Mapping as an Analytic of Stabilization in Digital Interfaces: An Annotated Bibliography

Recent scholarship in the study in digital interfaces examines the ways that users are afforded the ability to invent meaning and construct discourse through the free navigation and connection of multiple pieces of information. Assembly and rearrangement of information fosters new pathways for invention as interfaces allow users to flexibly meet an influx of ever mobile information (Rice, Brooke). The network comes to be defined by it multiplicity, mobility, and malleability. In navigating databases that are always in flux, users map their understanding by holding artifacts, events, phenomena, and other information together.

Yet users’ cognitive mapping of the information they find in databases is performed within the confines of the digital interfaces that mediate the interaction between users and information (or other users). Digital interfaces such as Google and YouTube operate as gatekeepers to the information that users can arrange in order to invent new meaning. Since these interfaces play such a key role in the development of ideas, their influence on the ability of users to arrange information is of primary importance for investigation.

One major area of concern involving interface affordances and limitations on users’ ability to map information is the element of transparency – as standard logics of digital interfaces become naturalized, the ways that they influence the user tend to become invisible to critical inquiry. Serious examination of these interfaces requires an understanding that interfaces are not deployed innocently. Rather, they are imbued with ideological and political stances that represent cultural positions (Manovich, Selfe and Selfe). Through continued everyday use of certain interfaces, I question how the continual practice of using interfaces that place limits on rhetorical invention serves to reinforce their ideological and political positions.

In *Lingua Fracta: Toward a Rhetoric of New Media*, Colin Brooke proposes an update of the classical trivium better equipped to handle the demands of the multiple, mobile environment of new media. This language for discussing the rhetoric of new media is useful way to characterize the ideological influence of the interface on users. He describes three levels of scale that he calls ecologies, a term that accounts for the way that the changing network impacts an interface after it has been implemented. These levels of scale updating the classical trivium are ecology of code, ecology of practice, and ecology of culture. Ecology of code, which expands beyond grammar to include visual, aural, spatial, and textual elements that contribute to an interfaces design, is of least concern to me. My interest lies in connecting ecology of practice with the higher scale ecologies of culture. For Brooke, ecology of practice includes both the design of an interface in practice, as well as those practices that are made possible by that design. Also included are the ways that users may repurpose an interface and exploit its affordances for uses unintended by the designer. Ecology of culture is the balance of ideological and cultural assumptions on several levels (interpersonal relationships, discourse communities, global communities) that are carried out by the implementation of the interface. While Brooke’s book concentrates on ecologies of practices as new ways of envisioning the rhetorical cannons, it is my interest to investigate how these practices that are afforded by the interface and manipulated by users support certain ideological views in a networked environment that is in flux.

The sources contained in this bibliography explore the rhetorical impact of mapping, interface, or, more broadly, naturalization of ecologies of culture. It is arranged in four sections, each section arranged alphabetically by author. The first section contains only one source,
Cynthia and Richard Selfes’ “The Politics of the Interface: Power and Its Exercise in Electronic Contact Zones.” In this project, it is my intention to update Selfe and Selfe’s work for our current historical moment. The other texts in the bibliography will hopefully lend support to this effort, as two decades of scholarship contributes to our new understanding of interface. The second section includes two texts that will operate as the foundational theoretical scholars with which I am most engaged. The third section includes texts that broadly investigate networks and interfaces on the level of practice. These texts often explore the design of particular user interfaces, or the impact of network and computer interface designs on students (and by extension, the teaching of composition). The final section includes text that explore ecologies of culture or the ways that ideological positions influence interface, maps, and written genres. These texts offer both options for possible ecologies of culture naturalized through ecologies of practice in the interface and useful methodological foundation for ways that I might explore the rhetorical influence of several digital interfaces.

Section One


Selfe and Selfe argue that computer interfaces are cultural maps that are ordered from ideologically interested perspectives. These maps serve to naturalize the ideological position of interface designers through continued practice of small acts of dominance. Such actions often develop out of the stabilized map of the interface that omits the perspectives of groups with different linguistic traditions and lower economic status. To enter the virtual environment of the interface is to simultaneously conform to the ideological perspective of white, male, upper-class designer/user. Such acts of dominance are built into computer interfaces via limiting language selection options, capitalistic metaphors, and hierarchical organization of knowledge associated with patriarchal cultural dominance. The deployment of these cultural maps in the composition classroom becomes problematic when instructors forgo criticism and are persuaded by the utopic “rhetoric of technology” that promotes computer interfaces as democratic. Instead, instructors must both understand and teach their students that interfaces are partial cultural maps and “linguistic contact zone(s) that reveal power differentials” (495). This recognition allows instructors and students to criticize interface designs, contribute to interface design from a position of critical awareness, and revise interfaces as texts by considering ways that interfaces may be altered in order to allow for a wider range of socio-political perspectives.

