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Term Paper

Towards a Weirder Archive

At any moment, as we approach ubiquitous computing, you may find yourself struck with the sudden realization of the Internet's strangeness: its immensity, its abstraction of location, its feat of trivializing the time between "knowing" and "not knowing". Those who lived through another time are perhaps overcome with this feeling more often than digital natives. One such person was Belinda Barnet, who wrote of the Net's simultaneous—and seemingly duplicitous—split roles as the ephemeral communication platform and as the institutional information archive. The Internet, she claims in "Pack-rat or Amnesiac: Memory, the Archive and the Birth of the Internet," seems caught somewhere between collecting everything for long-term storage and forgetting everything but short-term memory. This convulsion of roles, however, likely has the strangest effect on the user: particularly the one that takes advantage of search engines. That strangeness, as I will explore, is a manifestation of the uncanny.

I. Search Results as Societal Definitions

As they are found by relevant tags and contexts, collected from a web crowdsourced data, search results can be thought of as cultural definitions to any given term. In finding search

results, search engines scour their index of the Net looking for websites relevant to the user's query. The web's spiders (their actual name) crawl through the Internet and take notice of each webpage's structure: its content, its frequently used words, and its metadata. The spiders attempt to get a picture of the webpage, and a record is made. Each record is compiled into a large database that is the search engine's index. This data is then pitted against a user's query to find what it perceives to be the most "relevant" results. In the most basic search engines, relevancy is simply defined as the frequency with which the query is used in the webpage. So, for example, a user searching for "The North Face" would rather receive more results for the activewear brand than websites detailing on what side of a tree moss grows. The search engine makes this inference based on its observation that the brand's website has more mentions of "The North Face" (presumably in product descriptions and advertisements), while the website detailing moss growth patterns would probably discuss more types of trees and fungi than just saying "moss grows on the north face of a tree."

A more advanced search engine like Google also finds what it perceives to be the most "important" results, and it organizes them as such. Importance, as opposed to relevance, is determined not within a website but rather in the connections between websites. A website is ranked more important when more users link to it. From the horizontality of hypertext, a hierarchy is formed based on user's behaviors. The Google PageRank system analyzes not only the words within a web document; it looks to where the hypertext links point. If more users link to a specific website in their own content, Google will consider the target of those links incrementally more important. Returning to the prior example, Google would notice

that content generators are more likely to link to The North Face's activewear website (this time presumably because they are pinning their favorite fashions to their Pinterest page, sending family members wishlists through social media, or the like) than they are to cite the moss information. Google will then return the search results in an order that reflects its perceived importance based on popular user activity. The search engine mediates between relevance and importance. The basic assumption here is that if one link is important enough for many users to point it out, it is probably important for every user.

Search results are the Internet equivalent of a clap-o-meter.

This method of search, though, relies entirely on the cooperation and collaboration of the Internet as a society and community of content generators. Search in general operates under the pretense that if many users categorize, sort, and endorse specific content, then it is likely that other users will agree. This data is compounded by observing the behavior of those who commit similar searches. If those who all search for a common query click one result more than another, the commonly preferred link will be ranked more importantly. The search engine, then, has very little manual labor to do beyond creating algorithms to watch the web. The content generators of the Internet will do the work for the search engines just by fulfilling their regular practice: making topical websites that have jointed, cohesive content and linking to other sites they hold to the same standard. So long as (1) the general somoociety that is the Internet acts logically and with the intention of *not* deceiving viewers, (2) a significant portion of that society agrees upon matching contents and contexts, and

(3) searchers will click links that appear relevant to their query, search engines can more-or-less accurately display relevant results in order or importance.

In this sense, search results truly are societal standards in response to any idea used as a query. Because of the search engine's above assumptions, any result for a search term is literally what the most people think the term represents—or more specifically what's important about it. The method by which Google (and other search engines) catalogs the Internet into relevant search results creates a condition in which queries are “societally defined.”

