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MAKING SENSE OF LIFE IN 2017 - METAPHORS OF THE INTERNET

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In 1998, Annette Markham proposed a framework of the internet as a tool, as a place and as a way of being. In the introduction of her book “Life Online: Researching Real Experience in Virtual Space” she wrote:

“I wanted to know why people spent so much time online. I wondered what cyberspace meant to them, how it affected or changed their lives. I wanted to know how they were making sense of their experiences as they shifted between being in the physical world and being in these textual worlds created by the exchange of messages, where they could re-create their bodies, or leave them behind. ”

In the 20 years since the publication of this research, various metaphors have helped us make sense of and explain our experiences with and in digital, web, internet-mediated, or technologically saturated contexts. Cyberspace and the Electronic Frontier gave way to The Information Superhighway. The Net became the World Wide Web, which morphed into social network sites, convergence culture and networked publics. As the internet has become more mobile and ubiquitous, it is predominantly explained as a way of being.

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Studying the metaphors that are commonly used in scholarly, professional, legal and popular discourse can create important insights about the tropes of “truth” (Burke 1945/1969), and about how people and groups make sense of their experience and the world. As Lakoff & Johnson (1980) remind us, each metaphor highlights certain aspects of situations and simultaneously obscures other alternatives. As various metaphors of the internet thrive or dwindle, these both illuminate and distort what we notice about different phenomena (Morgan 1986/1997). “As our metaphorical conceptualizations of the term “Internet” become more concrete,” Markham wrote in 2003: “walls of meaning are constructed around us, reifying a box that we will be asking ourselves to think outside of in the future.”

This panel brings together five short presentations that engage with the original metaphorical framework to examine various commonly invoked metaphors about networked technologies and publics, their conceptual and methodological implications, and how these change over time. We also critically examine how Markham’s framework might remain a useful heuristic for categorizing experience or be extended and expanded.

Paper 1 examines the interplay of metaphor and memory among long-time internet users during times of breakdown and crisis. For long-time users, the internet has shifted over two decades from voluntary to compulsory, peripheral to central, marvelous to mundane. Do people who witnessed these transitions make different sense of the internet than more recent adopters? In moments of conflict or injustice, some long-time users invoke a narrative of decline, harkening back to an idealized past internet, presumed to be more open, egalitarian, or exciting than the present. What can we learn from these expressions of loss? How might they illustrate the sense-making habits of long-time internet users?

Paper 2 also engages with shifts and changes in time, asking what the implications of predominant metaphors of internet are for how its egalitarian possibilities are invoked, resisted and experienced. The author compares early political metaphors of the internet to contemporary ones, contrasting the rhetoric of democracy with that of mobs and trolls. Based on research with countercultural groups the author then turns to spatial metaphors of the internet as a means of fostering community and civic dialogue. Although spatial metaphors have been critiqued as being reductive and naive to important differences in how geography asserts itself online, the author argues that a nuanced understanding of online space as hospitable to civic discourse can recuperate the democratic potential of life online.

Paper 3 challenges the prominent metaphorically laden concept of “platform vernacular” by examining a non-dominant platform vernacular among gender non-conforming Tumblr users. It goes on to literally *flesh out and spatially inflate* the aspects of vernacular that focus on affordances and location. The author engages deeply with the metaphor of social media as place.

The focus on the metaphor of place continues in Paper 4, but we shift from the metaphoric framework as a lens through which to explore and explain people’s lived

experience, and focus on the implications metaphors have for methods of studying the internet. The authors analyze three ethnographic methods (“walk-through”, “go-along” and “scrolling back”) that use metaphors of *mobility* as their organizing principle. Critical discourse analysis shows how each method makes use of metaphors pertaining to both “media-as-tools” and “media-as-places”, and how these configure the methods to become more or less oriented towards flows of media use, negotiations of access, and media as mnemonic devices in everyday life as well as the research situation.

Paper 5 uses the metaphoric framework and the methods of critical metaphor analysis to study the rhetorical functions of the Internet of Things within the Smart City discourse. The authors of this paper suggest conflicting perceptions of the Internet of Things, whereby it is framed in popular discourse as a Way of Being but implemented at the level of city infrastructures as a Tool, or more specifically a conduit for information transmission.

Finally, we have a commitment from Annette Markham to read the papers in advance and chair the session.