For this project, Selfe and Selfe’s work will be instrumental in providing a foundation for exploring Google, YouTube, and Pandora as deployed from an ideological perspective. Their work, important in the development of my criticism of contemporary user interfaces, requires updating for a new technological world where computer interfaces have changed yet may very well remain entrenched in similar acts of colonial dominance. Two interrelated concepts of prime importance are the naturalization of the ideological perspectives and naturalization occurring through repeated acts of dominance associated with the interface. Selfe and Selfe’s treatment of naturalization, of the standardization of particular codes or ways of organizing knowledge, echo the work of postcolonial scholars such as Pratt and McClintock. These scholars reveal that systems of imperial dominance become naturalized when they are proliferated throughout a culture as not only *a* way of making sense of the world, but *the* way of organizing knowledge.
Hence, Selfe and Selfe’s discussion of ASCII as the standard language of knowledge exchange online has become proliferated throughout computer culture as a result of seemingly irresistible inertia that establishes the language as the way of knowing in digital environments. Yet the crux of this naturalization depends on the repeated practices required for use of interfaces that are imbued with ideological motivations – small acts of repeated dominance. This concept is crucial for attempting to establish a link between the ecologies of practice in online interfaces and the ecologies of culture which they uphold.

Section Two


Brooke argues that the ecologies of culture by which we approach invention in the discipline rely fundamentally on the view of an individual author composing a stable text that is intended to be read, therefore separating the positions of reader and writer. Invention from this perspective relies on the ability to come to a stable conclusion – invention necessarily has a beginning and end. Yet interfaces and hypertext have developed new approaches to invention that blur the distinction between reader and writer. Following the work of Barthes, writerly texts are those that encourage the active involvement of reader not as interpreter but as co-constructed meaning.

To call a text writerly, then, says less about the text than the ways readers or users approach and subsequently interact with that text. A writerly text encourages or affords co-productive engagement by the reader. In order to bring the rhetorical canon of invention into the ecology of practice promoted by new media (and interfaces), Brooke relies on the distinction between what he calls hermeneutic and proairetic models of invention. Hermeneutics rely on the completion of a stable text and invention that seeks resolution of some previously unknown inquiry or problem. Alternatively, proairetic invention embraces the multiplicity of non-resolution, in which new information (artifacts, phenomena, events) are taken as points by which to continually transform meaning and understanding. Resistance to closure and embracing of continually transforming possibilities as information characterize proairesis as a replacement for invention. In hypertext format, interfaces that promote the association through the generation of key terms also searched by other users, such as del.icio.us, facilitate the type of continually transforming networked navigation that resembles his proairetic model of invention.

For this project, the distinction between the hermeneutic and proairetic model of invention speaks directly to the ways in which our interfaces control what users can know and what meaning they can construct or interpret. As Brooke points out, the purpose of search engines, such as Google, is hermeneutic. Users attempt to discover the stable meaning of the search term. Brooke relates our reliance on a hermeneutic invention in the discipline to an ecology of culture developing from print technology and the concept of the individual author. Taking this impact on ecology of culture as a starting point, I am interested in the ways in which interface designs and affordances (that make them more or less writerly) rhetorically reinforce ecologies of culture that impact user identity. In addition, I inquire if and how users naturalize the ideological assumptions of these interfaces through continued practice. Utilizing a heuristic of mapping in this context is an exploration of how users interact with mapping interfaces, and the ways in which such interfaces afford certain types of meaning making or reinforce particular, stabilized ideologies.