The implication of these societal definitions is the removal of all personal connections and connotations from the term. From this, we can derive two oppositional forces: the subjective, that is the individual's combined denotative and connotative meaning ascribed to an idea; and the objective, for all intents and purposes the idea's "meaning" in the stricter, lowest-common-denominator sense of the word. The objective is not necessarily factual as much as it is validated by a majority of people who subscribe to its ideas—though another paper could make the case that this is equally truthful as facts are. Take for example the search term "home" proposed as a term we wanted to define through search. Looking up the word in a dictionary would not reveal any qualities specific to the researcher's own home. The search engine is no different. Returning results on Google does not link you to the phonebook listing of your house, nor it does show your bedroom, nor your favorite chair in the house, nor any specific personal connotation you may have to the query as an idea. In this example, the Internet as a society defines "home" as a part of Home Depot, a restaurant in New York City, and a number of songs with "home" in the title

(or at least, it defines it as such in an appeal to my person, an effect which will be discussed later). The query is only a query, and it is questioning what the web-connected thinks. Google is a large dictionary of ever-changing societal definitions; and regardless of the definition's medium of delivery, when research takes to a catalog of established societal definitions, personal injections and connotations fall by the wayside.

II. Simultaneity, Duality, and Ambivalence

This condition of search engine databases as societally written dictionaries presents an eerie one in specific search scenarios: a feeling of the uncanny can overcome the user. The feeling is unmistakable. It is a cognitive dissonance simultaneously between feeling familiar with an engaged object and feeling utterly foreign to it. It is an uncomfortable and incomplete familiarity.

In the first writing of this feeling, "On the Psychology of the Uncanny," Ernst Jenst writes of its most basic example: the automaton. Jenst points to Olympia, a lifelike wooden doll in Hoffmann's “Nachtstucke”. In the story, the doll is so convincingly realistic, so beautiful, that the character Nathaniel spies her "sleeping" through a window and instantly falls in love with her. When Nathaniel enters the room to reach his love, he finds that she is an automaton with wooden flesh and mechanical movements, and he is overcome with a feeling of the uncanny. He is struck with the dissonance between his expectation of a familiar form (that is, a human, a woman) and the reality of her inanimation.

Freud expounds upon Ernst Jenst's example in his seminal essay aptly titled "The

Uncanny":

"[T]he 'uncanny' is that class of the terrifying which leads back to something long known to us, once very familiar. How this is possible, in what circumstances the familiar can become uncanny and frightening, I shall show in what follows." (3)

Freud then clarifies that the uncanny does not just strike Nathaniel; it also strikes the reader. In a more meta scope, Freud discusses *unheimlich*, the German translation of "uncanny". Importantly, he discovers the duplicity with which *unheimlich* is used. That is, "*heimlich* is a word the meaning of which develops towards an ambivalence, until it finally coincides with its opposite, *unheimlich*. *Unheimlich* is in some way or other a sub-species of *heimlich*" (8). What Freud points to here is the multiple definitions of heimlich and its supposed antonym *unheimlich*, and how they converge.

In the most common sense, *heimlich* signifies the familiar and what belongs or pertains to the home. There is a level of comfort which *heimlich* describes. To this definition, the antonym *unheimlich* simply means that which is neither familiar nor comfortable and that does not belong to the home. But relating the uncanny to the un-*heimlich* does not fully describe the uncanny's full peculiarity.

Instead, Freud insists, we must look at *heimlich*'s other significations that are less common: "concealed, kept from sight, so that others do not get to know about it, withheld from others," as in how the home's privacy keeps things from the public (6). Thus, *unheimlich*, which ordinarily signifies that which is simply uncomfortable, is then "the name for everything that ought to have remained . . . hidden and secret and has become visible". As we can now see, the multiple definitions of the word and its antonym have converged.

"The notion of something hidden and dangerous [...] is still further developed, so that '*heimlich*' comes to have the meaning usually ascribed to '*unheimlich*'" (8). To bottom-line it: *unheimlich* (the antonym to the commonly used *heimlich*, an antonym which itself is commonly used) signifies the same characteristics as the uncommon *heimlich*. Both describe something that is foreign and unpleasant. This ambivalence shown in *heimlich*/*unheimlich*'s denotations describes what it means to be uncanny. In the most basic sense, something appears to a viewer as uncanny when the perceptual gap between his projection and the object's projection converges and interference subsequently appears.

What's uncanny about *heimlich*/*unheimlich* themselves (beyond their translation into English) is that the meanings become confused depending on the people speaking and hearing them. *Heimlich*/*unheimlich* as words do not even provide maximum grip on talking about the uncanny. Their meanings actually become uncanny depending on the people speaking and hearing them. Perhaps appropriately, the German word for uncanny can actually become uncanny in conversation. Imagine a scenario in which two people speak of weekend plans, where one participant (*1*) considers *heimlich* to mean something homey and comfortable, while the other (*2*) considers it to mean something covert and potentially shady:

1: "If all goes well, my plans for the weekend will be *heimlich* and spent with the family."

2: "Why? What are you hiding?"

