

2017

What Can Asian Eyelids Teach Us About User Experience Design? A Culturally Reflexive Framework for UX/I Design

Jennifer Sano-Franchini
Virginia Tech

Follow this and additional works at: <https://docs.lib.purdue.edu/rpcg>



Part of the [Rhetoric Commons](#)

Recommended Citation

Sano-Franchini, Jennifer (2017) "What Can Asian Eyelids Teach Us About User Experience Design? A Culturally Reflexive Framework for UX/I Design," *Journal of Rhetoric, Professional Communication, and Globalization*: Vol. 10 : No. 1, Article 3.

Available at: <https://docs.lib.purdue.edu/rpcg/vol10/iss1/3>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/326655004>

What Can Asian Eyelids Teach Us About User Experience Design? A Culturally Reflexive Framework for UX/I Design

Article · October 2017

CITATIONS

2

READS

809

1 author:



[Jennifer Sano-Franchini](#)

Virginia Polytechnic Institute and State University

17 PUBLICATIONS 52 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



CCCC Asian/Asian American Caucus History Project [View project](#)



Rhetoric and Representation of East Asian Blepharoplasty on YouTube [View project](#)



ISSN: 2153-9480. Volume 10, Number 1. October - 2017

What Can Asian Eyelids Teach Us About User Experience Design? A Culturally Reflexive Framework for UX/I Design

Jennifer Sano-Franchini
Virginia Tech

Introduction

The proliferation of web applications in recent years has brought about conversations among technology designers about user experience (UX) and user interface (UI) design's role in propagating and reaffirming cultural bias, and in facilitating race-based discrimination. At times, such conversations have demonstrated how taking stock of racialized and cultural bias during the design process can challenge widely held design assumptions. For example, in 2015, Nextdoor, a neighborhood-based social network, was reported to have facilitated racial profiling when users began posting to the application's Crime and Safety section reports of "suspicious" persons on the basis of racialized appearance, as opposed to any actual suspicious behavior (Harshaw, 2015). To address this problem, Jamie Ayers (2016) explained, Nextdoor opted to break "a cardinal rule of contemporary user experience design: they added friction to the interface of the platform." Nextdoor developers did so by adding steps and reminders to make incident reporting slightly more complicated so that over a more prolonged process, users would "stop and think."

Also around this time in 2016, Airbnb, a home sharing application, similarly received negative press over its role in facilitating discriminatory actions by hosts, a number of whom reportedly rejected potential renters on the basis of race. In response, Airbnb worked with Laura Murphy, civil rights attorney and former director of the American Civil Liberties Union (ACLU), to come up with eight policy changes intended to address hosts' discriminatory practices and thus impact user experience. Among these changes included revisions to the user agreement and unconscious bias training for hosts. Through these steps, Airbnb similarly "added friction" to the interface, as a way of: 1) clarifying for users the company's stance on issues of discrimination; 2) educating hosts about unconscious bias; and 3) encouraging users to reflect upon their actions as they contribute to larger systems of racial inequity on a global scale.

These revisions to Nextdoor's and Airbnb's UI demonstrate a shift in thinking in UX design, from an emphasis on ease of use or the user's pleasure to a concern with attending to the

sociopolitical impacts of technologies by encouraging slow reflection and complex, multi-perspectival thinking. The cases of Nextdoor and Airbnb are just two among many examples of socially minded conversations and practices taking place within industry, and technical communication and UX/I design scholars have likewise studied the cultural affordances of technology design for some time now. This paper builds on the important work of practitioners, scholars, and activists who research racial and other forms of systemic equality, and who have articulated how technologies uphold inequality in ways that are structural in nature; that is, inequity is embedded and imparted through micro-level interactions that take place within the institutions, technologies, and cultural practices through which we live, work, and play.

I extend on this groundwork through a case study of user engagement and cross-cultural negotiation on YouTube. In particular, I focused on YouTube videos about East Asian blepharoplasty, a cosmetic surgical procedure colloquially known as double eyelid surgery. Through my qualitative analysis, I identified five tropes and five temporal logics through which users rationalized the decision to get the surgery across cultural boundaries. I then cross-analyzed these two sets of findings to present what I am calling a Culturally Reflexive Framework (CRF) for UX/I design. In doing so, I show how being attuned to the dynamics of race in the U.S.—keeping in mind that race in UX is a global issue that is shaped by transnational migration and flows of information, products, and capital more generally—can help us to be more conscientious and reflexive in matters of complex social issues in UX design.

To be clear, I focus on double eyelid surgery to discuss the rhetorical construction of race and culture in UX/I design not because I myself believe that the practice is simply a racial issue; based on my research along with my understanding of Crenshaw's (1991) theory of intersectionality, I understand race as one among many motivations for getting the surgery—motivations that are complicated and enmeshed in and through histories of colonization and transnational migration, global political economies, embodied and gendered subjectivities, and efforts to achieve some semblance of rhetorical agency within these contexts. While there is much to be said about the workings of gender, colonialism, or migration as it pertains to the topic of double eyelid surgery, I focus on race in this paper for two key reasons: 1) because it was the predominant trope used to rationalize the surgery across cultural difference—that is, it was a strategy often used by people who had not themselves gotten the surgery and who were in some way morally opposed to this practice, and it thus became a point that cultural insiders who had gotten the surgery felt the need to address; and 2) because examining the rhetorical construction of race in this context—keeping in mind that race is not a biological reality but a social, cultural, and political one—can help us to see with greater clarity the significance of race in UX, particularly in contexts that may not have an inherent or apparent connection to race. In this way, my findings can help UX designers more fully consider how racialized and culturally contested representations are often imparted in subtle ways.