Rice argues that databases can be used as a mediator between the affordances of mapping interfaces provided by the designer and the individual users to assist in deploying their rhetorical power by drawing connections to that space. Databases include all of the information which might be brought to a location, as information from a wide range of sources contributes to the construction of a map used to navigate that location. Digitizing Detroit marks it as a networked location, where “users” bring with them a set of tools for constructing a navigable map of the city based on their conceptions of the place in their database of information and the affordances of the mapping device they are using (whether that be a service such as Google Maps or an encounter with an actual physical location). Arrangement and invention, where users bring together spaces and the concepts by which they come to define those spaces, are practices in selecting information from one or multiple databases. Arrangement becomes a construction of a space by selecting varying information from a database that does not dictate a structure – a place is not spacialized based on an already stable topoi or category but allows for other selected information to be deployed in the construction of that place. Places shift and move depending on the information used in their construction from individualized databases. Grand narratives about a place (either physical or discursive) operate as stable topoi that deny the accessibility of other information that may cause a new identification of that space. Invention through a database challenges grand narratives by bringing other spaces together and assembling information based on the personal experiences of the actor/user. Invention through personalized construction of spaces makes those spaces move.

For the purposes of this project, Rice offers a fundamental outline for how stable topoi and categories exclude invention possibilities based on other information. While Rice offers database usage and networked rhetoric as a means of undermining the stable construction of topoi, I inquire how the affordances and limitations of online mapping systems, such as search engines and interlinked popular websites (YouTube, Facebook), operate to uphold or undermine what he calls grand narratives and Colin Brooke refers to as ecologies of culture. Do these interfaces actually allow for the personalized arrangement and invention of space through selection of information in a database? Or might the limitations of our online maps only allow our navigation of stable topoi of meaning? Rice’s text then serves as a foundational piece by which I come to understand mapping as a heuristic for exploring (hidden?) rhetorical impact of interface design and the implications for what can be known by users in these environments.

Section Three


Carnegie argues that interfaces have become a foundation for the study of rhetoric with the development of new media applications. Interfaces lay the structural foundation, what she calls the classical exordium, for the ways that users are persuaded when coming into contact with computer systems. In this way, interfaces are rhetorical because they produce certain types of interactivity between users and computers. Interfaces that generate a high level of interactivity predispose their users to higher levels of persuasion. Carnegie, relying heavily on the work Sally McMillan, devises three modes of interactivity by which the interface mediates between user and computer. Multi-directionality concerns the level to which users are able to receive, respond, and
send messages within the parameters of the interface. Manipulability pertains to users’ ability to change the interface and the way that an interface allows them to interact with content. Presence is the ability of the user to feel connected to other users despite no physical interaction (social presence) and the interface’s facilitation of the creation of the feeling that users are in a place other than their physical location (spatial presence). Using these three modes as means of examining the extent to which interactivity is facilitated by an interface (and hence testing its ability to persuade), Carnegie challenges composition researchers, instructors, and students to challenge the invisibility of the interface and to discover the rhetorical impact of the interface as exordium.

While the heavy theoretical discussion presented by Rice, Manovich, and Brooke form the foundation of this research project, Carnegie offers a useful tool for data analysis. While Carnegie argues that interactivity is the measure of an interface’s rhetorical impact, I will adjust her proposal to include interactivity as defined by users’ ability to map their experience (i.e. the way they receive search results as stabilized topographies of meaning, the passive or dynamic way they interact with the interface, etc.) Carnegie touches on this notion while discussing manipulability. A portion of my thesis will include a reading of Selfe and Selfe’s criticism of the ideological stance deployed through the interface in terms of Carnegie’s modes of interactivity. In this way, I can view the ways in which the ideological perspectives of an interface becomes naturalized. In addition, when Carnegie states that higher levels of interactivity will result in the higher levels of audience persuasion, she indicates one way interfaces have shifted with new media away from Selfe and Selfe’s analysis in 1994. This is namely the acceptance of new media interfaces hinging upon their facilitation of interaction. This observation may offer an opening for investigating the complicated ways that new media interfaces’ ideological positions become naturalized when they are so heavily dependent on user interaction.


