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(Not) Welcome to the US: Hyper-Ebola and the Crisis of Misinformation

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ABSTRACT

A hyperbolic portrayal of Ebola in the US resulted in a crisis of misinformation, when an actual outbreak never occurred. We study how online mass media uses discourse in the constitution of a culture of fear, and how non-expert actors (e.g. media) employ a specific line of discussion to legitimize actions outside of science. *Strange nationalism* is a fantastical construction of foreign, invasive crises. This discourse was used in online media to create an imagined Ebola outbreak, which legitimized inappropriate disease management policies, since outbreak was positioned as fact. Information featured on mass media provides input to crisis and emergency management information systems, such as the Global Disaster Alert and Coordination System (GDACS). In this respect, online media play a key role in informing the public about crisis through the construction of real or imagined emergencies. How crisis is framed affects both public understanding and response by authorities.

INTRODUCTION

In 2014, Governors Andrew Cuomo and Chris Christie enacted quarantine to contain the threat of Ebola in the US. This was largely influenced by rumors propagated by mass media. As the New York Times wrote, "new measures go beyond what federal guidelines require and what infectious disease experts recommend. They were also taken without consulting the city's health department" (Santora, 2014). Ebola, a deadly virus with outbreaks generally confined to Africa, crossed US borders in 2014. Its arrival was portrayed as both an outbreak by the media. In reality, there were a total of 10 individuals infected with the virus (CDC, 2014) out of a population of over 320 million (US Census, 2015). While there were more cases of Ebola than typical, the situation did not constitute a disease outbreak because there was no significant risk of contraction (Ashkenas et. al., 2014). However, fear among multiple actors, such as the media

and the public, were characteristic of much of the response.

The media served as a major source of knowledge about the disease and played a fundamental role in instigating questionable actions and policies. We characterize actions incongruent with the accepted science of Ebola epidemiology as inappropriate. For instance, confusion about Ebola's mechanics resulted in rumors of airborne transmission that exploded within media and public discussion. This was despite multiple statements by experts that contradicted such claims (Berman, 2014). As a consequence, inappropriate containment activities, like quarantine, were enacted despite public health protocols. Some of the most hyperbolic calls for action included a proposed ban of all flights from West Africa, which would have negatively affected international aid work.

Here, we examine ethical and social considerations in the case of Ebola. These underpin the use of an increasingly complex set of evolving information technologies widely used in today's mass media (Scheufele, 2013). Specifically, we examine how rapidly transmitted misinformation (or interpretations of information outside of accepted science) through media influenced public and institutional perceptions of Ebola. We review online articles that covered Ebola, as well as reader commentary to capture sources of misinterpretation. Following a discourse and rhetorical analysis of initial data, we assert the case of Ebola reveals aspects of how a culture of fear is constituted through a discourse we call strange nationalism. This created an imagined moral panic perpetuating illusion of fantasy and stigma rather than scientific fact. Strange nationalism reinforces divisive political discourses that permit inappropriate policy actions misaligned with science that extend beyond Ebola.

EXTANT LITERATURE

The relationship between mass media and science shapes how people interpret facts. Schäfer (2011) argues the former is a primary source of information on science issues, not only for the public, but also decision-makers. This is important because there are consistent discrepancies between facts and the ways they are portrayed in the mass media (Schäfer, 2011; Scheufele, 2013). How people understand potential threats shapes risk perception, sometimes in negative ways

(Slovic, 2000). The case of climate change is one example. Following Luhmann's (1995) conceptualization of science and media as societal systems, this disconnect gives rise to further complications between communication and action, particularly when "what appears to be certified and objective knowledge is transformed into decisions in a highly selective and often seemingly irrational manner." (Weingart, 2012: p.25) Related literature identifies an oversimplification of science facts by mass media, as well as the adoption of sensationalist narratives (Schäfer, 2011: p.402). Also troubling is the use of uncertainty, which results either in an unshakeable certainty that blocks disputes on scientific results, or an over-projection of uncertainty through discussion of controversies within science (Schäfer, 2011). The case of Ebola sits somewhere in the middle. While experts argued there was no outbreak, mass media presented it as contested and open to different interpretations, generating confusion among the populace. Publics are often led to 'unanticipated interpretations of content' that essentially distort, not the message that mass media present, but the perceived meaning of that message (Dunwoody, 2008). This issue further complicates the relationship between science and the public.

