Original Article

MEDIA CULTURE & SOCIETY

Loving Ebola-chan: Internet memes in an epidemic

Media, Culture & Society
2017, Vol. 39(3) 341–356

DOI: 10.1177/0163443716646174
journals.sagepub.com/home/mcs
SAGE

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Abstract

In this article, the authors provide a layered analysis of Ebola-chan, a visual cultural artifact of the 2014–2015 Ebola outbreak. Rather than considering her as a two-dimensional anime character (i.e. as a simple iconic coping mechanism and/or a fear response), this recent Internet meme is analyzed using an integrated semiotic and structural approach that involves discussion of the genesis of disaster humor in light of the changing world of the Internet, the history of anthropomorphism of disease, and the biosocial nature of an infectious disease epidemic. Our analysis is designed to advance both the anthropology of the Internet and the anthropology of infectious disease. As a multi-vocal symbol with different meanings for different audiences, Ebola-chan represents a social response to a lethal epidemic in the digital age.

Keywords

anthropology, anthropology of Internet, disaster humor, Ebola, infectious disease, Internet memes, medical Anthropology

On 4 August 2014, a manga-style image of a young girl with long, pink pigtails that end in the shape of the Ebola virus was posted to Pixiv, a Japanese social networking site for illustrators. A nurse's hat with a winged blood droplet sat on her head, a white lilac perched in front. Purple bat wings peaked out from behind her short, sexy nurse dress. The girl beamed an innocent, beguiling smile below large yellow eyes as she cradled a

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bloody skull; beneath her image was the caption 'but I seem in vogue recently' in Japanese.

The eye-catching image was titled 'Ebola-tan' and within hours was archived on 4chan, an American-based anonymous message board known as a birthing place for Internet memes (e.g. the now widely disseminated grumpy cat), but also for the controversial circulation of nude celebrity photos, child porn, and racist, homophobic, and misogynist humor. An image macro of Ebola-chan[1] began to circulate by 7 August, urging 4chan users to post 'I love you Ebola-chan' in the thread to avoid excruciating pain and death. Within days, new images of Ebola-chan began to emerge in a variety of styles, some depicting her as a large-breasted seductress, while others preferred a girlish *loli*[2] character, often with her panties partially visible. These images often accompanied phrases such as 'Ebola-chan loves you', 'there is no cure for love', 'don't you want Ebola-chan in your country?', 'good luck, Ebola-chan!', and 'thank you, Ebola-chan!' Ebola-chan made her first appearance on Reddit – a more popular and less controversial message board – by 18 August with a mix of great popularity (it got an 87% upvote) as well as outright disgust. Fan art soon began to be uploaded to DeviantART, the largest online social networking site for artists. She gained an entry on *Know Your Meme* (2014) by late August, as well as in *Encyclopedia Dramatica* (2015a), two websites that document and explain popular memes and online troll behavior.[3] In addition to hundreds of fan art and cosplay[4] postings on Reddit, DeviantART, 4chan, a Tumblr site, and two Facebook pages, by September 2014, Ebola-chan cosplay was being paraded at anime conventions in the United States.

Within a relatively brief period, Ebola-chan had become an object of popular and artistic interest, of endearment to her fans, and even of sexual suggestion for some participants. In the later months of 2014, as the most widespread Ebola outbreak to date ravaged through Western Africa and began to reach distant shores, a response was occurring on the Internet that differed markedly from previous popular culture reactions associated with the spread of a frightening and deadly infectious disease. Making cultural sense of this seemingly contradictory response is the focus of this article.

Ebola-chan, we suggest, represents a striking example of the biosocial experience of an infectious disease epidemic in the age of the Internet. More than a mere a fear response in times of mass hysteria and uncertainty, she came to embody some of the complex social and political issues provoked by an infectious disease outbreak. In this article, we offer a layered analysis of Ebola-chan as a cultural artifact of the 2014–2015 Ebola outbreak. Rather than considering her as a two-dimensional character (i.e., simply as a mechanism for coping or denial in a time of social dread), we analyze Ebola-chan using a semiotic approach to discuss the genesis of disaster humor in the age of the Internet, the tendency to anthropomorphize disease, and the biosocial nature of an infectious disease epidemic. The goals of the article are (1) to contribute to the growing anthropology of the Internet by exploring the borderlands of online and 'real-life' behavior and experience and (2) to contribute to the anthropology of infectious disease and Ebola by assessing a noteworthy social response to a lethal epidemic in the digital age.