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MEMORY AND METAPHOR: NARRATIVES OF DECLINE AMONG LONG-TIME INTERNET USERS

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In the late 1990s, metaphors functioned as sense-making devices for internet users experimenting with new forms of computer-mediated communication. Building on her ethnographic work in *Life Online* (1998), Annette Markham identified three interrelated classes of metaphors in the discourses of net enthusiasts—tool, place, and way of being—each of which reflected a different orientation toward the socio-technical assemblage termed “the internet” (2003). Twenty years later, the internet is receding into the background of everyday life, but the need for sense-making metaphors remains. The autobiographical micro-narratives of long-time users provide glimpses of metaphors in flux amid changing technical and political conditions. In first-person accounts circulating on social media, long-time internet users tend toward narratives of decline, nostalgia, and loss.

Markham developed her three-part metaphorical framework at a juncture in which the visibility of the internet in popular culture outpaced hands-on access for most Americans. In 2001, approximately one-half of American adults reported accessing the internet but only a tiny minority reported subscribing to a home broadband service (Pew Research Center, 2017). Meanwhile, these same Americans had been regaled for nearly a decade with stories of the Internet as a technical marvel, economic opportunity, social revolution, and moral threat. A sample of *Time* cover stories illustrates the extent to which the internet permeated everyday talk: from the “info highway” in 1993, to the “cyberporn” panic in 1995, dot-com “golden geeks” in 1996, and the “death of privacy” in 1997. Beyond these sensational headlines, numerous stories circulated about friendships, romances, collaborations, and support groups forming on the net. With these narratives in the background, Markham described her early experiences and expectations of the internet and its growing user population as “astounding” and “extraordinary” (Markham, 1998, pp. 16–17). At the turn of the century, the internet seemed charged with unknown possibility.

Twenty years later, the sense of wonder that characterized early encounters with the internet appears scarce. With the increasing availability of wireless internet connections, broadband access is nearly universal across many different socio-economic segments of the U.S. population, particularly those that intersect with higher incomes, more education, or a white racial identity (Pew Research Center, 2017; Rainie, 2017). Perhaps because of this high rate of adoption, many of the routine bureaucratic aspects of life in a post-industrial nation-state have shifted to the internet. In comparison to the fantastical multi-user environments that Markham described in 1998, typical uses of the internet in 2017 seem quite dull: reading the news, solving a crossword puzzle, shopping for household goods, or arranging meetings with coworkers. Furthermore, in popular media, the internet seems to oscillate unpredictably from the mundane to the menacing. The same platform used to file income taxes is said to facilitate waves of

terrorism, harassment, fraud, and propaganda. Returning to the *Time* archive, we find alarming cover stories about the “secret web where drugs, porn and murder hide online” in 2013 and a failed e-government initiative described as a “nightmare” in 2014. What is striking about this recent sample, however, is how *infrequently* the internet is mentioned, a contrast that reflects the internet’s domestication. The net beats a quiet retreat into the quotidian.

Long-time users, that is, people who have accessed the internet routinely since 1997, are in a unique position relative to the transformation of the internet from ballyhoo to banality. While nearly all American adults have been exposed to ideas and arguments about the internet since the early 1990s, only long-time users may temper these narratives with first-hand experience. Long-time users bore witness to several translations in the cultural position of the internet: from voluntary to compulsory, peripheral to central, marvelous to mundane. For the long-time user, the interleaving of computer-mediated communication and human society is neither taken-for-granted nor natural. And while these transitions unfolded over the course of many years, long-time users are only occasionally prompted to reflect on the changes they have experienced. It is in these moments of self-reflection that we find clues regarding the changing meaning of metaphors over the past two decades.

This paper focuses on two types of discourses that implicitly invite long-time users to reflect on their experience of the internet over time: nostalgia and failure. In the first case, long-time users may feel inspired to share a personal recollection of the early net after encountering its representation in popular culture. These first-person narratives accumulate in social spaces on the web, from the popular press and YouTube to niche messageboards dedicated to retrocomputing or fandom (e.g., the subreddit dedicated to *Halt and Catch Fire*). The second type of discursive event follows moments of breakdown or crisis related to the internet itself. The specific provocations vary—from a mass-scale leak of personal data to the moral panic over “fake news”—but, again, we find first-person histories of the early net in circulation alongside news coverage of these events. In both the cases of nostalgia and failure, the narratives of long-time users depict the early net as a kind of golden age; an electronic Eden in which users were free to play and experiment in relative safety. As one characteristic comment reads, “[This] brings back some fond memories. [Back then,] the worst thing that would happen was that call waiting would knock me offline!”

