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Premediating Ecological Crisis: A Visual Rhetoric of Florida Sinkholes

Jacob W. Greene, University of Florida

On May 8th, 1981 a sinkhole the size of a city block opened up suddenly in Winter Park, FL, taking down several vehicles from a nearby car dealership along with it. As the sinkhole slowly expanded over the next few days, tourists made detours to catch a glimpse of the unexpected urban void and, thanks to some quick-thinking entrepreneurs, they could even commemorate the occasion with a "Sinkhole '81" t-shirt. Although the Winter Park sinkhole (now known as Lake Rose) is an undoubtedly iconic moment in Florida's geological history, its status as the most infamous sinkhole in the state was challenged on February 28th, 2013, when a sinkhole opened up beneath a

bedroom in Seffner, FL, swallowing Jeff Bush in his sleep.

Sinkholes are not uncommon in Florida, and large—or strange sinkholes typically receive some form of national media coverage. However, the rarity of sinkhole fatalities, combined with the fact that Bush was the only person harmed in a house of five other people, contributed to an unprecedented sense of myth and incredulity pervading the media's coverage of the Seffner sinkhole. National Geographic (Berlin 2013a) described it as "a monster from a nightmare," while others played up its bizarre precision, noting that the sinkhole was "exactly the size of the bedroom" (Ortiz, 2013).

Although coverage of the Seffner sinkhole began to wane into the summer of 2013, the story resurfaced in August alongside coverage of another major sinkhole that opened up in Clermont, FL and eventually took down an entire resort building. In fact,

from the date of the Clermont sinkhole into late 2014, five major sinkhole stories came out of Florida, each replete with references to the ones preceding it and to Seffner in particularⁱ. The story of the Seffner sinkhole in early 2013 inaugurated and sustained an interest in sinkhole activity not seen since the catastrophic Guatemala City sinkhole in 2010 (Fig. 1).

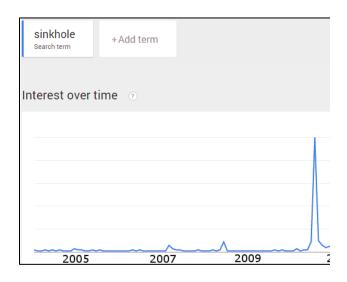


Figure 1- Data Source: Google Trends (www.google.com/trends)

Due to its consistent (re)circulation within the media, the Seffner sinkhole functioned as a kind of myth or origin story for subsequent Florida sinkhole activity. Media theorist Marshall McLuhan ([1964] 2003) writes that a myth "is the instant vision of a complex process that ordinarily

extends over a long period...the contraction or implosion of any process, and the instant speed of electricity confers the mythic dimension on ordinary industrial and social action today" (42). For McLuhan, the instantaneous logic of myth functions as the default interpretive stance for a media-saturated society attempting to derive meaning out of the vast network of information it produces.

Over the course of 2013-2014, the cultural perception of Florida sinkholes underwent a shift from novel, potentially harmful aspects of Florida's ecology (e.g. Winter Park) to dangerous, actually harmful ecological threats. For instance, a woman in Plant City, FL fell into a sinkhole while gardening in her backyard on two different occasions, once in 2010 and again in 2011. Initially, this story received very little attention, appearing mostly in local news. However, as Florida sinkholes became a more prominent fixture in the mainstream media throughout 2013 and 2014, the story resurfaced, even appearing on a January 2014 television special titled "Sinkholes:

Swallowed Alive" (Discovery Communications, 2014).

Indeed, the cultural perception of sinkholes as a mythic, deadly, and distinctly-Floridian carried over into early 2015 when the science documentary series NOVA released "Sinkholes: Buried Alive" (NOVA, 2015). Opening with a dramatized reenactment of the events leading up to Bush's death in Seffner and ending with an exploration of Florida's unique underground cave systems, the structure of the documentary retroactively simulates the media narrative that emerged from the actual sinkhole events from 2013 and 2014: Seffner is the catalyst, or harbinger, for impending wide-scale ecological disaster.

In this article, I argue that the specific ecological disaster of the Florida sinkhole provided the means for comprehending the abstract process of global ecological disaster, or what environmental theorist Timothy Morton (2013) refers to as a "hyperobject" (1). Morton writes that hyperobjects are "nonlocal," meaning that "any 'local manifestation' of a hyperobject is not directly the

hyperobject" (1). It is this nonlocal quality of hyperobjects that makes them so elusive; their ontological dispersion across space and time pushes them beyond the edge of human perception. Morton argues that one of the most important environmental issues of the 21st century—global warming—is a hyperobject because its "precise scope" is unknown even if its "reality is beyond question" (7). Although the material effects of global warming are undeniably real, "global warming" as an ecological phenomena (i.e. as a hyperobject) is never present as such.

Because the hyperobject global warming is nonlocal, it is easier to deny as a causal agent within Earth's ecology (8). In fact, the reason that Morton prefers "global warming" over the more conciliatory "climate change" is because the latter term obfuscates the material reality through which hyperobjects reveal themselves (i.e. through specific interactions of warm/cold/wet/windy/etc.). He writes, "[w]hat we desperately need is an appropriate level of shock and anxiety concerning a *specific ecological trauma*" (9, emphasis added).

The media representation of sinkhole activity in Florida—and the Seffner sinkhole in particular—from 2013 to 2014 provided a "specific ecological trauma" that mediated the hyperobject global climate change and global ecological crisis more generally. Media theorist Richard Grusin (2010) refers to this cultural phenomenon as "premediation," or the process through which a society anticipates the affective grounds of future trauma by simulating (premediating) its experience through the media.