A complicated web of significance has been spun around Ebola-chan's image by the media and people of the Internet, made all the more complicated by the moral implications of online troll behavior. To make sense of Ebola-chan as a response to an infectious

disease epidemic, it is useful to consider the semiotic perspective espoused by Clifford Geertz (2001). Employing this approach allows consideration of the entwined but not unified layers of meaning expressed by Ebola-chan. Rather than looking at her ontological status (e.g. Is she a form of social therapy? A psychosocial stress-response mechanism? A form a cyberbullying?), a 'thick description' or layered analysis of her existence is necessary for examining her *import*, that is, does she represent 'ridicule or challenge, irony or anger', fan art or humor, fear or threat response, or perhaps all of them combined as a multi-vocal cultural nexus reflective of contemporary social complexity (Geertz, 2001: 338)? Because this essay seeks to bring forth the various meanings of Ebola-chan and the behavior that spread her around and even beyond the Internet, it necessary to look at 'the pattern of life by which [the behavior] is informed', which broaches anthropological inquiry into the aspects of Internet sociality, humor in times of disaster or tragedy, and the cultural artifacts of infectious disease outbreaks (Geertz, 2001: 341).

Ebola-chan in the anthropology of infectious disease

The Internet meme as a cultural artifact may be defined as 'a dimension of cultural production and transmission … contagious patterns of "cultural information"' such as a concept, image, or phrase (or a combination of text-on-image, known as an 'image macros') spread person-to-person via the Internet (Knobel and Lankshear, 2007: 199). The Internet, as noted by ethnographer Christine Hine (2015), may be considered both a cultural site (where people do things) and a cultural artifact (something made meaningful within other contexts). In this analysis, the artifact is Ebola-chan and the site is the Internet, an important distinction since, paraphrasing Geertz, 'working out what people think they are up to involves a close scrutiny of the means they have available for expressing and understanding themselves and their world' (Hine, 2015: 27). Thus, understanding how the Internet and accessible mobile technology have come to influence expressions of humor, mourning, solidarity, fear, and aggression is integral for thinking about the braided meanings of Ebola-chan.

It is important to keep in mind, however, that like other cultural or social sites, the Internet is not bounded by a specific time and space. Indeed, the Internet and Internet sociality are integral to everyday life, influencing our language, pace, and style of communication and pushing boundaries of *what* can be communicated and in which forms. Furthermore, the Internet extends our metaphoric conceptions of social reality while also creating new venues for new metaphors to emerge. In sum, from an interactive standpoint, the Internet is about people and provides a new venue for observing the ways in which technological innovations alter pre-Internet forms of sociality. An anthropology of the Internet is therefore not delimited to web- or computer-based technology, but integral to many pre-existing paths of anthropological inquiry. In terms of medical anthropology, the Internet is a relevant site for tracking how health information is shared and consumed, the way bodies are produced with online technology, and, in the case of Ebola-chan, how the fraught embodiment of an infectious disease is communicated across time and space. In this way, the anthropology of the Internet and the anthropology of infectious disease cannot afford to construct impervious sub-disciplinary boundaries, but

must be considered a vital crossroads in addressing serious questions about health, society, and technology.

Anthropologists have become increasingly involved in responding to infectious disease epidemics over the past three decades. The advent of HIV/AIDS heralded the movement for sociocultural inquiry into the reasons for disease transmission within and between populations and to the response of communities to the threat of spreading infection. Singer (2014: 16) noted the value of medical anthropology, in particular, for 'understanding and responding to HIV, Ebola, SARS, tuberculosis, malaria, influenza, kuru and numerous other infectious diseases by analyzing their role in the creation of lived experiences'. Other important contributions to the anthropology of infectious disease include Inhorn and Brown (1997), Hewlett and Hewlett (2008), and Herring and Swedlund (2010), as well as a growing number of ethnographers who have focused their attention on specific epidemics. These medical anthropologists emphasize the interaction of the biological and social toward developing an understanding of disease transmission, treatment, and symptomatology. Such a biosocial framework of analysis accounts for both individual behavioral and structural forces (Singer, 2014).

Social and cultural artifacts of epidemic are important aspects of the biosocial nature of infectious disease and may take the form of images, statues, songs, text, policy, and new behavioral norms or ways of interacting. In the time of the Internet, however, these artifacts must be considered within the context of multiple cultural sites, such as the upload of an image online that is simultaneously viewed via the Internet as well as in-person among groups of friends. Other cultural products and venues are equally relevant to sociality in the time of infectious disease threat. In reference to AIDS, for example, Nancy Tomes (2002) observes that

> [a]gainst the backdrop of a global … pandemic that has claimed almost 14 million lives, the news media and entertainment industries have used the specter of real and imagined plagues to promote a wide variety of cultural products, from nonfiction tomes to made-for-TV movies. (p. 625)

Such media representations come to influence the way people perceive those affected by disease, as well as the way practitioners or the state treats the affected. In New Zealand, for example, Judith Littleton et al. (2010) describe tuberculosis (TB) as a 'potent signifier' of third-world conditions and immigrants, which 'serve[s] to intensify its stigma by emphasizing its contagiousness and potential spread, placing TB in the position of a plague threat' (p. 127). This association has contributed to the way TB is treated, as well as to campaigns for immigration policies that prevent entry of individuals with TB. As an image and textual artifact of the 2014–2015 Ebola outbreak, Ebola-chan is a particularly potent signifier for those who have no personal experience with the disease and yet who live in an electronic media world in which exposure to Ebola information is ubiquitous.