Distorted perceptions are not solely rooted in under-appreciation of science. They partly arise from a sense of nationalism - or the implied effort to create and participate in an imagined ethnic community (Calhoun 2007). The social construction of nationalism raises a few points that relate to the public understanding of contested issues. First, national identity is deeply relational in nature; it is shaped through the interaction with the 'other', or those outside the imagined community who are seen as inferior, superior, or equal to its members (Harrison, 2003). Second, nationalism is embedded in everyday habitual practices. The term 'banal nationalism' captures aspects of daily life that reproduce nationalist sentiments, yet are largely ignored; for instance, a national flag outside a public building in the US attracts no special attention (Billig, 1995). This theoretical perspective offers insights into how perceptions of national identity are subtly reproduced in daily life and affect the reaction of the public to a 'contentious threat'. Adenyanju's (2010) examination of the Canadian public's reaction to a speculated Ebola infection shows fear associated with globalization, as well as racial and colonial assumptions, was reproduced in coverage by mass media. This case was projected "as an analogy of all that is considered threatening

to Canadian society, especially criminality, racial impurity, immigration and scarce social resources" (Adeyanju, 2010: p.13). Similarly, the use of information about Ebola in the US could be conceived as having origins in a 'culture of fear' that invoked elements of nationalism, such as suspicion of an 'other'.

A culture of fear is a concept articulated by multiple scholars. Researchers suggest (see Furedi, 2007 for example) it is a socio-cultural disposition where people in post-industrial societies use fear to make sense of and respond to a world constructed as threatening. In support, Altheide (2002; p. 26) argues, "fear does not just happen; it is socially constructed and then manipulated by those who seek to benefit." As such, the media has a major role in crafting and re-creating an orientation to fear. Altheide (1997) and Guzelian (2004) suggests risk communication through modern tools such as mass media has more of a hand in shaping fear than real threats and personal experience. Thus, news media has a major role in the production of public fear, and reports are often presented in ways that perpetuate anxiety.

Perception of risk can be influenced by fear. The SARS outbreak is an excellent example of how fear can shape interpretations and actions. Eichelberger (2007) shows risk discourses rooted in stereotypes of the Chinese resulted in unwarranted stigmatization. The public viewed such communities as potential sources of disease, despite a lack of cases. Thus, the perception of risk can have important socio-cultural motivations with some negative consequences, such as stigma, that results in diseases becoming contested issues. Similarly, in policy, Jacobson v. MA (1905) held the government could invoke public health interventions, such as quarantine, when necessary to prevent harm. This was used to justify the actions of Governors Cuomo and Christie who used fear of Ebola to enact quarantine despite contradiction with expert recommendations.

Another issue is the rapid dissemination of information through both Television and online media. The propagation of information, as discussed in the context of different, yet overlapping strands of literature in information diffusion (see Cha, 2009), adoption (see Dyagilev et al., 2010), or contagion (see Jenkins, 2013), is an underlying theme of this research. These conceptualizations of information spread provide a backdrop for the discussion of the effects that online mass media have on the public understanding of science. It not only projects and presents scientific

facts in a certain, often stylized way; it also allows the reproduction of ill-informed perceptions through the space for reader interaction and commentary. The case of Ebola illustrates exactly this; it is an 'epidemic of misinformation' and demonstrates the reconstitution and perpetuation of rapid, society-wide panic and fear. The research presented in this paper explores this proposition.

