space where new ideas are tested. In essence, wiki-documents exist as testaments to the optimism of the digital space. Scholar Milag Doueihy figures the wiki-document's space as a digital city as follows:

The digital city is a new landscape that, as we have seen, by instituting new practices calls for new laws that can accommodate the nature of the digital object and the ways in which it circulates within the digital environment. Access and openness are the vehicles for more than just sharing files and easy communication. They are the emblems for potentially radical social and political changes on a global level, for they legitimate new values. The digital environment is a new form of a city that has yet to finalize its ultimate shape and define its frontiers. (82)

One feels the optimism and appreciates the power of the wiki-document after such a description, for the digital city, including all wiki-documents, is a powerful illustration of the power of documentation, collaboration, information, and technology. The power of the Internet, the opportunity of collaboration, and the landscape of the wiki-document facilitate considerate

growth for how information is shared and spread in Web 2.0. Despite the obvious, problems of the digital age such as trustworthiness, are dealt with or tolerated despite criticism. For example, scholar Astra Taylor notes in *The People's Platform*, that although digital culture rests upon liberated and inclusive notions, the Internet at large faces an encroachment of “the commercialization and consolidation of the digital sphere” (38). The success of the “new media model” does not “sweep away all the problems of the old-media model” (38). Taylor’s attitude reflects that of a large population that views digital cultures negatively or poorly because the population sees digital cultures as failed in some way, or because the population worries about digital cultures' inability to assuredly uphold responsibility online. In response, the digital age offers considerable theoretical opportunity for wikis and Web 2.0. By recognizing how to better improve the real-world through an unlimited and supplementary resource, the wiki-document exists as the new virtual collaborative compendium for documentation and illustrates an optimism about the digital age and digital cultures.

Although the parameters of documentation have become permeable in the digital age, this study, as a response to Majchrzak's call for Web 2.0 theory, proves digital document analysis is undoubtedly possible and valuable. This study has shown that one particular example of a digital age document, the wiki-document, operates in ways far beyond what is expected of the traditional paper document. Recalling Ferraris’ statement that documents are inscribed social acts, the wiki-document operates both in and out of that statement: the wiki-document moves dynamically within the ever-changing confines of the Internet because of the fluid nature of communication and writing. While physical documents can be reduced to their registered act, the fluidity of online documents calls for the deeper analysis, echoed by Buckland, Michel-Salaun, and Koepsell and Smith, that is offered in this piece. In the digital age and in accordance with

Ferraris' theory, online documents will continue, to some degree, to register acts even though, more and more, acts are harder to identify. Perhaps this is why people are uneasy with the Internet as a whole: the Internet's dynamism prevents direct connections of object to act. In any case, the wiki-document moves beyond this distinction by becoming Doueih's digital city and registering more phenomena than simple existence.

The cultural aspects of the wiki city register the communication, values, ideas, interactions, memories, thoughts, and attitudes of its citizens to create a unique virtual space. In it, information is decided upon, rules are created, structures are enacted, styles are established, and standards are formed—as would happen within any culture, within any community, within any city. As well, the wiki city establishes its own authority style far different from the traditionally central authority style in order to foster a more equal digital environment that makes the outsiders insiders, accepts typically undesired information, and allows in more valuable voices. The wiki city, then, is a impressive offering of alternative communication and collaboration that showcases profound social relationships in the digital space. In another way, the wiki city demonstrates that digital documents can create intangible yet fixed areas of exploration—both determinate and incorporeal. Digital documents are spaces where information becomes the basis for a playground of social reality. Here, *playground* is the most appropriate term as the wiki city exists as an unrestrained space for exploration unavailable in the physical reality. In the wiki city, there is opportunity for an inverting of typical reality, where the rejected become the accepted, the other becomes the common, and the excluded becomes the included. In fandom wikis, for example, there is a novel inversion of reality that shows digital documents' exploration of new ideas and thought. In accordance with Ferraris' theory, the wiki city uses information to prove its existence and, considering the subjects of many niche wiki-documents,

such as fan wikis, the blurring of reality and cyber-reality becomes increasingly thin. The more contributors write about something such as the fantasy world of *Harry Potter* or the *World of Warcraft* universe, the more they discuss and argue over the characters of *Game of Thrones* or the lineage of Doctor actors in the *Doctor Who* series, the more they publish and edit and create and write about the vastness of the *Pokémon* or *Star Wars* worlds—the more real virtual worlds become. The wiki-document, then, exists as the information foundation for the registering of virtual worlds and the cities build around them—all to remove the line between fantasy and reality.

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