Keeping in mind the biosociality of the 2014–2015 Ebola outbreak, the remainder of this essay examines the social worlds and patterns of life within which Ebola-chan emerged and circulated. Thus, we are concerned with what Paula Treichler (1999) calls an 'epidemic of signification', that is the production of the meaning of disease through preconceived social constructions. An epidemic of significance also draws attention to new meanings that are generated through lived experience and media representations.

Rising popularity

Soon after the appearance of Ebola-chan on 4chan, users in separate forums[5] launched a troll campaign to spread the rumor of a death cult that worshiped Ebola-chan in order to propagate the Ebola epidemic in West Africa. 4chan users instructed each other to create their own Ebola-chan shrines and circulate pictures of them to stoke fears and distrust. One troll posted a thread on Nairaland, Nigeria's largest message board, warning about a racist death cult in Europe and America that worships an Ebola demoness (Nairaland Forum, 2014). The post, which included pictures of multiple shrines and expressed suspicion that doctors were involved in the spread of Ebola, was immediately called out by several other users as a weak attempt at trolling. Nevertheless, mainstream media such as *Vocativ*, the *International Business Times*, and the *Washington Post* voiced outrage over the following days concerning the negative public health implications of 4chan egging on conspiracy theories, racist agendas, and mistrust toward healthcare workers (Dewey, 2014; Iaccino, 2014; Kaufman, 2014).

Within a few days of her Internet debut, the character had garnered international attention, although the mainstream media hardly batted an eye after the first failure of 4chan trolls at stoking fears via Nairaland. Despite the media drop-off, which as noted by Whitney Philips (2011) is one of the surest ways to bring a troll raid to a halt, Ebola-chan seemed to get increasingly popular as the epidemic raged in West Africa and cases began to appear in Nigeria, the United States, and Western Europe. The trajectory and lifespan of Ebola-chan would be as difficult to predict as the 2014–2015 Ebola epidemic itself, largely because her significance is firmly rooted in the fears and uncertainty surrounding the then-rapidly spreading virus. At the time of her emergence, questions such as 'why would someone create this?' and 'how could anyone find this entertaining?' seemed to swarm among her critics, alongside concerns about her effect on relations between those affected by the virus and those trying to stop its spread. In retrospect, however, new questions have emerged: how long will Ebola-chan be popular? Is she a flash-in-the-pan meme or a significant cultural artifact of an epidemic? In the greater context of fears of pandemic, what is her significance among both fans and critics of Ebola-chan and how will this affect her lifespan as a popular or infamous character? And finally, how do we interpret the extent to which she was tethered to the mainstream media response to the Ebola outbreak and the uncertain trajectory of the epidemic?

Ebola-chan's height of popularity proved to be during the peak period of the epidemic in Liberia (August to November 2014), Sierra Leone (September 2014 to January 2015), and Guinea (September 2014 to January 2015) and concomitant with news of cases in Nigeria, the United States, and Western Europe (World Health Organization (WHO), 2015). Postings to the Ebola-chan sub-Reddit, her Facebook pages, and uploads to DeviantART remained consistent until early to mid-January, which perhaps not so coincidentally also marked the beginning of the slow decline in the rate of new Ebola cases in West Africa. What is notable about this time period is that her popularity on the Internet did not seem to falter with the mainstream media's drop-off of coverage of the epidemic that occurred almost immediately after the US mid-term elections. She remained quite popular while the epidemic continued to grow with no end in sight, indicating that her

attractiveness may have been more contingent on the growth of the epidemic than to its media presence. These two factors are, of course, very much related since a growing epidemic tends to have a more extensive and fear-inducing media presence than a plateauing or shrinking one, but it stands to reason that Ebola-chan remained inspirational to her fans during a time of heighted perceived threat and that when the threat began to dissipate, so possibly did sexual fantasy, romantic appeal, and the need to control fears of a very uncertain future (Mednick, 1977).

Anthropomorphizing infectious disease

Why do we want to give a virus a human face? This section discusses how we account for the sexualized nature of Ebola-chan and a cohort of epidemic-related images that have cropped up in her wake, notably AIDS-san/AIDS-kun, Zmapp-chan, Marburg-sama, Malaria-sama, and Polio-sensei, among others.