Law argues that social science research methodology attempts to fit into the standard of common-sense realism by reporting results that are well-ordered. “Common-sense realism” outlines that which exists in reality “out there” as independent (of our actions and perceptions), anterior (prior to our attempts to study it), definite, and singular. According to Law, most social science research is measured against its ability to meet the complete package of these tenets of common-sense realism, resulting in the need to present clear research which avoids or ignores the mess he sees in reality. Critiquing this position, Law argues that the politics of presence (which itself implies absence) tends to make manifest some of the absences it creates while simultaneously Othering those absences. Within the confines of common-sense realism adhered to by most social science researchers, information which is inconsistent with its basic tenets is repressed and reality is produced as though that information does not exist. The production of reality (and absence) is key to his critique, as much of the common-sense realistic package depends on adherence to the principle of independence. Law offers allegory as one possible suggestion for correcting this problem with social science repressing the mess of reality. Allegory relaxes the policing of the border between manifest and Othered absences and allows for the tracing of sometimes inconsistent and incoherent assemblages of reality.
Law’s piece supplements the methodology section of my project by outlining it as a stabilization in itself, but one that is aware of its tracing of only a certain assemblage of reality and does not ignore what it leaves out. My goal is to make a claim about the interfaces and their political and ideological influences on the mapping of reality. However, I see the interface as a moving target continually mobile based on the ecological influences of its environment and the perceptions of individual users. Therefore, Law’s work helps to supplement this stance while simultaneously and necessarily tempering the claims that can be made as a result of this research. Also, in extending Law’s understanding of the politics of research that intends to have a stable view of an independent reality “out there,” I question how the interfaces I am investigating potentially apply a similar principle of reality by stabilizing topographies of meaning through return results, interface design, and passive user interaction. In this sense, Law recalls the work of both Colin Brooke and Jeff Rice. For Rice, the stabilization of topographies of meaning is combated by a networked approach much like that suggested by Law, in which the question “what” is not answered but exists as the articulation of the networked incoherence. Brooke’s concentration on the hermeneutic or proairetic models of invention also resound in Law – the conclusive hermeneutic model mirroring the tidy approach to social science research and the happenstance and tracing of proaretic invention mirroring the mess associated with the assemblage of Law’s post-structuralist reality.


Rosinski and Squire argue that the integration of Human-Computer Interaction principles into composition curriculum can assist students in understanding the complex relationship between audience and prose or, as is their focus, an interface’s design. Teaching courses for their institution’s multimedia authoring minor, they find useful parallels between rhetorical and technical pedagogical approaches of composition and computer design, complicating the static understanding of audience through the dynamic, HCI concept of the “user.” Three primary principles of HCI correlate and effectively complicate composition concepts by introducing a new perspective. First, knowing the user is a foundational principle of HCI that complicates the notion of audience by leading students to understand the technical aspects associated with the design or compositions of the interface or text. Solving such technical problems as determining what the user needs to accomplish with the interface or what they prefer in an interface extends the concept that audiences are active participants in how a piece of prose or information is used, understood, or interpreted. Second, reducing the cognitive requirement, or the internal knowledge a user must have in order to operate within an interface, of the user assisted students in understanding the impact of their design on audience usability. In some cases, students did not provide enough information or operate within expected constraints, resulting in the user’s inability to complete tasks intended of the interface. This allows students to grasp ways to determine ways to effectively impact the audience. Related, the third principle, test and iteratively design, helps composition students view the peer-review/audience-review stage of composition as more than just presenting completed work to the intended audiences. HCI involves the testing of interface design throughout the design process, again reinforcing the concept that audiences should be dynamically involved throughout the design and composition process.
Rosinski and Squire’s discussion of cognitive load reduction on the user raises serious implications for both their critical awareness about how power is possibly distributed through transparent interfaces and the development of this critical awareness by students. The value for this project, then, is to identify one way in which ideological or political positions can be hidden and transferred to the user through the standardized logic of the interface – namely through the reduction of cognition necessary for its use. A useful design principle that developed in tandem with user demands, cognitive reduction is worthy of investigation and discussion in both the theoretical and practical chapters of my thesis. Simultaneously, Rosinski and Squire offer the beginnings of a pedagogical utility for the investigation conducted in this project when they discuss the use their proposed curriculum can have on student ability to understand power transfer in interface design. They offer a practical underpinning that grounds my research.


Schmidt asserts that maps are a useful tool for conveying the shifting nature of everyday composition from a narrative structure to a database structure. Teaching a class on the rhetoric of maps, Schmidt desired that his students understand maps as rhetorical, as making an argument by representing the world in a certain way. He challenged students to consider the indexicality of maps, that is, their adherence to some truth of location in a physical world. Using physical maps and Google maps, students explored the ways that maps were drawn as a means of representing the world in a way that served a particular rhetorical purpose, rather than an adherence to indexical representation. For Schmidt, developing a critical awareness of the rhetorical implications of mapping assists students in better understanding the rhetorical aspects of the “spatial” elements prominent in shifting understanding of writing. Database structure has taken on a prominent role in new media, and the rhetoric of maps prepares students for the non-linear representation and hierarchical arrangement of information found in digital media interfaces. For Schmidt, this hierarchical arrangement mirrors the decisions made by cartographers to represent the world in a certain way to have a particular rhetorical impact on an audience.