Florida figures prominently—both geographically and politically—within the issue of global climate change. Florida is often used as a metonym for the effects of global warming (e.g. rising sea levels), and—ironically some of the most prominent climate change deniers hail from Florida." Indeed, reports even surfaced in March 2015 of an informal policy within Florida governor Rick Scott's administration that all uses of the terms "climate change" and/or "global warming" must be removed from public reports and state-sponsored environmental research (Huffington Post, March 12, 2015). Thus, even prior to the emergence of the major

sinkhole stories from 2013 and 2014, Florida had already been linked to potential ecological disaster, a disaster made all the more salient by the denialism associated with the state's political responses to it.

In "Iconographic Tracking: A Digital Research Method for Visual Rhetoric and Circulation Studies," Laurie Gries provides a methodology for tracking an image or event's "rhetorical becomings" as it circulates within and across physical and digital networks. Gries' method advocates for a productive dialectic between "data hoarding" (collecting data through web and image searches) and "data mining" (analyzing this data for patterns and trends) so that the researcher's knowledge of a given phenomenon is constantly informed by the movement of the phenomenon itself and not just the initial concerns of the researcher. According to Gries, such a methodology allows for the emergence of an image or event's "nonlinear, divergent, and unpredictable flows" (344).

The Florida sinkhole's deployment as a "specific ecological trauma" for global warming emerged out of the media

coverage of the Seffner incident and its appropriation within each of the six major sinkhole stories that came out of Florida between February, 2013 and November, 2014. In order to narrow the scope of my research, I tracked how these stories were covered in the mainstream media in the aftermath of each event, and thus intentionally bracketed other online networks through which this story circulated such as blogs, social media, and fringe/conspiracy-theory websitesⁱⁱⁱ.

The Seffner tragedy played a crucial role in shaping the Florida sinkhole as an affective symbol for actual, unexpected, and ubiquitous ecological disaster. As a result, the increasing normalization of sinkhole activity in Florida post-Seffner perpetuated a duality within the rhetoric of global climate change between potential and actual ecological disaster. This duality plays out within the visual-rhetorical narrative of Florida sinkholes as isolated yet ubiquitous crises, a narrative which premediated the ontological characteristics of the hyperobject global climate change.

Sinkholes and Ecologies of the Strange

Sinkholes form when carbonate rock (common in Florida) is dissolved by groundwater, creating a porous landscape conducive to springs, caves, sinkholes, and other underground voids. There are two basic types of sinkholes in Florida: cover-subsidence and cover-collapse. Cover-subsidence sinkholes form as sandy soil fills in small underground cavities over time, sometimes taking years to completely subside. Cover-collapse sinkholes, however, form when an underground void becomes too large to support the ground above it, or—as is typically the case in Florida—when a period of heavy rain follows a drought and an underground chasm normally filled with water empties and the heavy, rain-saturated ground above suddenly caves in (Berlin 2013b).

This invisible, underground deterioration contributes to sinkholes' cultural identity as "sudden" ecological phenomena. As geologist Clint Kromhout (2013) pointed out in a paper released by the Florida Department of Environmental Protection following the public's

growing interest in Florida sinkhole activity, sinkholes typically receive media attention only if they are peculiar and/or occur in human inhabited areas. Because covercollapse sinkholes are more sudden than cover-subsidence, they are more likely to result in death, injury, or unexpected property damage, thus making them more likely to appear on the news. Consequently, most of the media coverage surrounding sinkhole activity focuses on cover-collapse, perpetuating an overall conception of sinkholes as sudden, unpredictable ecological phenomena.

Unsurprisingly, the Seffner sinkhole was identified as cover-collapse, and much of its media coverage revolved around a rhetoric of suddenness, strangeness, and rarity that would prove formative to the developing identity of the Florida sinkhole. NBC's (2013a) televised coverage is emblematic in its uncanny description of the event as "a scene right out a horror movie." A similar rhetoric of mythic strangeness was deployed elsewhere in describing the "freak sinkhole" as "biblical," "bizarre...horrifying," and the "stuff of a living nightmare" (Buzzfeed, March

1, 2013; The Atlantic, March 1, 2013; Miami-Herald, March 1, 2013; Huffington Post, March 2, 2013). In addition to the sinkhole's strangeness, others emphasized its ominous precision, noting its "unique" size in opening only underneath Bush's bedroom (Los Angeles Times, March 1, 2013).

Barbara Zelizer (2010) points out in About to Die: How News Images Move the Public that the most widely circulated images of a disaster are often those that manage to pull the entire event "into one frame" (84). As an example, Zelizer discusses one of the most widely circulated images of the 1871 Great Chicago Fire. The image is a drawing by John R. Chapin, and it depicts a mass exodus of Chicagoans crossing the Randolph Street Bridge as they attempt to escape the fiery destruction of the city.

Zelizer claims that Chapin's drawing circulated so widely in response to this crisis because, unlike photographers' piecemeal documentation of the fire, Chapin's drawing managed to distill the significance of the entire event into a single image. Zelizer uses the

image's propensity for circulation to support her argument that it performed an important sociorhetorical function for the people of Chicago by providing the existential orientation required for "a public needing to figure out where it stood in relation to what it saw" (84). As a single, isolatable instance of a much larger process, Chapin's drawing provided a sense of specificity to the public's complex, individuated, and perhaps even contradictory experiences of the Great Chicago Fire. Similarly, I argue that the sinkhole in Seffner, FL, provided a rhetorical specificity to the global ecological crisis of climate change.