Historically, it is not difficult to find imagery of disease and related morbid phenomenon. Often such images have a deep history, such as the skeletal grim reaper, a popular Western depiction of death which dates to 15th-century England, although the term 'Grim Reaper' can only be traced to the mid-19th century (Lynette, 2009). Common in modern Japanese art and fiction, including contemporary manga and anime, the *Shinigami* resemble the Western tradition of the Grim Reaper (Ashkenazi, 2003). In various parts of Latin America and among some Hispanic communities in the United States, Nuestra Señora de La Santa Muerte is a celebrated feminine folk saint.

In contemporary popular culture, Death as a personified being appeared as a recurring character in Neil Gaiman's widely read DC comic book series, *The Sandman* (Wallace and Manning, 2010). In this series, the character Death took on a female persona and was depicted as one of The Endless, a group of beings who embody powerful forces within the universe. Death also appeared as a primary protagonist in the 2012 video game Darksiders II. Notably, some of these images may well have been familiar to and influenced the original and subsequent creators of Ebola-chan.

In examining the link between illness as metaphor and the anthropomorphism of computer viruses, Simon Williams (2014) considered literature from anthropology, sociology, and philosophy on embodiment and symbolism with respect to the body as being 'good to think with' (Scheper-Hughes and Lock, 1987). Starting with the premise that humans 'cannot do without the practice of anthropomorphizing aspects of their world', Williams (2014) argued that we conceptualize 'computers in bodily terms, but also the body in computerized terms' (p. 48). Similarly, viruses as natural parts of our biological world are often drawn on for metaphorical imagery. For example, the notion of the human race as a virus infecting and destroying the earth or the imagery of the human body going to war with an evil, scheming pathogenic army of invaders. Energized by the human emotions provoked by infection and disease, the imagery of our body responding dispassionately to the presence of a microscopic protein envelope will hardly suffice compared to a picture of a militarized and personified being (human, animal, plant, or insect) engaged in all-out conquestial warfare. Envisioning the immune system as a machine-like-but-righteous defender is paralleled by visions of viruses and other pathogens as purposive monsters bent on bodily destruction (Williams, 2014). In this way,

symbolic imagery and the narrative of viral infection become a significant aspect of the human experience of the biosocial nature of human–pathogen interactions described in anthropological investigations of infectious disease (Singer, 2014). In the case of Ebola-chan, the imagery of a dangerously cute, sexy, and naïve young girl who is merely looking to 'spread her love' expresses both the unsuspecting and intimate nature of transmission (among family members, friends, and care providers) and the substantial threat to life posed by a microscopic virus. That is, she represents the innocence of youth as well as the dangers of female sexuality.

Another salient point drawn from Williams' (2014) discussion is the role of Baudrillardian effacement in displacing the virus as the center of the epidemic. Baudrillard (1994) posited that signs and symbols often function as simulacra that are taken to be the real thing rather than a representation. Comparable to the way that the use of sophisticated technology in the modern hospital pulls the patient's body from the center of medical practice, society and the media generate symbolic images and text such as Ebola-chan, fruit bats, bushmeat, and famous cases (e.g. Thomas Duncan) so that the 'real simply disappears in an endless chain of self-referential images or simulacra' (Williams, 2014: 49). Widespread social responses to infectious diseases such as Ebola, AIDS, TB, and Malaria become largely self-referential, in that the 'reality' of disease is rarely spoken about in terms of the biology of the pathogen, transmission, and pathogenesis, but rather in terms of images of suffering, inappropriate behaviors, vectors, transnational humanitarian aid, and media representation and commentary. When signs and symbols become the reality of an infectious disease, then the spread of images can be considered violent or aggressive. Showcasing or disseminating images of death and disease from Ebola can cause distress to audiences with high-perceived threat, feelings of guilt or anger to those who feel helpless to do something, or anger and disgust by those who do not want to see such images – particularly if they have been personally affected. Yet, signs representing Ebola are also commodities paraded around on the media to grab consumer attention. These signs are sold by artists and journalists to periodicals, websites, and television programs and then subsequently re-sold to media consumers. Baudrillard's consideration of the way signs are exchanged as commodities and symbols as gifts offers a framework for analysis of why Ebola-chan means so much to both her proponents and detractors. On one hand, as a gift, her image is uploaded as fan art and disseminated widely, which can be interpreted as a violent or aggressive act, depending on the audience. On the other hand, spreading her image may serve as inspiration or humor, thus prompting other artists or fans to produce and upload their own renditions of her. Indeed, her trajectory seemed to have followed the successive phases of the image:

> it is the reflection of a profound reality; it masks and denatures a profound reality; it masks the absence of a profound reality; it has no relation to reality whatsoever; it is its own pure simulacrum. (Baudrillard, 1994: 16)

As her own pure simulacrum, Ebola-chan represents a potential reality that never came to be: that of afflicted countries 'sharing the love' of Ebola around the world. Such simulacra are common in mainstream media in the form of comics, television shows, and films featuring an apocalyptic or post-apocalyptic world affected by an uncontrollable

contagion. Popular recent examples of infectious disease outbreaks include *Contagion* (2011), *I Am Legend* (2007), *28 Days Later* (2003), zombie films such as *World War Z* (2013), and the long-running graphic novel turned television series *The Walking Dead* (2010). Singer (2014) notes that such popular media representations both reflect and amplify social concerns of an impending plague. Comedic depictions of plague and disaster also have a long and entrenched presence in mainstream media, from *Dr. Strangelove* (1964) to *Shaun of the Dead* (2004), and as well reflect micro-social tendencies to satirize tragedy or find humor in the unspeakable. The next section addresses how this tendency has evolved with the advent of the Internet and meme culture.