Around the same time that Markham was preparing *Life Online*, Arthur Herman published *The Idea of Decline in Western History*, an intellectual history seeking to understand the common belief that Western society is perpetually in decline, either through slow decay or by impending disaster (2014). Herman argued that the tradition of “declinism” might be fundamental to modernity in the West, an inversion—but not a refutation—of the idea of progress. In his sweeping style, Herman asserted, “every theory of progress has also contained a theory of decline” (p. 13). For our purposes, Herman’s book provides a broader historical context for the long-time user who experienced the internet as a *revolutionary* way of being and now laments the passing of her salad days. In Herman’s reading of European revolutions of the 19th and 20th century, the ecstasy of revolution is unsustainable; a momentary break followed by a return to the ordinary or, worse, the equal-and-opposite reaction of repression and violence.

As long-time users grapple with the domestication of the internet, their metaphors must adapt. At the same time, we may wish to speculate about the experience of more recent adopters. Does the internet still offer a sense of excitement and decline? Or, was there a unique revolutionary moment in the internet's past that is now beyond reach?

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FROM DEMOCRACY TO POPULISM: POLITICAL METAPHORS OF LIFE ONLINE

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Early narratives (from journalists, industry leaders, policy makers and academics) about the internet emphasized its democratic potential, where the web was imbued with rhetoric of individual choice, fostering tolerance and exposure to diversity. Markham (1998) has pointed out the ways in which the internet has been conceptualized as a tool, and in a political narrative, early internet discourse positioned the web as a tool of democracy. These narratives emphasized democratic capacities of self-reliance (in terms of gaining knowledge about how to use digital technology), universal access to knowledge (or at least, universal to those with a modem), and tolerance (through exposure to diverse viewpoints). This hype can be (and indeed has been) critiqued for advancing hyper-individualist narratives that ignored experiences of race, gender and privilege (Chun, 2006; Nakamura, 2001), and for failing to recognize the ways that differences in geography and privilege can be sharpened rather than reduced by online connectivity (Burrell, 2012). While some of these early promises have endured, particularly in neo-liberal narratives of self-promotion (Marwick, 2013), recent political turmoil such as the 2016 presidential election has led technophiles as well as technophobes to ask whether the web has delivered on promise of tolerance, self-determination and diversity (Kreiss, 2016). Given concerns of algorithmic sorting and extremist rhetoric, has the web in fact delivered a populist public over a democratic tool?

This paper begins by characterizing early and contemporary political metaphors of the internet, contrasting rhetoric of democracy with contemporary outcomes of populism. For the purposes of this extended abstract, I have condensed this analysis into the table below, noting that my thinking on populism has been shaped by work from Laclau, Mouffe, and Panizza (in Panizza, 2008). When we think about how the web was initially characterized as a tool of democratic progress (e.g. in projects like One Laptop per Child, see Warchauer and Ames, 2010), this connection leverages association with the internet as a DIY tool for self-improvement and autodidactic learning that can moreover foster tolerance by connecting users to people across the globe who are fundamentally different. When we think about the political implication of the internet in 2017, the (often panicked) rhetoric that emerges highlights the extremism of content, the hyper-segmentation of publics and the uneven virality of amplifying some voices over others.

Democracy	Populism
Elected representatives	Leader as demagogue
Presumed equality between citizens	Ethic of binaries and relativism

Faith in system	Rejection/mockery of system
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Web as promised	Web as delivered
DIY ethic of self-reliance, individual creativity	Connections and content determined or facilitated by algorithms
Geography irrelevant	Geography reinforced, both in terms of access and hyper-local content
Exposure to diverse ideas, backgrounds	Hyper segmentation and siloes

With these diverging narratives in mind, I compare longstanding metaphors of online citizenship as democratic with contemporary debates on mobs and trolls (Phillips, 2011). I argue that these disparate symbols can help parse complex shifts in general expectations of what the internet is meant to do for its many online publics. Much of what I've just described relies on characterizations and hype, which risks eliding important nuances of life online. Trolls have always existed on the internet (Dibbell, 1998) and life online can still be and often is wonderfully democratic. By sketching these contrasting views, my goal is not to polarize further the politics of internet discourse, but rather to tease out the underlying logics of the online publics that have emerged as populist, and to think about possibilities for recuperating their democratic potential.