1: "Nothing, why do you ask? We will probably enjoy a meal in the family room."

2: "Well I suppose your plans are *unheimlich* now—now that you've told me"

The two never fully reach proper conversation because each consistently operates under the assumption that their held definition is the same definition everyone holds. With only two participants, neither can truthfully say he is the majority. Neither can testify that his held definition mirrors the societal definition unless they consult a third party or resource. In a skewed form of this dialogue, both participants know of *heimlich*'s duplicitous definitions, and therefore still cannot communicate. In this situation, their minds bring them to two places at once as they hold both definitions simultaneously.

Maurice Merleau-Ponty wrote similarly on dissonance between expectation (what I call personal projection) and reality (the object's projection). In "Phenomenology of Perception," he writes of "maximum grip":

"My body is geared into the world when my perception presents me with a spectacle as varied and as clearly articulated as possible, and when my motor intentions, as they unfold, receive the responses they expect from the world. This maximum sharpness of perception and action points clearly to a perceptual ground, a basis of my life, a general setting in which my body can co-exist with the world." (158)

He makes the case here that only way we can live in the world is if our perception of objects (our expectation of an object based on our prior experiences with something like it) agrees with our current experience with the object. Hence, "when my motor intentions [...] receive the response *they expect* from the world [...] my body can co-exist with the world." In this ideal state of agreement, he has maximum grip on the world, and there is no uncanny. But for an idealism such as this to exist, Merleau-Ponty's past experiences with

objects must be recreated indistinguishably everywhere he goes so that the familiar expectation is always met, or they must be radically different that he then has *no* expectation. The former option declares an authoritarianism that relates to the search engine's expectation: what's familiar and relevant to one must be familiar and relevant to all.

III - The Specifics of The Uncanny in Information Retrieval

Merleau-Ponty's yearning for a utopian world where expectations of familiarity are consistently fulfilled by reality echoes the process of online information retrieval: specifically when a user searches for an idea that is familiar to him or when she searches for a term to which she has a particular connotative connection.

Knowing that search results represent societal definitions, the general act of search becomes clear as pitting the subjective expectation (that which is familiar) against the objective reality (that which is societally defined and which has the potential to break expectations). This pitting against one another is the perfect contention for producing the uncanny. In some cases, the subjective may align perfectly with the objective while in other cases the expectation will be radically different from the presentation; but neither of these cases yields the uncanny. Feelings of the uncanny emerge when the user's expectation of familiarity is met with search results that deviate just enough from the personal injection. Put succinctly by James Kalbach, in these particular alignments of factors (which will soon be discussed), the uncanny is felt and "[a] gap exists between users' natural information

use and search design" ("I'm Feeling Lucky", 2).

As users search for broad and unknown topics, they are not startled by the result because they have fewer expectations. Of course in cases when the user searches for totally foreign information, according to Kalbach, optimism is met with "confusion, frustration, [and] doubt"; but this confusion does paint the duality of emotions the uncanny evokes (2). Derivative to Freud's question "How [is this] possible, in what circumstances the familiar can become uncanny and frightening[?]" we may make the statement "The entirely unfamiliar cannot become uncanny."

Instead, users are more likely to be confronted with the uncanny as their search specifies, localizes, and personalizes. These three factors fulfill one half of the uncanny: that the material is first familiar.

(1) As a query specifies, the user expects less perceptually "random" results. With broad search queries, the user sets up an expectation to receive broad sets of data. The search engine workings here look for relevance and importance, but because the search terms are less specific there is a broader scope of usages allowed into the results. That is to say, the search results are naturally more diverse and therefore more likely to not be what the user had in mind. However, most users familiar with search engines understand there is a sweet spot of specificity, and being broad gets broad results. The user "expects the unexpected"—so to speak—thus it is hard to evoke feelings of the uncanny. More specific searches, though, give the user hope that the results will be close to what he's trying to find.

(2) As the query localizes—that is, as the search terms become more pertinent to the user's context—the more the user expects the search results to represent *heimlich* in the

common sense of the word. When queries are localized, it seems obvious to the user that what is around them would be reflected in the search results. Think back to the conversation between two participants who knew opposite definitions of *heimlich*. Neither had a larger body or resource to poll, and therefore neither could confirm which definition fell in line with society's established definition. Much is the same with the localized search: users commonly have only their immediate surroundings to validate their ideas and concepts. They may be ignorant to larger discussion pertinent to their query, or even ignorant to a separate understanding of the query that manifests a completely different discussion. If the query reflects an expectation of the objective to match the subjective, there is a heightened risk of the uncanny.