For the lulz or for the love?

Throughout history, artists have represented death and disease by employing 'conventions of their time and their medium: the ways they and their audiences agreed to see and represent people and objects' (Fox and Karp, 1988: 172). Ebola-chan came into being on a Japanese social networking site for illustrators, created by an artist and set free on the Internet for other artists or fans to enjoy, so to speak. Within hours, she was scooped up by Internet trolls and archived on 4chan, spreading from the tamer/a/(anime) forum to the more trollish/pol/(political) and/b/(random) forums that incited the failed troll raids on Nairaland (*Encyclopedia Dramatica*, 2015a). The term 'troll' is a self-ascribed label among users of the/b/board, a forum that is 'widely regarded as an epicenter (arguably *the* epicenter) of online trolling activity, and consistently pumps out some of the Internet's most recognizable, not to mention offensive, viral content' (Philips, 2012: 7). Most of this content is posted and modified anonymously; hence, users are known as 'anon' and collectively as 'Anonymous' (Philips, 2012). Gabriella Coleman, an anthropologist of hacker culture and online activism, has described the Internet troll as 'a class of geek whose raison d'être is to engage in acts of merciless mockery/flaming or morally dicey pranking' (Coleman, 2012: 101).

The morally ambiguous acts of trolls range from protesting the Church of Scientology (coordinated by Anonymous) to raiding memorial pages on Facebook and, similar to the case at hand, circulating risqué or pornographic material (Philips, 2011, 2012). The troll epithet has also become associated with cyberbullying and stalkers, although it is important to parse out the different kinds of trolls (i.e. self-ascribed 4chan trolls vs a mainstream perception of troll as hopeless sociopath of any sort, regardless of their tech savvy) in order to discuss behaviors in various kinds of Internet forums and sites. Within the troll social sphere, the reason commonly cited for acts of moral diciness or outright anti-social behavior is 'I did it for the lulz' (*Encyclopedia Dramatica*, 2015b; Philips, 2011, 2012). Entries on *Encyclopedia Dramatica* (2015b) have described the concept of *lulz* as analogous to *schadenfreude* or laughter at the expense of another's misfortune. To do something 'for the lulz' can be as simple as doing something for one's own enjoyment, made all the more ironic with the increased gravity of the act (e.g. posting child porn, trolling memorial webpages, or attempting to spread fear about Ebola death cults) (Know Your Meme, 2009). The more inappropriate and extreme the juxtaposition of humor and misfortune, the greater the lulz, leading lulz-seekers to engage in an economy of lulz characterized by a 'transgressive one-upmanship' (Philips, 2012: 9).

In her analysis of lulz-seeking on Facebook memorial pages (known as RIP trolling), Philips (2012: 8) made the important link between trolls' 'function[ing] as a counterpoint to hyperbolic media coverage' and Elliott Oring's (1987) assertion that public disasters signify a triumph for the media. This link pulls analysis from the interpretation of lulz as either 'cruel and depraved or therapeutic and liberating' toward a realistic medium of lulz – and jokes in general – as 'forms par excellence that deal with situations of unspeakability' by juxtaposing or conjoining unspeakable tragedy, violence, sexuality, or other horror with a speakable discourse (Oring, 1987: 282). Without discounting the theory that jokes often have therapeutic value, the simplistic explanation that jokes inevitably 'rise to the occasion to articulate anxieties' glosses over the different ways in which humor is an important social response and how dominant social forces both shape and reject it (Dundes, 1987: 80). Furthermore, the theory that disaster jokes are a coping mechanism for trauma fails to fully explain why people who do not personally suffer from an event still appreciate the humor (Kuiper, 2005).