Drawing on fieldwork with countercultural groups who rely on the internet for a sense of togetherness, I discuss how countercultural communities have worked to maintain a sense of shared identity among a diverse group of constituents, socio-technical models they've developed for mitigating internal conflict, and tensions between mainstream platforms and marginalized identities. In particular, I propose a return to thinking about online life as a form of place-making.

It's significant that Markham (1998) described the internet as place rather than space - cultural geographers (e.g. Massey, 2005; Tuan, 1977) have conceptualized the former as a physical location and the latter as a convergence of material setting, social context with a temporal history. Spatial metaphors for the internet have been problematic for as long as they've been popular. From *web sites* to *page visits*, our language for talking about online interactions is heavily indebted to metaphors of space. Critiques of these metaphors arose almost as quickly as the technologies themselves (e.g. Druick, 1995; Harrison & Dourish, 1996; Stefik, 1997) but they endure in ways that have consequences for thinking about how online publics form and embrace or reject certain political relationships.

Looking at the tensions surrounding countercultural publics and online place-making, I draw out possibilities for thinking about how groups have developed practices and policies for hospitable dialogue. Life online will always be contentious, no platform can be all things to all people, and no set of policies can ensure peaceful interactions all of

the time. But in evaluating changing metaphors for participation in online publics, it becomes possible to reimagine the web we want, less as a political tool as more as a place for dialogue and diversity.

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“IT’S JUST A DIFFERENT CIRCLE OF FRIENDS ONE PLACE OR ANOTHER”: AFFORDANCE HACKING AND THE CONSTRUCTION OF PLACE VIA TRANS SELFIES ON TUMBLR

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Sloppy, wet and tactile metaphors abound in Annette Markham’s book *Life Online* (2003). Chinese food boxes splayed in her office, what Terri Senft describes as “computer butt” after eight hours in front of a screen, the physical discomfort of waiting for a response from an awkward interview subject, the tossing and catching of virtual balls and eating of virtual ice creams. I find incredible parallels between Markham’s material-affective descriptions because after working with young people who share images of their bodies on social media platforms for over three years, I see the same importance of the metaphors of *place* and *being*—what I’m aligning with *matter* and *affect*—even today, 20 years later online. And the thing that perhaps holds most true to me between Annette’s work and mine is not the distinctiveness of these concepts, but rather their messy, slippery, wet and entangled nature. Being online is not a matter of hard edges and clear boundaries; it’s a matter of slippery squishiness, boundary and border crossing, entanglement and chaos, and inversions and instability.

In this paper I pick up on Annette’s metaphor of *place*, adopted by herself and her participants, to describe being online. I want to staple my chapter here onto her metaphor, but I also want to rework it a bit. I want to suggest that *place*, when it comes to social media for the group of trans people I worked with last year, is constructed via—and again to use Markham’s words—a combination of social media *tools* and *ways of being*. In other words *place*, *tools*, and *ways of being* are all entangled and inseparable. The impetus for this idea came as a result of a lengthy open-ended questionnaire completed by 62 transgender and gender non-conforming users who regularly post selfies to Tumblr. The metaphor of *place* came up again and again for this group of people, when it came to explaining the proliferation of their selfies on Tumblr as opposed to other social media platforms. The sense of place emerged as a sweet entanglement of the embodied experience of *these particular users* amidst the particularities of the supportive platform culture, and through the creative use of Tumblr’s particularly malleable affordances, which led to my participants describing Tumblr as a comfortable and safe *place*.