Because a sinkhole is often inextricable from the image of the singular void it leaves in its wake, the most salient (i.e. newsworthy) aspects of its activity are usually discernible from such images alone. Although iconic images of wide scale disasters such as fires or earthquakes certainly circulate, sinkholes are more precise and isolated in their material effect upon the world, thus making it easier to depict the entire disaster within the confines of a single image. Whereas the aftermath of wide scale disasters

is often repeated in looped video footage on 24-hr new cycles, the aftermath of a sinkhole is visually compact, thus making its circulation more instant and iconic.

The lackluster images of the Seffner sinkhole, combined with the tragic and bizarre manner of Bush's death, created a rhetorical context that privileged the circulation of the Seffner sinkhole as a narrative rather than a single image. Responding to this gap between the allure of Bush's death and its lack of visual representation, ABC created a virtual simulation of the Seffner sinkhole (Fig. 2). The simulation depicts a rapidly expanding hole swallowing up Bush's bed just as it breaches the floor of his bedroom. In this animated simulation, the rhetoric of strangeness emerging from the media coverage finds an outlet within the ABC simulation, thus circumventing the relatively tranquil images of Bush's intact home (Fig. 3). As a result, the Seffner sinkhole is further contextualized within the affective dimension of strangeness and incredulity that emerged from the "reality" of the initial media coverage.



Figure 2 - Screenshot (ABC News, 2013)



Figure 3- Video Thumbnail (Image courtesy of WFTS-Tampa Bay, 2013)

In a media ecology rife with premediated news (e.g. virus outbreaks, terrorist threats, climate change patterns, etc.), virtual simulations are a primary vehicle for distributing potential narrative futures, allowing the media to focus less on single, actual events and more on multiple, potential ones. Although the

ABC virtual view ostensibly simulates a single event—the Seffner sinkhole—its abstraction into a set of core visual elements (the eroding ground, the crumbling home, the empty animated bed, etc.) grants it a transferability that allows it to remain potential and symbolize a much larger event (or set of events) than the one it depicts.

In early 2015, NOVA released a documentary titled "Sinkholes: Buried Alive" focusing on the "escalating" rate of sinkhole activity in the United States and Florida in particulariv. The documentary opens with a narrated reenactment of the Bush family's experience of the sinkhole that killed Jeff Bush. The Seffner sinkhole's placement at the beginning formally indicates that it is to be read as an emblematic, if not catalytic, event for the ecological trend depicted throughout the rest of the documentary.

The Seffner reenactment deploys a docudramatic rhetorical strategy that film scholar Steven Lipkin (2011) refers to as sequencing, or the interspersion of original and recreated images/footage (3). The section is framed by voice-over

narration from Bush's family as the footage cuts back and forth between a dramatized reenactment of the collapse and actual footage from the rescue crew (Fig. 4). Through sequencing, according to Lipkin, docudramas are able to "link and authenticate the evidence" they present while still maintaining the suspenseful tone emblematic of the docudrama style (3). The docudrama's stylistic connection to investigative crime stories further instantiates a perception of the Seffner tragedy as a catalyzing event with an unexplained cause. Many televised docudramas such as Dateline or 48 Hours begin with an unexplained tragedy, usually the death of an innocent person, that provides the salience for the details revealed throughout the narrative. Obviously, Bush's death functions as this catalyzing event within the NOVA special. Indeed, Bush's role as the symbolic "martyr" of Florida's escalating sinkhole activity is only enhanced when the narrator mentions that his niece had been living in the same bedroom just two months prior to the collapse.



Figure 4-Screenshot of Original Footage (Hillsborough County, 2013)

The docudramatic style of the Seffner reenactment mirrors the initial media coverage of the actual Seffner sinkhole; both represent the Seffner tragedy as the catalyzing incident through which the Florida sinkhole developed its identity as a deadly, unanticipatable ecological phenomenon affecting innocent people in places considered safe (i.e. a man asleep in his bed). As the beginning to an evolving narrative of increasing sinkhole activity in Florida, the sinkhole that killed Jeff Bush in his sleep actualized the horrific potentiality present within sinkholes as ecological phenomena, and it further inscribed the Florida sinkhole as a mysterious, unprecedented ecological event.

Post-Seffner Sinkholes and Potential Ecological Crisis

The first major Florida sinkhole to appear after Seffner opened up on August, 11th, 2013 underneath a packed resort building in Clermont, a small tourist town in central Florida. News reports emphasize the sinkhole's proximity to the heart of Florida's tourism economy, noting that it occurred "near Disney World" and that many of the guests were on vacation (CNN, August 13, 2013; USA Today, August 12, 2013). The New York Times' science writer John Schwartz even foregrounded his article with this association, writing "[i]n the realms of fantasy near Walt Disney World, disaster rides abound" (August 12, 2013). On the surface, these links between Florida tourism and sinkhole activity may be nothing more than attempts to engage readers and search engines alike through the cultural esteem held by the term "Disney." Nonetheless, such "nonlinear, divergent" associations reinforce a cultural perception of the sinkhole as an ecological force in an antagonistic relationship to a core aspect of Florida's identity as a tourist destination (Gries, 2013.)