Incongruities are vital aspects of jokes, which derive their base meanings from oppositions such as that between instinct and reason or a thought (e.g. this applicant is qualified) and a feeling (e.g. this applicant is very attractive) (Kuiper, 2005; Oring, 1987). Achieving incongruity or 'script incompatibility' is a simple linguistic method most easily accomplished by transgression (Kuiper, 2005: 71). A joke usually has only one base meaning, but its *performance* meaning depends on who is telling the joke, the audience, and the setting; therefore, jokes naturally tend to have multiple performance meanings. This is significant since the performance meaning indicates whether someone is laughing at a tragic event itself (usually they are not) rather than one of the many incongruous meanings associated with that event (Oring, 1987). Applying this logic to media representations exemplifies how disaster humor, lulz, or jokes triggered by a devastating event such as an infectious disease epidemic are a natural response to a 'world defined by the media', particularly because 'news programs regularly conjoin images and stories of death, disease, and destruction with images of commercial products' (Oring, 1987: 284). Incongruities represented by the media, be it through televised news programs, radio shows, printed or online periodicals, are essentially templates for the humor or pleasure derived from lulz and may guide analysis of why an entity such as Ebola-chan is a significant artifact of the 2014–2015 epidemic (Oring, 1987; Philips, 2012).

In the same way that RIP trolling 'pushes back against a corporate media environment that fetishizes, sensationalizes, and commoditizes tragedy', Ebola-chan may be another outlet for the backlash against the nature of mainstream media attention to the 2014 Ebola outbreak. Philips (2012) found that trolls used Facebook to 'not just harass the bereaved, but also to criticize what trolls believe to be the mindless histrionics of the modern 24-hour news cycle' (p. 3). Trolls' attempts to use Nairaland to spread sensationalist rumors about the cause and spread of Ebola are not a far cry from the way the media spreads images and messages of fear, disaster, and terror on a daily basis through a more accessible and socially approved medium. That is not to say that lulz-seekers are consciously trying to make statements about flawed social and political institutions, but that there is a clear template for their form of conduct (Oring, 1987; Philips, 2012).

Lulz serves at once as a motivation and justification for any act, whether it is a harmless joke or (often inadvertently) a political statement. Whether Ebola-chan can be considered

a troll joke or humor is complicated by the fact that she is not only a troll meme but also an artistic expression represented in hundreds of different ways by as many artists. Although she was quickly picked up by 4chan trolls with lulz-seeking desire for increased hysteria, she was also accepted and replicated by many artists and *otaku*[6] fans, thus leading somewhat of a double social life as both a troll meme and a fan art sensation. It is perhaps significant that in a time of epidemic, she can be both a symbol of lulz-seeking troll terror and an artistic outlet for Internet users who may also avidly decry 4chan trollery. As a form of humor, Ebola-chan represents the juxtaposition of fear and desire or fear and familiarity – in this case, the familiarity of a sexualized and tempting girl or woman. It seems to be a common trope in fear response to create familiarity from something that is generally feared or uncontrollable by fetishizing it or making it an object of desire. Similarly, Dave Grossman (2009) argues that just as the repression of sex in the Victorian Era produced an increase in sexual fetishization, the focus on youth and repression of death in contemporary society has resulted in the emergence of multiple violence fetishes.

Whether Ebola-chan is a joke, a sexualized artistic outlet, or a lulz-seeker's spectacle, her image and text serve a role (indeed many roles) that is embedded with many performance meanings in confronting a media response that induces fear, horror, and feelings of helplessness in the context of an infectious disease epidemic. By making her, and thus the virus itself, an anthropomorphized object of desire, fans of Ebola-chan may feel they have a power over her: the power to desire her, to love her, to ask her to come closer as has often occurred in posts on her Facebook and Tumblr pages (e.g. 'come to Indonesia please', 'Ebola-chan, help us with government in Poland', or 'when will you come to Hungary?'). Similarly, critics of Ebola-chan also have a new outlet through which they may express anger toward the fear and helplessness inspired by the virus, directing their wrath at the people who love her and spread her image. It may be silly for a person to say 'I hate Ebola', but completely warranted for a person to publicly (via the Internet) lash out against indecent, insensitive, and fear-inducing images propagated by specific, if anonymous, people. To be sure, there is another level of analysis that involves an actual public health threat when people – mostly from Euro-American donor countries – feed into centuries-old racist sentiments and risk, further ingraining mistrust toward healthcare workers, government, and non-governmental aid efforts. While this form of humor can hardly be said to be new, Giselle Kuiper (2005) poignantly observed that in the context of post-9/11 humor, the Internet joke – as opposed to the oral joke – is a relatively new genre that is still defining its own conventions and therefore must borrow from others, such as the video game, postcard, advertisement, and video. Drawing similarities between post-9/11 humor and humor in the era of the 2015 Ebola outbreak, it is significant that a full 14 years of Internet culture(s) has rapidly developed, which is related to more widespread access via affordable technology such as smartphones, laptops, and tablets, as well as the coming of age of the millennial generation as well as the coming of age of the millennial generation, also known as 'native' Internet users. These social developments are significant for reshaping forms of humor, yet a consistent role of visual jokes is that they serve to 'defy the moral discourse of the media, provide pleasure of boundary transgression, and block feelings of involvement' (Kuiper, 2005: 77).