While both Schmidt and Rice consider mapping in its relation to indexical representation of a physical world (the drawing of a digital map), Schmidt’s discussion of the rhetoric of mapping bearing similarities to the database-oriented arrangement of new media provides me a useful academic voice for making the same comparison for the interfaces in this program. I am treating Google, YouTube, and Pandora as hierarchized “maps” that represent the world in a particular rhetorical way. Therefore, I am interested in extending Schmidt’s notion of people’s ability to cognitively map (draw maps in their head for navigation purposes) as being limited by digital mapping interfaces to the database driven interfaces I am investigating. I wish to investigate to what extent these interfaces limit or afford the construction of cognitive “maps” of information.


Spinuzzi asserts that genre ecologies operate as a more efficient frame for understanding breakdowns in mapping interfaces than metaphor. He argues that metaphor, while useful in diagnosing and correcting the symptomatic breakdowns of mapping interfaces, fails as a framework for analyzing the roots of user error because it relies on the map as an indexical
representation of the physical world. Genre ecology is a framework that takes into account the multiple tasks that various genres have developed to complete. When multiple genres are moved into the computer interface they form as hybrid genre and their separate ecological development can cause fundamental breakdown in user utility. In Spinuzzi’s example of accident location maps brought into the same interface as geographic locations maps, conflict arises because these two genres developed from varying ecologies with different tasks. Accident locations maps historically intend to cluster the number of accidents around a location, while geographic location maps are fundamentally driven by precise location. Bringing these genres together as a hybrid therefore results in conflicting tasks and user difficulty. While metaphor could correct the symptoms of such breakdowns, genre ecologies can help identify the varying tasks associated with each genre and therefore assist interface designers in correcting the root contradictions.

While Spinuzzi’s object of critique (metaphor) may be outdated in an environment where Web 2.0 applications are prolific, genre ecologies may have pointed application as a framework for finding associations between the interfaces that are my objects of study. Since one major questions of my research is to determine the standard logic of these interfaces, an ecological investigation which takes into account the previous media which led to their formulation might be useful. In order to determine the ideological and political stances perpetuated by these interfaces, investigating their origins and possible hybridity might assist in seeing the way that ideological positions are possibly reinstituted through interface design. This framework might also be useful for understanding the way these interfaces influence each other – for example the way that search engine technology (Google) possibly forms a hybrid genre in YouTube or Pandora.

Section Four


Edbauer argues that the rhetorical situation model betrays the processes and encounters which give rise to rhetoric, challenging the notion that a pre-established exigence is met with the introduction of a piece of discourse. She proposes a supplementation of the rhetorical situation model with an ecological, affective model of rhetoric, which more thoroughly accounts for the impact of a piece of discourse’s impact on the process of response and construction of a rhetorical situation that is in ongoing “social flux” (9). In explaining the difference between this social flux and the conglomeration of separate elements suggested by the rhetorical situation model, Edbauer proposes that theories of city-spaces that view the construction of “sites” as performed by movement and interaction rather than the sum total of material elements as useful for comparison. Rather than encountering a pre-conditioned conglomeration of material conditions, sites transition into a complex and mobile measuring of intensity of interactions between many historical and cultural elements. Writing, using this ecological model of mobile space, is a distributed activity that complicates sender-receiver models and complicates the concept that rhetoric is a response to a pre-established exigence. Edbauer asserts that these models more comfortably fit with the field’s understanding to rhetoric – rather than teach rhetoric we teach what it means “to rhetoric” (13). In Austin, Texas, the movement surrounding the sustenance of local business resulted in piece of discourse (“Keep Austin Weird”) which was then manipulated, repurposed, challenged, and borrowed in conjunction with other events in Austin (even finding its way into a major corporation’s ad campaign). For Edinbauer, the
interaction of this piece of discourse with other city events that responded to no particular exigence but rather helped to shape the affective rhetorical ecology of the city is a prime example of the way that such models can supplement rhetorical situation models.

In association with the Pratt’s tracing of the genre of travel writing, Edinbauer provides a rhetorical framework for the need to be vigilant in updating our understanding of the political and ideological positions of the interface. While Pratt’s argument is on the perimeter of writing and rhetoric scholarship, Edinbauer brings my discussion of transitioning interfaces as a result of changing digital media ecologies squarely into a writing and rhetoric perspective. Edinbauer’s assertion that writing is a distributed act and that rhetoric is a mobile practice may also add a useful caveat to the standardization of the logic of some interfaces. Edinbauer is operating at what Brooke would call the level of ecology of practice. For the purposes of this study, the idea of an affective rhetorical ecology that is mobile may raise interesting questions about the ways that standardized logics (and the ideological positions that accompany them) change or are hidden.