As Wendy Adams (2014) notes in her article for the Journal of Florida Studies "Romantic Paradise to Tourist Destination," Florida has long been represented as a place of "rejuvenating escape from the social constraints of everyday life" (3). Moreover, she points out that these representations of Florida emerge from an even earlier conception of the state as a place "rooted in myth, fantasy, and wish fulfillment" (5). Throughout the twentieth and twenty first centuries, Florida's legacy as a mythic, Edenic place combined with its emerging cultural identity as a vacation and retirement destination, resulting in a popular conception of Florida as a place of escape and respite that persists to this day.

Occurring within locations associated with rest (bedroom) and escape (Disney, vacation, etc.), respectively, the Seffner and Clermont sinkholes reinforced a conception of Florida sinkholes as ecological disasters within ostensibly safe places. Indeed, as other sinkholes opened up in Florida backyards (Dunedin, FL), retirement communities (The Villages, FL), and suburban neighborhoods (Spring Hill, FL), they contributed to the formation

of the Florida sinkhole as a symbol for unexpected ecological disaster.

In addition to its developing identity as an unexpected disaster, the Florida sinkhole was also indelibly stamped with an aura of incredulity due to its association with the Seffner incident, a story referenced in the majority of mainstream news coverage of subsequent Florida sinkholes. The salience of increasing sinkhole activity in Florida became rooted in the bizarre, unbelievable tragedy of Bush's death. Consequently, the Florida sinkhole came to symbolize the shift from the *potential* for unprecedented ecological disaster to the *reality* of unprecedented ecological disaster. Sinkholes are likely to become more regular as climate change brings with it longer periods of drought followed by heavy rain (Henley, 2013), thus its function as a "specific ecological trauma" for premediating the wide scale ecological trauma of global climate change should not be surprising.

Despite the fact that climate change has already brought about irreversible changes to Earth's ecology, descriptions of climate change are

often virtual, gradual, and anticipatory. Scientists create virtual models to predict the effects of higher temperatures and rising sea levels, and climate change activists evoke an admonitory tone when discussing the need for immediate, wide-scale action to combat potentially fatal environmental changes (Madigan, 2013). Moreover, some of the more shocking predictions of the consequences of climate change are related to rising sea levels, predictions which commonly feature Florida as a metonymic first victim (Fleshler, 2014). Although climate change itself might not be conisdered "virtual" to those who align with the overwhelming consensus of the scientific community, its interactions with the world are nonetheless distant (spatially and temporally), wide scale, and abstract, making it that much easier to ignore as an ecological phenomenon.

However, in contrast to the ontological characteristics of climate change as gradual and distributed ecological phenomena, sinkholes are immediate and isolated. Through their increased presence within the media throughout 2013 and 2014, the ecological

immediacy of the Florida sinkhole intersected with the gradual, anticipatory rhetoric of global climate change. As the Florida sinkhole emerged as an icon for unexpected disaster, it promulgated a cultural perception of sinkholes as symbols for political denialism and instability more generally. Following the Seffner incident, several political cartoonists used the sinkhole as a visual metaphor for the political and economic crises predicted to come as a result of the nation's partisan gridlock and impending budget sequestration (Plante, 2013; Beeler, 2013; Ramirez, 2013). This discursive connection between political and ecological events reveals the degree to which "the sinkhole" emerged as an icon for the potential consequences of obdurate denialism.

In their in-depth study of iconic
American photographs, Robert
Hairman and John Louis Lucaites
(2007) point out that a public image
should never be understood as
occurring in isolation but rather as
emerging from an "intertextual field of
discourses and other images" (34).
For Hairman and Lucaites, this
constitutive interaction of image and

discourse occurs across a variety of culturally mediated contexts, producing images that are "multiply coded" yet—due to the distilling processes of iconography—manage to "cohere in a manner that provides a sense of dynamic, dramatic movement toward some whole that can encompass the parts" (34). Although not traceable to a single iconic photograph, sinkholes nonetheless circulated as a visual reference point for the nation's political denialsm, and the "dynamic, dramatic movement" of Florida sinkholes in particular premediated the "specific ecological" consequences that such denialsm entails.

Media theorist Gregory Ulmer (2003) explains the acceleration of this image based logic in contemporary culture in terms of the rapid growth of digital media. Ulmer claims a shift has taken place from the discursive logic of print to the non-discursive logic of the image, or a shift from literacy to what he neologizes in the term "electracy" (10). In his book *Electronic Monuments*, Ulmer (2005) links his theory of electracy to the topography of his home state, writing that Florida's porous limestone aguifer

functions as an appropriate metaphor for the postmodern "psychogeography" of America:

[T]he underground movement of water, following the line of least resistance (greatest permeability) through fractures and cavities, creates the surface features of the landscape, analogous to the way the workings of the unconscious are manifested in symptoms...personal monuments to forgotten traumas (23-24).

The Florida sinkhole ("fractures and cavities") is the specific

"forgotten trauma" of climate change, and its manifestation creates an undeniable, physical rift across the denialism plaguing Florida's political response to its ecological future. As a result, Florida's topography is inscribed as kind of ground zero for the shift from potential to actual ecological crisis.