Recounting humor from publicly devastating events such as the assassination of Presidents Lincoln and Kennedy, the Chernobyl nuclear meltdown, and the death of

seven astronauts aboard the *Challenger*, Dundes (1987) noted that the most common response is to ask how someone could voice such tasteless humor? Yet drawing on an abundance of examples, he challenged this response by proposing a corrective: the real question is how can we *not* joke about tragedy? Considering the media onslaught of images of Ebola-affected people and countries, as well as the hysteria that spread the world over in response to rising uncertainty about how far the outbreak would spread, there should be little or no surprise that satirical images such as Ebola-chan would crop up on the Internet. Indeed, mainstream media was already poking fun at itself and its audience in instances such as the 15 August 2014 cover of the British news magazine *The Week*, which depicted a man walking his dog, both in biohazard suits, with a neighbor similarly suited while mowing the lawn. This is an example of popular culture reflecting the inner fears of society – that soon we may all be walking around in other worldly attire – while making a mockery of a potential future that is surely absurd. From the biosocial perspective of medical anthropology, such social responses to the threat of infectious disease indicate the lived experience of personal fear and uncertainty that the populace may think is still not quite fully imaginable and therefore able to be joked about. Yet by bringing the unimaginable and unspeakable into discourse, it becomes a viable reality, no matter how distant or desired to be unlikely, because now it is conceived and spoken about.

Thus, spreading the image of Ebola-chan can be seen as a form of social rebellion in the age of the Internet and in the era of *risk society*. Coined in the mid-1980s, the term *risk society* labeled a trend in thinking about a modernity characterized by a growing sense of the pervasiveness of terror, epidemics, crime, and environmental crisis (Beck, 1992, Giddens, 1999). Central to the zeitgeist of risk society is the experience of danger as ubiquitous; risk is no longer spatially or temporally circumscribed, it is everywhere and always, changing in form as we bounce from crisis to crisis. Moreover, risk is no longer natural (e.g. an earthquake) but is increasingly manufactured for economic and political ends, and hence may be subject to manipulation. In this context, through the creation and sharing of Ebola-chan postings, dispersed individuals find common cause in imaginatively protesting against a reigning climate of risk by embracing the feared object. Ebola-chan became a potent signifier for people who have no direct personal experience with the disease of the need to make familiar, and even on some level appealing, something that is so threatening and impending yet seemingly far away and still largely abstract. Sharing her image could therefore serve as a form of violence or rebellion against mainstream hype over an unspeakable tragedy. In that it is a rebellion against prevailing dread, the natural form of oppositional behavior in this instance is humor. In that it is a rebellion against looming death, its logical symbol is youth and sexuality. In that it is an anti-institutional rebellion against spreading disease, its representation is an institutional healthcare provider in perverted form as the bringer of disease. In this way, Ebola-chan can be read as a rebellion by computer-empowered individuals against the disciplining features of risk society and life in the fear-driven world in which we now live. At the same time, the image of Ebola-chan facilitated the emergence of a specific discourse in which people of the Internet could ask for her gift of death, destruction, and eradication of certain countries or racial groups, giving vent to underlying racist, sexist, and violent attitudes.

Finally, rather than a real-world virus causing massive human suffering and death, Ebola could be electronically tamed as Ebola-chan, a hyper-sexualized female who merely wanted to spread her (innocently deadly) love. Read this way, she represents a very human need to gaze upon the microbial enemy rather than consider it as a diffuse, unknowable, uncatchable organism unable to be seen with the naked eye. Constructing an enemy and looking at it, sharing it, even putting words in its mouth, perhaps undermines the fear-instilling power of a deadly virus that is often objectified with images of hemorrhaged bodies, helpless victims, and chaotic health systems. Images, after all, can be readily manipulated and even erased from the world.

Conclusion

Keeping in mind the variety of ways in which objects may be categorized, Marshall Sahlins (1984) noted that in the transformation of traditional categories –such as genres of humor – 'nothing guarantees either that intelligent and intentional subjects, with their several social interests and biographies, will use the existing categories in prescribed ways' (p. 145). Ebola-chan provides a relevant example of how certain media (i.e. categories of communication) such as the Internet are used in both prescribed and non-prescribed ways. In *Islands of History*, Sahlins (1984) uses the term 'structure of the conjuncture' to label his view of the making of history and of cultural categories. History emerges in the space that resides between cultural expectations of what an event should look like, that is, what it means culturally, and how individuals synthesize the past and present for their own culturally meaningful purposes. The structure of the conjuncture is the eruption that will change things, a social reaction to a situation at a particular moment that can never answer the question of *how, why*, and *to what extent* things will change until the event takes its course in history. The 'conjuncture' is the space, in other words, where history is reproduced as a knowable experience relative to the present cultural order (Sahlins, 1984). The Ebola outbreak of 2014–2015 may be considered such an eruption embedded in several cultural contexts, notably the culture of risk society, widespread and various Internet cultures, *otaku* culture, mainstream media, and evolving forms of disaster humor in the United States and elsewhere. Knowledge-making institutions such as social media sites (e.g. 4chan, Reddit, Tumblr, and Facebook), mainstream media sites (Fox News, CNN, The New York Times, etc.), and fan cultures that incorporate film, cosplay, gaming, and graphic novel have formed different, increasingly overlapping, and interpenetrated structures that facilitate the production of a social reaction such as Ebola-chan.