METHODOLOGY

We investigated the following questions:

1. How does misinformation about contentious threats like Ebola in the US: a) manipulate the ways people make meaning of scientific knowledge and, b) shape actions and policies using such interpretations?
2. What are motivations behind the constitution of fear in light of potential threats such as infectious disease?

Discourse and rhetorical narrative analysis was used to examine the content of information about Ebola within the media. Specifically, we employ Critical Discourse Analysis (CDA) (Fairclough, et. al., 2005) to identify power imbalances between people through language, and the ways "communication can be used for coercion, control, discrimination and victimization" within systems (Albert and Salam, 2013: p.1) like mass media and the Internet. Rhetorical narrative analysis (Feldman, et. al., 2004) is also used to identify rhetorics that shape interpretations on Ebola nested in discourses. These methods allow us to:

- Theorize about: 1) what underlies the public's interpretation of contested crisis situations, and 2) the role of mass media in shaping and propagating these interpretation.
- Use this research to develop intervention strategies in potentially contested crises/emergencies of misinformation.

Preliminary data was collected via online articles from US news outlets (e.g. Dallas Observer, FOX News). We included articles from 9/2014 to 1/2015, with an initial sample of 20 per venue. This was analyzed in conjunction with reader commentary attached to articles through CDA and rhetorical analysis to get a sense of public viewpoints. This continues as theoretical saturation has yet to be

achieved; however we use initial themes to guide findings. We discuss these themes in our preliminary analysis, and ways findings could guide management of future contentious crises.

INITIAL FINDINGS

We present illustrative examples then unpack them in relation to extant literature in the conclusion.

Strange Nationalism

Moral panic was cultivated within certain factions of US media by the use of *strange nationalism*, which justified inappropriate interpretations and actions related to Ebola. This discourse, used by media outlets and perpetuated by the public, presented a hyperbolic threat that invoked elements of fantasy and racial stigmatization.

Strange nationalism: reader commentary

- "My God it does not take a rocket scientist to know that stopping all flights from West Africa going in and out needs to be done. These African countries need to start taking care of their own. When you have to tell people to wash their hands and when the people are as superstitious as most are in Africa their government needs to deal with it." (FOX News, 10/15/2014)
- "The speed of the African Ebola infections in the current epidemic there suggests airborne transmission mutation of the deadly virus" (FOX News, 10/1/2014)

Strange nationalism: media reports

- "Louisiana went out of its way to prevent the ashes from the incinerated belongings of Ebola victim Thomas Duncan from being brought into the state. Last week, a judge issued an emergency court order that prevented Duncan's remains from being brought to a hazardous waste landfill." (Dallas Observer, 10/16/2014)

- "Republican Rep. Phil Gingrey of Georgia wrote to the head of the CDC last month about his fears that undocumented immigrants might be bringing "swine flu, dengue fever, Ebola virus, and tuberculosis" into the U.S." (FOX News 10/7/2014)

Science Championship

In contrast, *science championship* counter-discourse was also a major theme. This advocates science of disease transmission over fantasy and fiction. It also calls out the use of fear in media discourses. Below are examples:

Science championship: reader commentary

- "You probably have a greater chance of getting hit by a truck that coming in contact w[ith] Ebola." (FOX News, 10/1/2014)
- "Since 9/11 we got a taste of what many countries have lived through and sad to say, we handled it like a bunch of Chicken Littles waiting for the sky to fall. Our macho bumper stickers about "Bombing them all and let God sort them out" didn't sound so good when the shoe was on the other foot. Since then we have been fed a diet of fear of "terrorism", Disease, Aliens, Islam, and even the new fear of "Bullies"…Sadly the long way we have come is going in the wrong direction. Our fear is hidden by anger, and America lashes out at Pinatas hoping they will go away. We can do better." (Al-Jazeera America, October10/10/2014)

Science championship was also evident in media articles written by journalists, who attempted to downplay hyperbolic discussions of Ebola:

Science championship: media reports

- "Lakey emphasized, as the CDC and others have, that Ebola is not transmitted easily from person to person. "It's not going to be transmitted through the air or the water. It is not going to be transmitted through casual contact. This is not West Africa", he added. "This is a very sophisticated city, a very sophisticated hospital." (NPR, 10/1/2014)

Even though science championship places primacy on facts versus fantasy (e.g.

airborne Ebola), it is not without elements of nationalism. Such discourse often distinguishes the superiority of the American system over that of Africa, which is blamed for the massive epidemic abroad.