This tension between potential and actual ecological disaster is even appropriated into the visual structure of the concluding section of the

aforementioned NOVA documentary. As the narrator mentions in the conclusion, there are still thousands of miles of unexplored underground caves in Florida, making it extremely difficult to predict land instabilities before they occur. In the final section, a group of geologists attempt to map a portion of Florida's underground cave system while a separate group of geologists track the divers' movements, eventually identifying their location beneath a busy highway. This section of the documentary invokes a visual structure that reflects the antagonistic tension between Florida's supposedly solid ground and the mysterious voids lurking beneath it (Fig. 5). As the two groups meet, this tension is visually reinforced by a split-screen shot showing divers exploring an underground cave with what appears to be only a few feet of solid earth between them and the oblivious Florida pedestrians above. In so doing, the Florida sinkhole further instantiates itself as the visual metonym for impending ecological crisis.

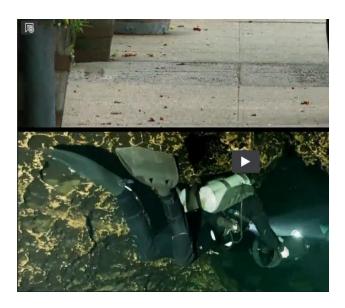


Figure 5-Screenshot (Klein, 2015)

The Ubiquitous Econography of the Florida Sinkhole

As an emerging symbol for the tension between ubiquitous and isolated crisis, the Florida sinkhole developed into what environmental rhetoric scholar Sean Morey (2014) refers to as an "econ," or "environmental icon." Morey describes econs as ways of "identifying and theorizing those environmental images that become iconic across mass audiences and symbolic of environmental issues and situations beyond any econ's individual species concerns" (1). Although econs typically correlate to specific animal species—such as the American bald eagle—they can also refer to ecosystems such as the South

American rainforests or the Florida Everglades (10). Morey refers to a variety of qualities (e.g. endangerment, local habitation, etc.) when discussing the criteria that might qualify an entity as econic; however, he seems to narrow in on a description of an econ's cultural value when he writes that "to become an econ, to become a symbol, perhaps requires that it [the econ] first (almost) become a martyr. The rare becomes valuable, becomes worth circulating" (13). Although the Florida sinkhole might not be "rare" in the same way that an animal or plant species is rare (i.e. endangered), it certainly evokes a high degree of ecological allurevi. This rarity, or allure, increases the econ's circulatibility and makes it an effective vehicle for prompting action and/or disseminating knowledge related to "environmental issues and situations" (14). Due to the necessarily reductive nature of econs, the type of knowledge that they circulate is affective and visceral.

Because a sinkhole is not likely to receive media attention unless it inflicts property damage, images of sinkholes are framed primarily in terms of their material effects. Over the course of 2013 and 2014, the Florida sinkhole became intertwined with a visual rhetoric of material loss and unanticipated disaster, particularly in spatio-temporal settings commonly regarded as safe (homes, bedrooms, resorts, retirement communities, etc.). More importantly, however, the visual rhetoric of Florida sinkhole coverage premediated the affective conditions through which the hyperobject

"global climate change" would be experienced through the media: as a compounding series of isolated yet interconnected ecological events.

Additionally, the common over-the-shoulder vantage point of sinkhole victims visually reduces them to anonymous figures of ecological displacement, thus allowing specific sinkholes to function as metonyms for ecological disaster more generally.

Media coverage of Florida sinkholes during this time period brought with it a steady stream of images focused on the material effects of sinkholes as ecological phenomena. Although coverage of a specific Florida sinkhole typically revolves around that particular image, it is not uncommon

for sinkhole coverage to incorporate images of other costly, dangerous, and/or unique sinkholes. Indeed, Florida sinkhole coverage during this time period appropriated images of visually striking sinkhole images from across the world (Fig. 6).



Figure 6- 2010 Guatemala City sinkhole. Photograph courtesy of Paulo Raquec (2010).

The image in Figure 6 shows an overhead photograph of an enormous sinkhole that opened up in Guatemala City in 2010; this is the same sinkhole responsible for the large spike in "sinkhole" search queries from Figure

1. Not only is the photograph one of the most iconic and ubiquitous sinkhole images circulating online, but it is frequently referenced and appears alongside coverage of Florida sinkholes^{vii}. As an overhead shot of a seemingly bottomless 66-foot-wide gash in the heart of Guatemala City's urban landscape, the image creates a stark visual contrast between the hole and the quotidian tranquility of its surroundings. This contrast reinforces the sense of destructive precision that contributes to sinkholes' econic allure and circulability. The unbelievable nature of the image even led some to question the veracity of the event in its initial hours of circulation (Moseman, 2010; Winnipeg Free Press, 2010).

However, as Michael Reilly (2010) pointed out during the media frenzy that followed initial reports of the event, the Guatemala City sinkhole is not a sinkhole. It occurred as a result of underground piping features and not, as is the case in Florida, from natural geological instabilities. This shows that the visual mediation of ecological events is motivated by a reception of spectacle that often neglects individuated approaches to ecological events in favor of abstractions (i.e. "sinkhole") that can be disseminated and placed within a more coherent relationship to other ecological events. In such cases, the image gets caught up in the "dynamic, dramatic movement" of its own econographic allure (Hairman, 2007).

The digital pervasiveness of the Guatemala City image came to shape the visually ubiquitous structure of Florida sinkholes coverage. As of early 2015, a Google Image search for the term "sinkhole" returns the Guatemala City sinkhole as six out of the first ten images. One of the first appropriations of the image within the context of Florida sinkholes occurred only a few days after the Seffner incident in an article from a British satirical news site (Mei, 2013; Fig. 7). In the article, titled "Massive Sinkhole Swallows up Whole of Florida," the writer jokingly reports on the disappearance of the entire state, commenting that "Google Earth will have to adjust its map and satellite images to factor in the massive hole where Florida once used to be." The article is juxtaposed with an edited image of the Guatemala sinkhole superimposed on top of a satellite image of Florida. Appearing on March 6th, 2013, barely a week after the Seffner collapse, this satirical article plays off the incredulous aura surrounding the Seffner sinkhole, and it uses the (literally) unbelievable

image from Guatemala City hole to visually emphasize this point.