Galloway argues that protocol (recommended standards and rules that govern the technical access of information) has developed into the controlling mechanism for life in the information age. He contends that the information age is not marked by the proliferation of computer technology, but the historical moment in which all matter could be understood in terms of code (111). Following Delluze, who asserts that “control societies” are dictated by codes that determine what information can be accessed, Galloway argues that control society of the information age vitalizes protocol systems and the information they control. Individuals are included in larger groups of sampled masses in order to articulate the individual with the parameters of the protocol – for example, as a stock image designed by the algorithmic composite of individuals like them as occurs in collaborative filtering. Yet the political-ideological power associated with this control is hidden, in Marxian terms, by a social hieroglyph, or, “something that does not announce on the surface what it is on the inside” (99). For Marx and Galloway, this quality of hiddenness is a key aspect of a naturalized system of management – Marx saw this quality in capitalism and Galloway in the new information age with protocol systems.

While Galloway is primarily concerned with protocol as a means of control in file and information sharing procedures, I intend to determine the ways that the interface might be associated with algorithmic protocols in order organize information into a topography – whether that topography is stabilized or mutable and how it maintains political and ideological influence are some of the foundational questions of this project. Furthermore, Galloway may offer a potential link between what Brooke’s rhetorical ecologies of practice and ecologies of culture. For example, the exploration of the social hieroglyph, or naturalizing representation that hides ideological position founded in Marxist theory, raises questions about the interface as a potential representation of ideologies that are themselves ecologies of culture (racism, capitalism, sexism, colonialism etc.). Most interesting for this discussion is the ways in which protocols simultaneously control and seem to proliferate freedom of exchange, again raising the question of stable and mutable topographic representation by the interface.
Manovich argues that interfaces are composed of other, already available mediums upon which designers draw in order to mediate between user and cultural information. He defines the cultural interface as the ways in which computers allow users to interact with cultural data, to make meaning of the cultural significance of numeric language. For Manovich, the cultural forms that contribute to an interface design can be integrated at a low level, and eventually the continued integration of similar cultural forms leads to a naturalization of their logic. That is, the automatic deferral to similar cultural codes throughout interfaces leads to their implementation as a default rather than a consciously selected cultural tool. For example, Manovich argues that many computer interfaces are based on a cinematic cultural form and that the cinema’s cultural logic (along with its standardized point of view and stabilized position of the viewer/camera) has become the default logic of computer technologies.

For Manovich, the discussion surrounding cultural interfaces and the historical tracing of the development of print, cinema, and human-computer interface (HCI) and cultural forms are important for him to make major claims about the cultural forms themselves. Manovich identifies common characteristics of cultural interfaces in order to make claims concerning the overarching influence of print, cinema, frames, etc. on the ways in which users come to experience cultural data via the interface. For the purposes of this project, I will employ Manovich’s concept of cultural interfaces as a lens for identifying the influence of naturalized ideologies on the ways users obtain cultural data. Where Selfe and Selfe discuss the socio-political stances from which the interface is deployed, Manovich discusses the naturalized logics that are repeated across interfaces throughout history and become standardized defaults. Taking these authors together, I hope to question if ideological positions have simply been remediated from other dominant forms of media – not to make claims about their practice and use but to establish how ecologies of culture become dominant and are sustained.

McClintock argues that the imperial enterprise, utilizing tropes of gender, sexuality, and domesticity, stabilized what were considered dangerous, unknown spaces through categorization within boundaries that justified the dominance of those spaces. Beginning with a metaphor of feminized mapping and moving through a discussion of racial hierarchy “naturalized” by Enlightenment progressive thinking and social trends of domesticity, she reveals that the imperial enterprise filled the “empty lands” of unknown territories with markers that made both colonial spaces and their people inherently inferior and rightfully dominated by the colonizers. This was largely accomplished through the implementation of an imperial science constructed by two tropes: panoptical time and anachronistic space. Panoptical time, developing from the tracing of natural evolution instigated by Darwinism and rearticulating time as spatialized, allowed Europeans to see at a glance a single history of humanity that was progressive and hierarchical. Anachronistic space involves the redistribution of this single history onto landscapes, viewing the colonized spaces as pre-historical and therefore justifying imperial dominance through the trope of progress. Movement out of prehistory and back into history was articulated as a physical movement from the colonized space back into Europe. Together, these tropes were used to justify the dominance of colonized spaces and people. Supporting the tropes of imperial dominance were markers of gender, class, and sexuality that similarly supported
naturalized hierarchies. For example, the black female body became marked as anachronistic because of visible markers that were constructed as naturally oversexualized and working against male master narratives of progress through procreation. From this perspective, the black female body existed before the narrative of evolutionary progress and thus the oversexualized female became prehistoric and hierarchically inferior. Such sexual tropes were then redeployed across naturalized class hierarchies.