Representing an epidemic with an image is not new, but Ebola-chan is significant as a multi-vocal symbol with different meanings for different audiences. Such an image could not exist without the range of media responses now prevalent in newspapers, magazines, mainstream Internet sites, and network television. Ebola-chan is an artifact of an epidemic, but delineating which cultural site (e.g. the Internet or specific geographic locations) in which the artifact is embedded complicates her varied meanings. These meanings are contingent upon patterns of life by which values and behavior are formed and negotiated. For anthropological inquiry, it is important to understand how and in what ways these formations and negotiations are tied to specific cultural sites,

particularly when the patterns of life include perceived threat and severity of disease, attitudes about big media presence, widespread and even addictive use of the Internet, the mainstream popularity of Internet memes, the changing nature of humor at times of public disaster, and Internet trolls as social scapegoats. Littleton et al. (2010) describe the 'effect of plague' as the 'disproportionate relationship between the physical threat of a disease and its symbolic power' (p. 136). Returning to the notion of Ebola as an 'epidemic of significance', contemporary medical anthropology must become an anthropology of the Internet, as we inquire into the processes and venues through which symbols and significance in the context of spreading disease are generated, reproduced, and shared. As an effect of plague, artifacts such as Ebola-chan represent a potent symbolic resonance of an array of meanings that play variously on (and rebel against) fear, sexual fantasy, perceptions of the Other, perceptions of oneself and one's own social (especially media) environment, the different ways of categorizing values and events, and the complexities of morality and humor. Some of these may have explicit political motivation, such as the famous illustration by André Carrilho depicting a room of black bodies affected by Ebola with the sole white body receiving all the media attention, although many may not. Building an anthropology of the Internet requires paying attention to these entwined layers of identity, emotionality, and cultural, social, moral, and political economic complexity. Similarly, building the anthropology of infectious diseases now mandates consideration of the Internet as a site for diverse responses to plague-like events. Infectious disease anthropology must pay attention to the Internet as a site of information sharing as well as a site for the construction and modification of social groups centered on a certain health condition (or multiple interrelated conditions), treatment regimens, prevention issues, social action, and artistic expression.

Delimiting sub-disciplinary boundaries, however, can be counterproductive, since theory-building in both the realms of infectious disease and the Internet are inherently intertwined. Anthropology views cultural products as having both cultural histories and social lives, which means the object of inquiry changes in structure and content over time and place, coming to mean different things to different people. On one hand, when the place is the Internet, we must consider whether the Internet is an artifact in the same way that Ebola-chan may be and that they have a co-productive relationship based on an expansive social network of people in various geographic locations. On the other hand, the Internet may be the cultural site itself in which Ebola-chan is embedded. These are important considerations for understanding the biosocial dimensions of infectious disease outbreaks since they imply which social venues are important for sharing information and expressing perceptions of disease. Furthermore, these venues may attract the people most immediately affected (or perceived to be so). Whether the Internet is conceived as an ethnographic site or as an artifact of a larger social space has great implications for the metaphors that are drawn from cultural sites to inform social constructions of electronic artifacts, which, in turn, become the analyzable remains of epidemics through time.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. -chan is an honorific in Japanese, while -tan is the 'cutesy' version that plays on the way young children pronounce the word 'chan'. The reason for the change from Ebola-tan to Ebola-chan may just be one of translation.
2. *lolis* or *lolicon*s are sexualized anime/manga of young girls. The term stems from Nabokov's *Lolita* and has been a popular trend in Japanese manga since the 1970s (Galbraith, 2011). *Lolita* is also a fashion trend in Japan in which young men and women dress in the aesthetic of Victorian-era dolls, notably a non-sexualized or modest style (Winge, 2008).
3. Internet trolls are a self-ascribed name by users of the/b/forum on 4chan. The term has developed more social meanings as it has emerged into mainstream parlance. See the brief discussion in the section 'For the lulz or for the love?'
4. Cosplay, or costume play, is considered a performance art in which individuals dress or accessorize as a specific character or as the representation of an idea.
5. 4chan is segmented into themed forums, such as/a/(anime),/pol/(political), and/b/(random). Forum visitors do not necessarily interact with each other and a meme generated on/b/is often not taken up or made popular on/a/or/pol/
6. *Otaku* culture in Japan is characterized by multimedia fandom of pop culture that includes gaming, anime, manga, and cosplay.

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