Figure 7-Mei (2013). Photograph courtesy of *The Daily Squib*

The Guatemala City sinkhole exemplifies the aura of incredulity and curiosity surrounding sinkholes as ecological phenomena, a fact which perhaps explains its appropriation as a visual-rhetorical bridge between parody (Fig. 7) and mainstream media (Fig. 8). As coverage of Florida sinkholes began to increase after the Clermont sinkhole in August, 2013, images of the Guatemala City sinkhole once again resurfaced surreptitiously alongside the media's visual rhetoric. The video still in Figure 8 appeared during NBC's televised coverage of the Clermont sinkhole on August 13th. It displays a county map of Florida covered in small red dots, which, as

the commentator points out, represent the number of documented sinkholes in the state. A deep, non-descript hole looms beneath, labelled with the askew title "Florida Sinkholes." Although there is no direct evidence that the sinkhole pictured below the state was taken from the Guatemala City image, the visual similarities between the two are undeniable. For instance, to the left of the title, a portion of the building from the original image can be seen jutting out over the upper left section of the hole. It appears as though someone (unsuccessfully) erased this structure using the same soil colored layer as the image background, perhaps in an attempt to maintain a sense of anonymity to the looming "sinkhole" beneath the Florida map.



Figure 8- Screenshot (NBC, 2013b)

The connection between the image of the Guatemala City sinkhole and coverage of Florida sinkholes sustained well into 2015 in the title shot of the NOVA documentary "Sinkholes: Buried Alive" (Fig. 9). On the documentary's webpage, a close-up of the Guatemala City sinkhole is juxtaposed with a pithy description of the Seffner tragedy. In this shot, the almost unreal image of the Guatemala City sinkhole is appropriated as an econ for the seemingly unreal event of Bush's death.

Program Description

In a leafy suburb near Tampa, Florida, on February 28, 2013, a giant hole opened up under the bedroom floor of Jeffrey Bush, swallowing him as he slept. His body was never found. Bush was a victim of a sinkhole—a worldwide hazard that lurks wherever limestone and other water-soluble rocks underpin the soil. When carbon dioxide from the air

Figure 9- Screenshot (NOVA, 2015)

Similar juxtapositions of specific sinkholes with abstract data continued into 2014 as more images of Florida sinkholes began to (re)circulate. The still from Figure 10 was taken from a *Today Show* broadcast covering the Spring Hill sinkhole in July, 2014. Similar to the still from Figure 8, Figure 10 presents a county map of Florida with small dots indicating documented sinkholes; however, instead of the Guatemala City

sinkhole, the background in Figure 10 features the wreckage of a sinkhole that opened up beneath a home in Dunedin, FL in November, 2013.



Figure 10- Screenshot (NBC, 2014b)

Although Figures 8 and 10 depict different sinkholes, they share a pivotal link in using an anonymous sinkhole to represent Florida sinkholes in general. The background images functioned as an affective reference point for the abstract dots on each of the Florida maps. Moreover, the interplay between the dots and their representative background image reinforces the salience of the media narrative that sinkholes are opening up more regularly in Florida. Such visual representations of the Florida sinkhole contributed to its development into an econ for ubiquitous yet isolated ecological disaster.

This dialectic between isolated and ubiquitous disaster is also discernible within images of sinkhole victims, who are often depicted with their backs to the viewer (Fig 11). In such images, faceless sinkhole victims gaze upon their crumbling suburban dwellings^{viii}. Such a setting reinforces the ubiquity of the sinkhole by invoking the displacement of the anonymous suburban subjects in the foreground.



Figure 11- (NBC, 2014a)

Whereas photographs were once associated with live events, they are now associated with an event's aftermath, or what photography and media theorist David Campany (2003) refers to as "late photography."

Campany defines late photography as images in which the viewer "can see that something has happened" but is "left to imagine or project it, or to be informed about it by other means"

(188). As video recording technology became more advanced and portable throughout the twentieth century, current events—such as environmental disasters—were more likely to be revealed through video, to the point that in today's media ecology "it is very rare that a photograph breaks the news" (188). Late photographs of disaster either assume or leave unspoken the cause of the disaster in order to emphasize its effects. As instances of late photography, these images of sinkhole victims abstract the experiences of individual sinkholes into core, transferrable images of ecological displacement. Through this process, the Florida sinkhole becomes an econ signifying not only the specific, local event of a Florida sinkhole, but the displacing effects of a global ecological crisis.

Conclusion

Recently, the rhetoric of global climate change has taken up a more nihilistic tone. Many experts claim it is now too late to reverse the most dramatic effects that will be caused by extreme temperatures and rising sea levels (Porter, 2014). Although

conservatives are beginning to concede to the reality of global climate change, they typically only do so with the caveat that it is not human caused (Applewhite, 2015). As a result, the prevailing perception of society's relationship to the environment is one that acknowledges environmental change yet denies any sense of collective agency in mitigating its cause. Therefore, in depictions of ecological disaster, such as those in Figure 11, it is then little surprise that the only valid response for the anonymous suburban subject is one of passive displacement.