CONCLUSIONS

We use the concept of 'strange nationalism' as an extension of banal nationalism. The latter describes how discourses are used to distinguish American culture from outsiders through ordinary means (Billing, 1995). Strange nationalism discourses use extraordinary cases, rather then scientific championship to build on fantasy and stigma in the constitution of moral panic (see Thompson, 2013). We argue here that this discourse is a hyperbolic construction of stigmatized crises (e.g. 'African' disease), and is one way a culture of fear is constructed through media. While science championship is not without its nationalistic elements, it places less emphasis on discourses rooted in fantasy, fear, and othering that likely influence the use of inappropriate actions in practice.

Initial findings indicate a need to frame discussions of crises, like Ebola and others, in ways that minimize spaces for strange nationalism. This research provides a theoretical canvas to develop more nuanced arguments on why and how the disparity between scientific facts and their representations within media leads to the constitution of a culture of fear in a rapid pace. The public understanding of science (PUS) seems to be significantly different in a knowledge intensive developed context, as compared to an industrial developing context (Bauer, 2009). We suggest the ease of availability of misinformation, through online media, and then its rapid propagation through tools such as reader commentary, has contributed to this issue. The advent of Web 2.0 has given mass media the "potential to bring about dramatic changes to many aspects of public relations" (Wright and Hinson, 2008). Unprecedented access to media was made possible through the exponential growth of information/communication technologies online, and also through Television. This has narrowed the distance between science and society and affected the quality of this relationship.

During an emergency, information systems such as GDACS, collect and analyze mass media news to inform early warnings. While this kind of input builds on a wealth of data, it is susceptible to inaccuracies embedded in news coverage. As demonstrated with Ebola, online mass media frames crises through fear and stigma discourses and can affect to a great extent, public understanding of such events and subsequent response by authorities. This research suggests early warning systems and crisis response efforts should be wary of such online media discourses in future emergencies.

Ebola as a crisis of misinformation demonstrates how the constitution of a culture of fear operates and comes about. Future versions of this paper will use Herman and Chomsky's (1988) media propaganda model, as well PUS, to complement the theoretical framework of nationalism. In this respect, the aim is to examine other topics that gather the attention of media and the public, such as terrorism and cyber-security, to complement this research. We expect to provide recommendations to journalists, policy makers, and designers of crisis information systems on how to mitigate strange nationalism discourses.

REFERENCES

1. Adeyanju, C. T. (2010). Deadly fever: Racism, disease and a media panic. Fernwood Publications.

2. Albert, C. S. and Salam, A.F. (2013) Critical Discourse Analysis: Toward Theories in Social Media, Round Table Presentations. Research in Progress Paper, AIS Electronic Library, http://aisel.aisnet.org/amcis2013/SocialTechnicalIssues/RoundTablePresentations/6/

3. Altheide, David L. (1997) The News Media, the Problem Frame, and the Production of Fear, *The Sociological Quarterly*. pp. 647–668.

4. Altheide, D.L. (2002) Creating Fear; News, and the Construction of Crisis. New York, NY: Aldine De Gruyter.

5. Bauer, Martin W. (2009) The evolution of public understanding of science - discourse and comparative evidence. *Science, technology and society*, 14 (2). pp. 221-240. ISSN 0971-7218.

6. Berman, R. (2014, October 28) President Obama took on Chris Christie's

quarantine response and said the U.S. must keep up the fight in West Africa. *The Atlantic.* Retrieved from http://www.theatlantic.com/politics/archive/2014/10/obama-ebola-response/382033/.