For this research project, McClintock’s most important contribution is her conception of mapping that helped legitimize the imperial enterprise. As maps supposedly capture the truth of a space and reproduce the reality of that space, they also cover their rhetorical power – that boundaries are drawn with prior knowledge and implicit goals for stabilizing a space. According to McClintock, mapping assisted imperials in “negotiating the margins” of unknown spaces (28). Such mapping practices carried with them inherent themes of gender dominance, domesticity, and the fetishizing of the unknown. Moving into digital environments, mapping is a primary metaphor by which I will analyze search engines, a major object of research for determining what ecologies of culture are being upheld by digital rhetorical practice. Using mapping as a guide, my goal will be to determine how search engines naturalize their results, what rhetorical goals interface affordances and limitations serve, and how the practice of using search engines as maps support postmodern industrial capitalism and/or continued themes of Orientalism.


Nakamura asserts that cybertyping, in which racial categories are communally stabilized as a result of a fear by the dominant, white order of the continual reconstruction of meaning online, flourishes when interfaces reproduce visual constructions of race present in the dominant (white) ideological hierarchy. Two important functions of cybertyping in visual representation lead to what Nakamura calls identity tourism. First, as often occurs in the MOO’s she studies, interfaces that forgo the use of race as a required element of identity substantiate the idea that all users are white by default. Second, and intricately related, when these sites encourage identity switching, they do so by reproducing images of the Other that fit into the symbolic economy of white imperial dominance – for example, being Asian online is to be a Samurai with a Sword. Identity tourism, in a move that recalls Edward Said’s *Orientalism,* is about defining racial boundaries for the dominant order in an online space where visual markers of dominance might potentially be destabilized. Identity tourism is about stabilizing the dominant order’s identity in opposition to the Other. Racial discussion that is foregrounded in textual and visual chatrooms and does not adhere to stable racial cybertypes is oppressed. Identity switching is only available to those willing to inhabit stable categories of race that fit the dominant order. Therefore, the ability to fantasize about identifying as an Other is only available from a privileged position. For Nakamura, the rhetorical impact on race of role-playing spaces online is hidden by the fact that a lack of material consequences portrays a sense of equality – there is little material consequence for the type of racial stereotyping that occurs. Additionally, divisive race discussions are rare in the study and those that occur are quickly suppressed by dominant-order users – identity tourists whose privileged position is supported by the design and common use of these digital environments.

The utility of Nakamura’s study for my project is twofold. First, it operates as a model for specific research into rhetorical power of interface design and use that serves to substantiate
grand narratives of dominance. Her work investigates how stable categorizations made possible through the reproduction of dominant racial ideologies limits the possible subject-positions a user can inhabit. They limit the way in which knowledge can be obtained in digital environments by privileging perspective and anticipating stabilized representations. Second, using mapping as an analytical tool, Nakamura’s work seems to suggest a mapping of identity from a dominant perspective. The metaphor of travel intricate in her characterization of identity tourism implies that the stable identity of the Other is a means of being assured that the user know where travel, much as the stable boundaries of a map are rhetorically deployed to stabilize what can be expected at a given location. Redeploying Nakamura’s conception of identity tourism and the hidden rhetorical impact of race representations online, I can investigate the way other interfaces I have marked as digital maps operate rhetorically to offer stabilized identity markers and ways of making meaning. Discovering how such markers are stabilized will be an important aspect of this project – an investigation that might resemble Nakamura’s investigation of interface identity requirements and user purposes.