(3) Most importantly, when signifiers to which the user has strong personal attachments are used as search terms, there is an emotional haze that blocks the logic of information retrieval. If a word that has strong connotations to the user, he is more likely to set up expectations for the results. This is because there is more subjectivity attached to word. In compound, he is less likely, then, to understand that the mass will not reflect the individuality: the objective will not mirror the subjective. Personalization functions in a three-piece role in the process of creating feelings of the uncanny: first ensuring the user has an expectation, second ensuring this expectation will have emotional impact if it is not met, and third abstracting the logic of the search engine by making the connotations seem more immediate than the objective denotation (i.e. ensuring the element of surprise).

Personalization:expectations :: Specificity:reality

Expectations:subjectivity :: Reality:objectivity

Personalization and specification can be thought to represent the opposite spectral ends of what is needed to produce feelings of the uncanny. Personalization ensures the opposing feeling to specificity in the ambivalence of the uncanny. While specificity ensures that the reality (the objective) of the balance remains close enough to cause a familiarity, the personalization of search ensures that the objective is just foreign enough.

All of this, however, is only one half of the equation: in order for the uncanny to manifest itself in information retrieval the expectations set up by specification, localization, and personalization must be broken. A user's expectations can only broken if they are contested against something that may or may not agree with the expectation. Here, the Internet's societal definitions come into play.

Let us return, then, to Merleau-Ponty's relation to information retrieval. The search engine can take on an authoritative role in declaring that one user's consideration of relevance and importance is transferable to all users. If enough users share these considerations, the search engine is comfortable making this assumption. However this is an appeal to collectivism, which is inherently in contrast with individualism. It is not that the Internet has prohibits subjectivity. On the contrary, search engines are truly democratic: the majority writes and votes upon which information gets pushed to the masses. Search engines look for rational understandings of queries—things most users can back on the basis of a common logic.

But the uncanny is not democratic. The uncanny relies on emotional connotations in

contrast to the objective denotations. Therefore, it is evoked for those who fall out of line with society's concepts.

Jose van Djick, citing French philosopher Maurice Halbwachs in his essay "Mediated Memories: Personal Cultural Memory as Object of Cultural Analysis" writes:

"Collectivity, Halbwachs claims, arises in the variable contexts of groups who share an orientation in time and space [*e.g. the Internet*]. Our memories organize themselves according to our actual or perceived participation in a (temporal) collectivity—a group vacation, a school class, a family, a generation—and recall tends to lean on a sense of belonging or sharing, rather than on a relocation in real time or space." (263-7)

From this we can infer that when a user's recall slightly loses its sense of belonging with the collectivity, there is conflict in the user's feeling familiarity. The user recognizes the results as a logical understanding of her query, but she cannot consider the results as entirely truthful because her strong feelings of subjectivity work against her sense of belonging to the collective.

However, van Djick does not consider the individual solely as antithetical to the collective. He also recognizes the user as part of the collective:

"For one thing, the emphasis on individual memory representations as building blocks for, or particular versions of, collective memory ignores the always inherent creative tension between individuality and collectivity [...] [I]ndividual expressions get articulated as *part of* as much as in *spite of* larger collectivities" (270).

There is never a search that yields entirely rejects the collectivity nor is there one the entirely engages it. These actions happen together. There is always a gap between the

individual and the collective, but there is also always an engagement between the two. Of course, we know this is true. Anyone who searches on Google is actively contributing to a societal definition because Google is monitoring his or her behavior (noticing which links are clicked, how a user modifies their search terms, etc.). However, an analysis of this simultaneity could bring explanation to the uncanny. It is the simultaneity of the uncanny itself, of familiarity and foreignness: that an Internet user is both contributing to the link system (the collectivity known as "The Web") and also separate and dissimilar from it. The user cannot fully align with the collectivity of the Internet, but on some level he can feel familiarity in it, as he helped make it.

IV: Images and the Double

Van Djick writes at length how we literally mediate our memories: he points towards our use of media (photos, video, writings) to enhance our memories. According to van Djick, memory is not entirely in the mind: it is also in the objects to which we ascribe personal meaning. Take for an example a 2001 family picnic, which was thoroughly documented with everyone's new point-and-shoot digital cameras. A photo was taken, and it captured the entire family eating in the grass—everyone having a good time with sandwiches in hand. Today, this event can be recalled on its own, but it likely that the photo evokes stronger memories. Looking at this photo could bring up all the feelings experienced on that day. Furthermore, it is likely that even when the photo is not ready-at-hand, recalling the memory of the event is first channeled through the photo anyway. The event is remembered

by first thinking of that one image as a specific symbol for the event. Van Djick argues that our memories are mediated by these external documents, that we offload some of our memories' weight onto images and media.