While I deeply want to share the narratives of place described by my participants, I am attentive and cautious of my own position as a cis-gender female researcher who is attempting to narrate the lived experiences of this cohort of transgender and gender non-conforming Tumblr users. I draw from theory on transgeographies to discuss some of the particular lived experiences of the participants of my study. Transgeographies places special attention on the lived embodied experiences, often via narratives, of transgender and gender non-conforming people’s embodied experiences of space and place (Browne, 2010). Although transgeographies mostly narrates the experiences of

physical built spaces, as mentioned, the narratives of my participants described Tumblr very much as a *built space*—and here I draw on the words of the participants—a “safe space”, a “place”, and “home”. Alongside quotes of the lived experiences of users, I entangle the writings of transgeography theorists to describe the embodied and experience of Tumblr as *space* in order to attend to the spatial and experiential elements that gave rise to such metaphors of place. And so, alongside the quotes of the lived experiences of users, I entangle the writings of transgeography theorists to show how the experiences of my participants working in and through social media places, are extremely similar to the experiences of trans folks working in and through the built spaces within transgeography theory. In other words, working with the narratives of gender non-conforming people we can see that discourses on gender, materiality (via affordances), and affect (via practices of platform culture) are first, not neutral phenomena and second, *trans-constituted* working in a networked, slippery and messy, entangled way to enable or disable people’s potential to exist in online places just as they work together to enable or disable existence in offline places.

Findings

The participants of my research described their bodily and affective interaction with a combination of the platform affordances (hackability of the affordances) and the platform culture were primarily what contributed to the appeal of Tumblr as a comfortable and safe place to be and share their images online.

Affordance Hacking

What is specific about Tumblr’s design and what my participants mentioned again and again as appealing is the malleability of the design interface as opposed to interfaces that offer little malleability for play, creativity, and what I call “affordance hacking”. Instead of terming creative use of affordances “misuse”—which privileges the platform and platform designers as the ones defining how an affordance ought to be used, I suggest we conceive of this process as *affordance hacking* wherein the participants of this study often creatively and innovatively used affordances subversively and against their intended design to produce platform vernaculars. *Affordance hacking* describes the act of creatively and intentionally re-appropriating interface affordances for specific needs.

Platform Culture

The platform culture on Tumblr should be seen not simply as the congregation of people who support certain ways of being in a static environment, but rather the platform culture emerges with and alongside the practices of affordance hacking and creative use and misuse of the platform.

Conclusion

In this paper I work through experiential quotes that describe this slipperiness where young trans and gender non-conforming people describe communities via the affordance hacking (material-discursive), community by their emotional support (discursive-affective), and the creative platform vernaculars that have been adopted by the group like reblogging selfies (material-affective). The metaphors that Markham names as ways of life, tools, and place and as being messy and muddled and entangled

in Life Online 20 years ago aren't that much different from the experiences of my participants, and perhaps, transgeographies and trans theory, precisely because of their intimate and rapt attention on the entanglement of affect, materiality, and discourses, can offer insight into how we should study the experience of any life online.

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WALKING THROUGH, GOING ALONG, SCROLLING BACK: METAPHORS OF MOBILITY IN CONTEMPORARY MEDIA ETHNOGRAPHIC METHODS

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Introduction

Conceptualized as a space, the Internet develops architectures, boundaries, and multiple entry and exit points. (Markham, 2003: 7)

There are different ways of making and remembering routes, and there is variety in how what might be called the 'aspect' of the body is formed: exploring, wandering, foraging or approaching a goal, for example. (Lee & Ingold, 2006: 75)

Since *Life Online* (Markham, 1998) came out 20 years ago, its object of study has transformed and expanded to such a degree that the category of "online" on its own seems less and less analytically relevant. Though more and more aspects of everyday life can be said to become mediatized (Jansson, 2013), and media weaving ever more tightly into the fabric of everyday, it is not the case that they have simply disappeared out of sight. Personal struggles of negotiating different social digital spheres as contexts collapse (Marwick & boyd, 2014) in new and surprising ways is one example of media being anything but invisible.

Here it seems valuable to revisit Markham's exploration of the metaphors used to describe the internet, that is, as a "tool", a "place" and a "way-of-being" (Markham, 2003). Markham points out that the metaphors are complexly related and "both invoke and foster divergent ways of making sense of computer-mediated communication." (ibid.: 2) Metaphorical configurations not simply descriptive and explanatory, but part of the sense-making processes that constitute the social impact of a given media technology.

Whereas Markham's interest in the book drifts towards how everyday lives with media are made sense of, this presentation turns towards *media methodologies*. In social constructivist epistemology there is no meaningful way to understand meaning making without taking into account the perspective from which it is constructed. In other words, methods make sense with metaphors too.