Pratt argues that imperial period travel writing shifted upon the introduction of Linnaeus’ *The System of Nature* in 1735, leaving behind its survivalist roots for a totalizing scientific endeavor. This system of classification supported a planetary consciousness that sought to obtain and categorize all life around the world in a singular, European, scientific language. In so doing, “naturalists” supported the imperial enterprise by naturalizing a distinctly European perspective of the world. European literature on southern Africa, which with Peter Kolb’s 1719 *The Present State of the Cape of Good Hope* retained elements of humanism in its treatment of colonized people, was altered to include a hierarchy of human organization invoked by Linnaeus’ system. Two of Linnaeus’ disciples in particular, Sparrman and Paterson, disparaged Kolb’s work and realigned travel writing to include a naturalist agenda. This agenda removed people from the natural environment of Africa, purporting to only observe and record (innocently, in their estimation) the landscape in terms of the naturalized system of nature. This anti-conquest rhetoric included the relegation of colonized people to a demoted, non-human status, as the world became articulated from a distinctly European, scientific perspective. Writing in 1801, John Barrow again altered African travel writing, much because of his mandate as a British governmental employee. For Barrow, the African landscape became defined by its opportunity, as a place where the Eurocolonial gaze could envision its exploitation. This view was similar to that of the capitalist vanguard in South American colonies that treated the contact zones as opportunities for economic expansion from a European center. Unlike Barrow, however, the capitalist vanguard was a distinctly conquest-driven group of travel writers. Yet as South American travel writing developed around the perspective of some women writers such as Flora Tristan and Maria Graham Calcott, the genre became a tool for women equality activism, providing the roots for such movements in Europe.

For the purposes of this study, Pratt’s method of analysis provides a useful exigence for reexamining Sefele and Selfe’s “The Politics of the Interface: Power and Its Exercise in Electronic Contact Zones.” A chapter of my thesis will be to read Selfe and Selfe’s piece through the methodological lens of Pratt, examining the ways that several factors (both associated with and not associated with technological development directly) serve to alter natural logics of computer interfaces over time. While Pratt’s work also reinforces the cultural analysis found in Anne
McClintock’s *Imperial Leather*, my focus with Pratt will remain on both the way that Selfe and Selfe use her text and the methods of analysis of one genre over a particular chronotope. Not only will this provide a solid exigence, it will also give me reason to call for an update of this discussion by other scholars after the completion of my research.


In this chapter, Said argues for two major claims concerning the West’s treatment of the Orient in the practice of Orientalism. First, Orientalism assigns to an unknown space representative markers derived from previously known objects in order to apprehend it and negatively define the Occident against and as superior to the Orient. This is the process of Orientalizing the Orient (whereby the Orient is penalized for lying outside of Europe’s imagined boundaries) by which Orientalist scholars made the unknown space of the Orient knowable from a Western perspective. Orientalists stabilize the space through markers with no bearing in reality – such markers have bearing only in the discursive representations of the Orient by Orientalists. The Orientalizing space becomes a stage for playing out a fictive Western understanding. Such Orientalizing serves as a foundation for Said’s second claim - that the representational markers serve to stabilize space and allow the West to confine the Orient as a systematically (alphabetically) knowable location. Orientalists continually confirm this systematized understanding of the Orient in order that it remains knowable and inferior to the Western gaze. Ultimately, the imagined geography of the Orient is attached to a distinctly European consciousness. In order to model this intensely theoretical discussion and to present the pervasive use of Oriental markers, Said locates his discussion in textual analysis of the plays of the Ancient Greeks, Barthelemy d’Herbelot’s *Bibliotheque orientale* (an alphabetic dictionary of the Orient), and Dante’s *Inferno*. These texts each serve to stabilize the Orient through the use of representative markers rendered knowable through pervasive discursive practices of the Orientalist.

For my research project, the value of this chapter of Said’s text is twofold. First, it serves as a useful model for the ecologies of culture that are potentially upheld through the rhetorical affordances and limitations of online interfaces. By tracing multiple sites which reproduce similar types of cultural ideologies and rhetorical representations, it is possible reach some conclusions about the ways in which digital actors and phenomena are being stably (or unstably) articulated through the geographies imagined and implemented by interface designers. Not only does the Orientalism serve as a model, but one potential ideological apparatus being upheld by our practices in digital environments. Second, the stabilizing impact of fictive representational markers in order to make the Orient systematically understandable bears a striking resemblance to the type of mapping that Anne McClintock discusses and drives my understanding of search engines as maps. Just as Orientalists texts such as *Bibliotheque orientale* served the purposes of stabilizing the Orient through alphabetization, search engines organize results in such a way that systematically (and hierarchically) orders knowledge around the search entry.