From all this, we can infer that online image retrieval is therefore a stronger candidate for the uncanny than its text-based equivalent. In fact, Alan Baddeley's study "Working Memory and the Vividness of Imagery," finds that images enhance one's ability to remember—a central quality to evoking the uncanny. However the act of search, as we've seen, is a certain forfeiting of personal subjectivity and memory to receive a collective objectivity. In general, the act of image retrieval is a request for a more objective visual representation an idea. In this sense, we offload our own ability to depict an idea onto the collective's ability. It is a second abstraction of memory. First we offload the actual recollection onto the image, and then we offload the image onto the collective's set of images. This is why on some level all image searches are uncanny: the memory attached to an image is of course fuzzier when it undergoes another layer of abstraction. The memory ends up attached to the majority's memories (which have also been attached images).

Freud would look at this offloading and consider the double and multiple selves. In "On Narcissism," Freud looks at the infantile state, when a child does not have a limited sense of self. The child, he claims, actually has multiple selves in his body, his mother, and anyone that cares for him. Because the infant offloads his needs and ideas onto separate entities that fulfill those needs and ideas, he does not see a boundary between himself and others. As far as the infant is concerned, that which responds to his wants is an extension of his will, and is therefore part of his self (8-9). These multiple selves are called "doubles," and

Freud relates them in "The Uncanny".

Having looked at popular examples of the uncanny, Freud notes their similarities:

"These themes are all concerned with the idea of a 'double' in every shape and degree, with persons therefore who are to be considered identical by reason of looking alike; Hoffman accentuates this relation by transferring mental processes from the one person to the other—what we should call telepathy—so that the one possesses knowledge, feeling and experience in common with the other, identifies himself with another person, so that his self becomes confounded, or the foreign self is substituted for his own—in other words, by doubling, dividing, and interchanging the self. And finally there is the constant recurrence of similar situation, a same face, or character-trait, or twist of fortune, or a same crime, or even a same name recurring throughout several consecutive generations." (233)

Nearly a century before the Internet, Freud describes a system similar to information retrieval. When one's ideas are shared across multiple individuals, and when the ideas are indistinguishable across bodies, one can divide her sense of self into these multiple individuals. There can then be a feeling of uncanny that is evoked when she realizes this familiarity of self is in fact another, completely separate individual. Thus, the selves feel familiar and end yet entirely foreign.

Specifically, when one searches Google she may receive search results that are similar to her own preconceptions. She may query the term "picnic" and find an image that is compositionally and conceptually similar to the image she recalls from her 2001 family picnic. She may find multiple image results that strike her as familiar. She then offloads her image (which already carries the memory of the picnic) on to the set of images, forming

multiple selves in the collective that is the Web. In Freudian terms, she returns to an infantile state where her ideas are fulfilled by others, and she stops distinguishing her self from others. However as a rational adult she cannot fully recreate the infantile state, and this feeling of multiple selves manifests itself in the uncanny. She remembers the feeling of dividing herself into doubles, but it is not actively available and it feels foreign.

V: Into the Uncanny Valley

According to Masahiro Mori's theory in "The Uncanny Valley," feelings of the uncanny can be charted in relation to the object's familiarity. In his text, Mori applies this charting to robotics, claiming that as robots come to resemble humans, we become more comfortable with interacting with them. However, there is a drop in comfort right before they become distinguishable from humans. This drop is coined "the uncanny valley" for its relation to the Freudian concept. For example, a toy robot is more comfortable in interaction than an industrial robot; but an automaton or zombie falls directly in the uncanny. On the exiting end of the uncanny, objects like prosthetics still feel uncanny but closer to comfort. At the end of this chart, declared as the most comfortable to interact with, is the actual human or anything that is completely indistinguishable from it.

Considering Google et al.'s personalized search technologies, the same theory can be applied to information retrieval. As we know, the uncanny is best evoked through image retrieval at a sweet spot of specificity, locality, and personalization. A similar chart can be drafted with the specificity, locality, and personalization (combined as subjectivity) of the

search as an axis.