7. Billig, M. (1995). Banal nationalism. London: Sage.

8. Calhoun, C. (2007) Nationalism matter. In Calhoun, C. (Ed) Nations matter: citizenship, solidarity, and the cosmopolitan dream. Routledge.

9. Centers for Disease Control. 2014, December 15, 2014. "Cases of Ebola Diagnosed in the United States". http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/united-states-imported-case.html

10. Cha, M., Mislove, A., & Gummadi, K. P. (2009, April) A measurement-driven analysis of information propagation in the flickr social network. In *Proceedings of the 18th international conference on World wide web* (pp. 721-730). ACM.

11. Dunwoody, S. (2008). Focus on the audience. In Bauer, M. W., & Bucchi, M. (Eds.) Journalism, science and society: Science communication between news and public relations. Routledge.

12. Dyagilev, K., Mannor, S., & Yom-Tov, E. (2010, July) Generative models for rapid information propagation. In Proceedings of the First Workshop on Social Media Analytics (pp. 35-43). ACM.

13. Eichleberger, Laura. (2007) SARS and New York's Chinatown: the politics of risk and blame during an epidemic of fear. *Social Science and Medicine*, (65)6 (pp. 1284-1295).

14. Fairclough, Norman, Mulderrig, Jane, and Wodak, Ruth. (2006) Critical Discourse Analysis. In Van Dijk, Teun A. (Ed.) *Discourse Studies: A Multidisciplinary Introduction* (pp. 357-378). London, England: Sage.

15. Feldman, Martha S., Sköldberg, Kaj, Brown, Ruth Nicole, and Horner, Deborah. (2004) Making sense of stories: A rhetorical approach to narrative analysis. *Journal of Public Administration Research and Theory,* 14(2): 147-170.

16. Furedi, Frank. (2007) The only thing we have to fear is the 'culture of fear' itself: how human thought and action are being stifled by a regime of uncertainty. *American Journal of Sociology*, 32 231-234.

17. Global Disaster Alert and Coordination System (GDACS): http://www.gdacs.org/media.aspx

18. Guzelian, C.P. (2004) *Liability and Fear.* Standford Public Law and Legal Theory Working Paper Series: Standford Law School, Stanford, Cal.: 712 & 767.

19. Harrison, S (2003) Cultural difference as denied resemblance: reconsidering nationalism and ethnicity. Society for Comparative Study of Society and History, 45(2): 343-361.

20. Herman, E. and Chomsky, N. (1988) Manufacturing Consent, New York: Pantheon Books.

21. Jenkins, H., Ford, S., & Green, J. (2013) *Spreadable media: Creating value and meaning in a networked culture*. NYU Press.

22. Luhmann, N. (1995). Social systems. Stanford University Press.

23. Santora, M. (2014. October 24) First patient quarantined under strict new policy tests negative for Ebola. *New York Times* retrieved http://nyti.ms/1z48o4v.

24. Schäfer, M. S. (2011). Sources, characteristics and effects of mass media communication on science: a review of the literature, current trends and areas for future research. Sociology Compass, 5(6), 399-412.

25. Scheufele, D. A. (2013). Communicating science in social settings. Proceedings of the National Academy of Sciences, 110 (Supplement 3), 14040-14047.

26. Slovic, Paul. (2000). The Perception of Risk. Risk, society, and policy series. (Slovic, Paul (Ed). Earthscan Publications London, England.

27. Thompson, K. (2013). Moral Panics (Key Ideas). Routledge.

28. United States Census Bureau. (2015). US World and Population Clock: http://www.census.gov/popclock/

29. Weingart, P. (2012). The lure of the mass media and its repercussions on science. In The Sciences' Media Connection–Public Communication and its Repercussions (S. Rodder, M. Franzen and P. Weingart (Eds) (pp. 17-32). Springer Netherlands.

30. Wright, D. K., & Hinson, M. D. (2008) How blogs and social media are changing public relations and the way it is practiced. Public Relations Journal, 2(2), 1–21.