As Whitney Bauman (2014) notes in "South Florida as Matrix for Developing a Planetary Ethic," any discussion of Florida's precarious ecological future must necessarily take a "multi-perspectival" position. Such a position, Bauman argues, "enables us to become ecological creatures" at a time in which the ethical imperatives to "preserve, conserve, and restore" have proved to be inadequate responses to wide scale ecological issues (15). Similar to Bauman, I am not naïve enough to believe that such approaches will permanently solve issues of political intransigence, media

sensationalism, and science denialism currently plaguing environmental policy. Rather, I consider the mediation of ecological crisis a key affective component to our individuated yet interconnected ecorhetorical futures, and critical, "multiperspectival" attention to this medial phenomenon in the present just might provide us with the ability to navigate such futures more effectively.

ⁱ A majority of major media outlets reporting on these five subsequent sinkholes (ABC, NBC, FOX, and CBS)

reference Seffner at some point in their coverage. ii See Atkin (2014), Valentine (2014), and Bennett (2014) for a general overview of climate change denialism in Florida politics.

iii Although I did not have sufficient space to discuss this last category (fringe and conspiracy theory sites), such websites commonly appeared in search results for the Seffner sinkhole and during late 2013 when Florida sinkhole activity began to appear more regularly within mainstream media. Common analyses of the Seffner sinkhole on these sites categorized it as either a sign or punishment from a spiritual entity or a conspiratorial scare tactic of the mainstream media and/or government organization (See for instance Answers in Genesis, "The Florida Sinkhole Tragedy: Why Did it Happen, and Could it Happen Again?" March 5, 2103). iv I put "escalating" in scare quotes because the establishment of a consistent and reliable database of sinkhole incidents has yet to be established. As of early 2015, the most comprehensive databases are run by insurance companies or insurance consulting services ("Florida Sinkhole Reports"). These organizations only focus on "subsidence incidents," or sinkholes that have been observed and reported. Such reports do not take into account sinkholes that open up in uninhabited areas or sinkholes that cause inconsequential property damage ("Florida Geological Survey-Frequently Asked Questions-#14").

v This rhetoric can even be seen in advertisements for Walt Disney World's amusement parks (e.g. "Where Dreams Come True").

vi In the aftermath of the Seffner sinkhole, for example, the average Google search term frequency for

"sinkhole" skyrocketed (Data Source: Google Trends (www.google.com/trends).

vii NBC News, "Massive sinkhole swallows Florida Man," March 1, 2013; *The Daily Beast*, "The Science of Sinkholes," March 2, 2013; *Yahoo News The Lookout* "Five facts about sinkholes," March 5, 2013; *CBS News*, "Deadly sinkhole revealed under Fla. Home," March 4, 2013.

viii For further evidence of this visual trend within media coverage of the Clermont, Dunedin, and Spring Hill, FL sinkholes, see *BBC News*, "Sinkholes: A deadly threat from Florida's 'underworld," February 3, 2014; *The Tampa Tribune*, "Sinkhole Swallows parts of two Dunedin homes," November 14, 2013; *National Geographie*, "Dramatic Pictures of Recent Sinkholes Reveal Hazards Lurking Below," July 25, 2014.

Works Cited

ABC News. 2013. "Florida Man Swallowed by Sinkhole: Conditions Too Unstable to Approach." (Video). March 1.

Adams, Wendy. 2014. "Romantic Paradise to Tourist Destination: The 1868 Florida State Seal." *Journal of Florida Studies* 1 (3).

Applewhite, J. Scott. 2015. "Senate vote that climate change is real, but can't agree on cause." Associated Press. January 21.

Atkin, Emily. 2014. "Florida Congressman: If humans cause climate change, then 'why did the dinosaurs go extinct?" *Climate Progress*, June 9. http://thinkprogress.org/climate/2014/06/09/3446650/miller-florida-climatedenial/

Bauman, Whitney A. 2014. "South Florida as Matrix for Developing a Planetary Ethic: A Call for Ethical Per/Versions and Environmental Hospice." *Journal of Florida Studies* 1 (3): 1-21.

Beeler, Nate. 2013. "The Sinkhole." The Columbus Dispatch. March 5.

Bennett, Brian. 2014. "Marco Rubio says human activity isn't causing climate change." Los Angeles Times, May 11.

http://www.latimes.com/nation/politics/politicsnow/la-pn-rubio-denies-climate-change-20140511-story.html

Berlin, Jeremy. 2013a. "Sinkhole Science: A Primer." *National Geographic News*, March 5. http://news.nationalgeographic.com/news/2013/03/130305-florida-sinkhole-science-causes-world/

Berlin, Jeremy. 2013b. "Why Sinkholes Open Up." *National Geographic*, August 13. http://news.nationalgeographic.com/news/2013/08/130812-florida-sinkhole-disney-world-explainer-urban-science/

Campany, David. 2003. "Safety in Numbness: Some Remarks on Problems of 'Late Photography,'" in *The Cinematic*, ed. David Campany, 185-194. Cambridge: MIT Press, 2007.

Discovery Communications. 2014. "Sinkholes: Swallowed Alive." (Television Episode). *Destination America Presents*, January 15.