At one end of this chart, we have broad searches listed. Like industrial robots, they are cumbersome and not very useful to the average user. These broad results are most often associated with research into foreign topics, as specificity is not yet apparent to the user. There is not much comfort with these results, nor is there discomfort. At most, a user may feel frustration with not understanding what is presented, but there is no uncanny.

Moving across the subjectivity axis, search results begin to become more comfortable as the user learns what he is researching. The information becomes navigable and increasingly familiar. Here, one might find images of grass, picnic baskets, and sandwiches in response to "picnic," but he would not see an image the compositionally and conceptually similar to his memory.

Skipping over the valley, on the end of the spectrum lays the picnic image itself. It is, for all intents and purposes, the most perfect representation of the memory and idea of a picnic. It is entirely subjective and the user is fully comfortable with it. The memory of the event and the document of the event are indistinguishable, such that the document *is* the memory. It is also worth noting that this end of the spectrum includes the photo's context as well. The user is only maximally comfortable with the image if it exists within a context he knows and over which he has control. Should the image appear elsewhere without his consent or knowing, it is no longer a perfect representation. Such a case would fall just short of perfect representation in the uncanny valley. Here, images are recognized and related to, but they ultimately end up appearing foreign.

An analysis of this placement finds that it is not the image that evokes feelings of the

uncanny but rather its context. No particular image creates the uncanny on its own. It is instead in the presentation of images. It is the authoritative presentation of images as societal definitions that creates the uncanny in response to a query. In such a situation, the user has no leeway to understand the images in a manner of her choosing. The images are presented to her as factual relations to the term she searched. These images *are* this term. Thus, when she is caught in a duality of familiarity and foreignness, she cannot simply dismiss the image. She is forced to confront the duality, and it then evokes the uncanny. Google's ability to authoritatively mine a user's data for "personalized search" pushes search results further into the uncanny valley. Google, and prolific web service giants like it, have taken to co-opting users' search histories, email keywords, and social networking profile to retrieve search results that it perceives to be more important to the user on an individual level. For example, any user who mentions in an email that his next vacation will be spent in Hawaii, who then searches the term "flights", will likely receive search results relevant to "flights to Hawaii." No longer is the dialogue "This result works for a lot of people, it should work for everyone," it is now "This result works for a lot of people like you, it should work for you." The authoritarianism has been directed to the user on a personal level.

In some situations, personalized search produces results more uncanny than just their presentation. By considering a user's activities outside the search engine field, and displaying results that is relevant to that activity, the search engine injects specificity, locality, and personalization *for the user without the user knowing*. This is a new paradigm that edges closer to nadir of the uncanny valley. In an ordinary search environment, when

the user actively creates specific searches or personal searches, on some level she expects to receive search results that may reflect that. When she experiences the uncanny multiple times, she may begin to learn what triggers evocative search results. With this knowledge she may nullify the uncanny in future searches. Google's invisible personalized search, though, abstracts that decision and takes further control from the user. She no longer has the ability to predict evocations of the uncanny unless she actively documents and traces her web activity as thoroughly as Google does. If she were to do this tracing it is likely she would need mediation to remember it all, and the abstraction caused by offloading memories onto media would more chances for the uncanny anyway.

However, should personalized search achieve maximum effectiveness, information retrieval could pull out of the uncanny valley. If web service giants such as Google monitor the entire extent of a user's life (beyond just his online habits using the company's products), it is likely that algorithmically defined relevance could equate human consciously defined relevance. Search results that consider user information beyond the search query could actually become very useful and escape the uncanny. In this perfect state, search is so localized that the collective is entirely abstracted and the search engine appears to only be searching your life and what's relevant to you. A user has maximum grip over the search results because they entirely match his past experience. That it is indexing absolutely everything is invisible. The user only sees what is perfectly relevant to him, and therefore he is like a converser who only knows one definition of *heimlich*: he has no third party to whom he can compare his ideas. It's only him and the search engine.

VI: Offloading the Argument

Currently the Internet is in a strange position in relation to user experience. The backbone of online activity—the search engine—has ties to Freudian theories of the uncanny in its interface, content, and presentation. When specificity, locality, and personalization align in a search, the uncanny can be evoked as the user receives search results that feel simultaneously familiar and foreign. The image, with its function of mediating memories, best evokes this feeling, but it is the search engine's presentation that gives the results any power. As personalized search becomes more ubiquitous, we will approach information retrieval results as perfect representations of experiential life, presumably peaking the opposite end of the uncanny valley. But when we achieve maximum representation, we must ask the question: is it that Internet interfaces are becoming minimally uncanny, or is all life becoming maximally uncanny such that we don't know any better?