Purpose and approach

The presentation focuses on media ethnographic methods that use metaphors of *mobility* as their organizing principle. This reflects the influence of the mobility turn in social geography on studies of media. As the second introductory quote shows,

metaphors of mobility allows for the qualities of a given embodied orientation towards a media environment to be described. Place-making with media is thus not only approached through metaphors of architecture and boundaries, but also through *styles* and *purposes* of orientation. (Jørgensen, 2016: 42)

The purpose of the presentation, then, is to expose how each method opens up different aspects of materiality, embodiment and interaction. I focus on three methods: “walk-through” (Light, et. al., 2016), “media go-along” (Jørgensen, 2016) and “scrolling back” (Robards & Lincoln, 2016; forthcoming). Through critical discourse analysis (Wodak & Fairclough, 2004) I examine how each method makes use of metaphors pertaining to both “media-as-tools” and “media-as-places”. This sheds light on what aspects of media materiality and symbolic meaning that the different metaphorical configurations allow the researcher to become sensitive to.

The metaphor of mobility in media research

The mobility turn in human geography has deeply impacted media ethnography. Becoming sensitive to mobilities is among other things to acknowledge that meaning arises in the complex interplay between bodies experiencing, dwelling in, and moving through spaces. In media research this works both on a metaphorical level, to describe media interface interactions, and concretely, when personal mobile media are used while bodies traverse built environments.

Broadening the concept of mobility to include navigations of media environments, makes available the concepts’ analytical potentials to many different levels of media analysis. one may then examine the ways in which bodies are mobile with media technology at hand. Urry and Büscher identify the mobile research entity as “practices of seeing, imagining, remembering, formulating places” (Urry, 2009: 110).

Material: The “walk-through”, “go-along” and “scrolling back” methods

The walk-through is a “technique to systematically and forensically step through various stages of app registration and entry, everyday use, and discontinuation of use.” (Light, et. al., 2016: 1) Thus the app focuses on the examination of media materiality and does so by integrating into the description the flows of experience and the particular embodied perspective they pertain to.

Questions of perspective and materiality are also central in the media-go-along method, in which “Research participants give verbal and visual tours, framed by the researcher’s discursively constituted invitations for orientation.” (Jørgensen, 2016: 32) With the mobility metaphors of *going along* and *touring*, the aspects of interactivity between researcher and participant as that of an insider and an outsider negotiating *access* is highlighted.

Similarly, the scroll back method centers on tour-giving, but does so in relation to media that provide an “activity stream” or “timeline” that allows the user and researcher to scroll back in personal time and biographical representation. The scroll back method also centres the participant not just as research subject, but as active co-analyst in the research process (Robards & Lincoln 2016). *Scrolling back* connects the digital labor

that it takes to go back, take a trip down memory lane. The “backtracking” of movement brings the person into vistas of environments that through their resemblance with the contexts in which personal experience has unfolded, become mnemonic devices that spur storytelling and memory work (Kuhn, 2010).

Conclusion and perspectives

By way of the three cases, it is clear that methods are configured through use of metaphors to become more or less oriented towards flows of media use, negotiations of access, and media as mnemonic devices in everyday life as well as the research situation. In light of mobile media integrating into “ways-of-being” (Markham, 2003). Finally, broadening the scope, this paper reflects on how some difficulties of working with ‘big data’ may be thought of as a metaphorical crisis.

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LIFE IN THE SMART CITY: A METAPHOR ANALYSIS OF PREDOMINANT DISCOURSES AROUND THE INTERNET OF THINGS

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Introduction

Metaphors matter. What are the predominant metaphors shaping our experience of urban life in the 21st Century, particularly as it involves so-called 'smart' city technologies and even more specifically, "Internet of Things?" This paper critically analyses the metaphors used in EU policy documents to consider the possibilities and trajectories embedded in the Internet of Things discourses.

Like others in this panel, this paper builds from Markham's (2003) framework "Tool, Place, and Way of Being" to explore smart city discourse. By looking closely at how people describe the internet (and related technologies) metaphorically, we can better understand where conflicts of meaning and policy arise. We can readily identify possible metaphor conflicts in recent debates. For example, if the proponents of net neutrality describe the internet as a place but the opponents describe the internet as a service, these provide competing domains for argument. If the EU considers digital data to be an extension of the self, and the US describes data as units of information exchanged for social media services, whose definition should be the foundation for international legal frameworks? If a person conceptualizes their actions online to be using a tool, but Facebook calls it sharing, how might these differences cause conflicts when it comes to privacy? Many metaphors compete for attention in smart city and IoT discourses (c.f., Nientied, 2016).