Fleshler, David, Matt Haran, Cindy Jones-Hulfachor, and Rachel Schallom. 2014. "Rising Seas: Inching Toward Disaster." April 6. http://interactive.sun-sentinel.com/rising-seas/

"Florida Geological Survey-Frequently Asked Questions." Florida Department of Environmental Protection. Last modified November 7, 2014. http://www.dep.state.fl.us/geology/contactus/faq.htm#14

"Florida Sinkhole Reports." *FloodInsights*. Accessed May 11, 2015. https://www.floodinsights.com/sinkholes.html

Gries, Laurie. 2013. "Iconographic Tracking: A Digital Research Method for Visual Rhetoric and Circulation Studies." *Computers and Composition* 30 (4): 332-348.

Grusin, Richard. 2010. *Premediation: Affect and Mediality After 9/11*. London: Palgrave Macmillan.

Hairman, Robert and John Louis Lucaites. 2007. *No Caption Needed: Iconic Photographs, Public Culture, and Liberal Democracy*. Chicago: The University of Chicago Press.

Henley, Jon. 2013. "What are sinkholes and what causes them?" *The Guardian*, March 4. http://www.theguardian.com/world/2013/mar/04/what-causes-sinkholes-florida-man

Kromhout, Clint. "What's Up With All the Sinkholes?" Florida Department of Environmental Protection. Accessed March 23, 2015.

http://www.dep.state.fl.us/geology/geologictopics/sinkhole/WhatsUpWithAlloftheSinkholes.pdf

Lipkin, Steven. 2011. *Docudrama Performs the Past: Arenas of Argument in Films Based on True Stories*. United Kingdom: Cambridge Scholars Publishing.

Madigan, Nick. 2013. "South Florida Faces Ominous Prospects from Rising Waters." The New York Times, November 10.

http://www.nytimes.com/2013/11/11/us/south-florida-faces-ominous-prospects-from-rising-waters.html

McLuhan, Marshall. 1964 2003. *Understanding Media: The Extensions of Man*. Berkeley: Gingko Press.

Mei, Maya. 2013. "Massive Sinkhole Swallows Up Whole of Florida." *The Daily Squib*. March 6.

Moseman, Andrew. 2010. Guatemala's Crazy-Deep Sinkhole (No, It's Not Photoshopped)." *Discover*, June 1.

Morey, Sean. 2014. "Florida Econography and the Ugly Cuteness of Econs." *Journal of Florida Studies* 1 (3): 1-25.

Morton, Timothy. 2013. *Hyperobjects: Philosophy and Ecology After the End of the World*. Minneapolis: The University of Minnesota Press.

Murray, Joddy. 2009. *Non-Discursive Rhetoric: Image and Affect in Multimodal Composition*. Albany: State University of New York Press.

NBC. 2013a. "Brother of sinkhole victim: 'I could hear him screaming for me." (Video). *Today*. March 2.

NBC. 2013b. "Florida's Costly 'Sinkhole Alley.'" (Video). Nightly News. August 13.

NBC. 2014a. "Giant Sinkhole Swallows Two Homes in Florida." (Video). *Today*. April 21.

NBC. 2014b. "Sinkhole Threatens Florida Neighborhood." (Video). Today. July 21.

NOVA. 2015. "Sinkholes-Buried Alive," *NOVA* website, http://www.pbs.org/wgbh/nova/earth/sinkholes.html. April 21.

Ortiz, Erik. 2013. "SEE IT: Sinkhole that swallowed a sleeping Florida man revealed after home is demolished." *New York Daily News*, March 5.

http://www.nydailynews.com/news/national/sinkhole-swallowed-sleeping-florida-man-revealed-article-1.1279726

Klein, Larry. 2015. "Sinkholes-Buried Alive." (Television Episode). *NOVA* website, January 28.

Plante, Bruce. 2013. "Washington Sinkhole." Tulsa World. March 1.

Porter, Eduardo. 2014. "Taking Effective Action Against the Unstoppable." *The New York Times*, June 24.

Ramirez, Michael. 2013. "The Sink Hole." Investors Business Daily. March 31.

Raquec, Paulo. 2010. "Hundiemento Zona." (CC BY-NC-SA 2.0).

http://www.flickr.com/photos/gobiernodeguatemala/4657053554/in/photostream/

Reilly, Michael. 2010. "Don't call the Guatemala Sinkhole a Sinkhole." *Discovery News*, June 4. http://news.discovery.com/earth/dont-call-the-guatemala-sinkhole-a-sinkhole.htm#

Smith, Marc A., Lee Rainie, Ben Shneiderman, and Itai Himelboim. 2014. "Mapping Twitter Topic Networks: From Polarized Crowds to Community Clusters." *Pew Research Center*. February 20. http://www.pewinternet.org/2014/02/20/mapping-twitter-topic-networks-from-polarized-crowds-to-community-clusters/

Ulmer, Gregory L. 2003. *Internet Invention: From Literacy to Electracy*. New York: Pearson.

Ulmer, Gregory L. 2005. *Electronic Monuments*. Minneapolis. University of Minnesota Press.

Valentine, Katie. 2014. "After Climate Meeting, Scientists Still Aren't Sure That Florida's Governor is 'Climate Literate.'" Climate Progress, August 21. http://thinkprogress.org/climate/2014/08/21/3474248/rick-scott-meets-with-climate-scientists/

WFTS Tampa Bay. 2013. "36-year-old man swallowed up in sinkhole in his Seffner home presumed dead." *ABC Action News*. (Video). March 1.

Winnipeg Free Press. 2010. "Sinkhole: Real or bad Photoshop?" (Blog). June 1.

Zelizer, Barbara. 2010. *About to Die: How News Images Move the Public*. Oxford: Oxford University Press.