In 2003, Annette Markham extended her 1998 framework, invoking classic language from metaphor and rhetorical theory:

What paths of action and response are encouraged through the use of particular discursive frames? What paths are cut off or discouraged? Our discursive choices in talking about Internet and Communication technologies have actual and meaningful consequences on the shape and perception of these technologies. More importantly, as our discursive frames become more embedded in everyday language, alternatives are shut out, cut off, and left behind.

She suggested that as we get more embedded in digital technologies, or as they become more ubiquitous, it increasingly becomes a way of being. "It is a transparent state wherein the self, information technology, everyday life, and other are vitally connected, co-existent. Technology does not hold a position as object outside the agency of the human. Rather, the categories are collapsed, to varying degrees" (Markham, 2003, p. 11). Within this metaphor, everyday situations are "intertwined with

their various technologies” and people “tend to experience life and technology on the same plane, without making vast distinctions between the two or by conceptualizing life as essentially mediated by technology... .In a sense, this category could be marked by its absence as a conscious frame of reference” (p. 11).

In this paper, we argue that smart city discourse is deeply invested in not just using the metaphor of Way of Being, but promoting this as the predominant way the internet should be experienced. Framing Internet of Things through the metaphor of way of being neutralizes and naturalizes it, soothing potential critique before it is voiced. What behaviors, relations, and values are encouraged or discouraged when city leaders or international governing agencies like the EU Commission talk about the Internet of Things?

What definitions are being invoked when people use the phrase “Internet of Things” or its acronym “IoT?” What definitions are implied or stated directly when using IoT as an embedded metaphor within larger metaphors associated with Smart Cities or the more recent shift, Smart and Agile Cities? Once we identify patterns at the direct level of discourse (where the metaphors are used directly in sentences), we can then explore more deeply some of the underlying metaphors, which operate indirectly (are not used directly in the sentence).

On the surface, the metaphor “smart” city may be brushed aside as a buzzterm, but it functions rhetorically to indicate that the city is like a living being with a brain that is capable of cognitive thought that has reasonably high intellectual value. At the “deep structure” level of discourse, as Smith & Eisenberg (1987) note, root metaphors operate. These “rich summaries of interpretive frameworks... are often unobtrusive with regard to their frequency of usage in ordinary discourse” (pp. 368-9). For example, the root metaphor “infrastructures are organisms,” is not something we say in a typical conversation, but we reference it by other phrases and it guides our thinking even as we are mostly unconscious of its presence. We may say “the economy is healthy,” “the city is resilient,” or use the terms agile and flexible to indicate the wellbeing of a body, which invokes an underlying metaphor that the city is a living being.

Many conversations around IoT never define it. We see efforts to combat this continuing ambiguity with clearer definitions (Greengard, 2015) or popular discussions of metaphors (“Apotheosis of Connectivity,” “reality transducer,” “omniscience engine,” “global neural network,” and “hivemind platform”) that could potentially be helpful for understanding IoT (Danaher, 2016).

Methodology and materials for analysis

This study is grounded in rhetorical criticism methods of conducting metaphor analysis. It draws on classic conceptual metaphor frameworks (e.g., Lakoff & Johnson, 1980; Reddy, 1979; Schön, 1979), all of whom use different methods, specifically, but offer useful parameters for looking for figure/ground relations in texts.

In this paper, we are examining *smart city* discourse over the past decade, primarily within the EU context. We have a strong corpus of policy documents, regional meeting transcripts, journalistic reports, and conference programs.

We use rhetorical criticism methods to analyze texts (e.g., Foss, 1992; Gozzi, 1999; Smith & Eisenberg, 1987).

Preliminary Findings

Our preliminary findings show that although citizens are being encouraged to live within a framework of the internet and IoT as a “way of being,” most *Internet of Things* metaphors within policy texts frame internet as a “tool”: a swift conduit for data transmission. This functionalist, almost mechanistic metaphor is at conflict with the more unobtrusive, malleable metaphor Way of Being.

This research adds analytical depth to more anecdotal studies of metaphors around smart cities, to explore potential conflicts between surface and root level frameworks for understanding. We believe it will help us understand why IoT discourse doesn't seem to make a lot of sense to laypersons and city planners alike.

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