In the sections that follow, I first show how race matters to UX design, drawing on critical texts in UX and technical communication research alongside the stated codes of conduct of professional organizations like the User Experience Professionals Association (UXPA) and the Association for Computing Machinery (ACM). I then go on to describe the case study from which CRF is derived, including my methods and primary findings, where I highlight race as one

among five interconnected tropes deployed by users across textual, visual, and aural modalities as they interpret and rationalize the decision to get the surgery. Next, I present CRF, a tool designed to facilitate conversations about the representation of race and culture in UX/I design. In doing so, CRF focuses on creating more culturally reflexive UX designers, as opposed to singular instances of culturally reflexive technology. I describe how CRF works, along with its potential applications. Finally, I close by considering future directions for research at the intersection of race, culture, and UX/I design.

Race and UX/I Design: A Review of Scholarship

Race matters to user experience (UX) design.¹

I make this oft-contested argument on the basis of three widely-accepted understandings about UX design: 1) the idea that both designers and users are always already culturally situated; 2) the idea that user experiences are shaped by culturally contingent and ideologically laden symbolic representations; and 3) the understanding that because technology design contributes to the articulation of cultural values, logics, and perspectives, designers need to consider issues of social impact and potential harm to users.

Designers and Users as Culturally Situated

It has been widely demonstrated within technical communication research that both UX designers and users are always already culturally situated. That is, UX is shaped by the culturally contingent values and perspectives held by designers, as well as users' previous experiences, cultural values, and situated perspectives that they bring to a product or technology. For instance, in "Between the Eyes': The Racialized Gaze as Design," Hum (2015) explained that "a culture's dominant perceptual practices implicate that culture's design and available design, thus affecting designers' choice making for their rhetorical agendas" (p. 191). That is, when we make design choices, these choices come from pre-existing frameworks, cultural knowledges, and organizing logics that are contextual, and rooted in culture-based understandings and rhetorics.

Several researchers and scholars have more specifically documented and explored the ways in which race matters to technology use, considering how and why particular technologies and applications are more widely used among particular racial and ethnic groups than others; addressing issues of access and the digital divide; considering how some longstanding technical tropes must be redefined in light of minoritized cultures; and highlighting the technical innovations of racialized Others (Banks, 2006; Banks, 2010; Boateng, 2011; Christen, 2005; Chun, 2008; File and Ryan, 2014; Green, 1995; Haas, 2007; Haas, 2012; Nakamura, 2008; Nakamura, 2013; Nelson, Tu, and Hines, 2001; Roh, Huang, & Niu, 2015; Smith, 2014; Sun, 2006). On a fundamental level, UX is contingent on literacies that are in many ways determined by access and relation to the dominant culture. For instance, the Pew Research Center has conducted a number of studies that explore the relationship between race and technology use, having observed that while diverse users have similar rates of smartphone ownership, racial

¹ While I focus in this paper primarily on the category of race, it should be acknowledged that the workings of race operate in concert with other forms of embodied subjectivity, including but not limited to gender, sexuality, and disability.

minorities tend to rely more heavily on their phone for access to health information, educational content, and job seeking (Anderson, 2015). In this and other ways, it is important that technology designers account for diverse user habits and experiences, as technologies can very well work as both barriers and bridges to material resources for minoritized groups, and thus take up a key role in either the persistence or dismantling of structural racial inequality.

Further, if UX design is concerned with the wide range of on-the-ground, “real world” contextualized user experience, from the time that the user becomes aware of a product to the time that they decide to acquire the product to the time they start to use the product, and so on, and including the emotional experience of users, then we must also account for the ways in which embodied subjectivities shape UX, particularly where minoritized users are situated in contexts that have been dominated by white heteropatriarchy. We know that users come to technologies having been shaped by previous experiences, and that for racialized subjects, those experiences are oftentimes unavoidably racialized as well. That is, within the U.S., racialized persons are often subject to lifelong patterns of experience in social sorting and discrimination, typically on the basis of racist tropes that are circulated through popular media and cultural discourse, including that of the “angry black woman,” the delicate and submissive “lotus flower,” the emasculated Asian nerd, or the perpetual Asian foreigner. In this wider context, UX must grapple with how some users might feel unwelcome, alienated, or excluded by a design, technology, or brand. In an effort to work toward a more robust picture of UX, we need to think critically and inclusively about who users are, and we need to understand that racialized subjects may at times have different experiences with technology as they have been shaped by how others react to their bodies.

UX, Culture, and Symbolic Representation

User experiences are shaped by culturally contingent and ideologically laden symbolic representations that are conveyed through alphabetic texts, user interfaces, and physical interactions between humans and machines. For example, researchers have studied user preferences and behaviors in response to gendered and racialized technologies like customer service agent avatars and conversational computing technologies like Siri. For example, Pratt, Hauser, Ugray, and Patterson (2007) found that computer users are more likely to adjust their actions when receiving input from a computer agent whose avatar is ethnically similar to them, and Hardy (2016) reported on the kinds of user biases around race, gender, and voice that must be considered in conversational computing development.

Technologies have also been critiqued for re-distributing the biases of the designers who created them, and scholars in professional and technical communication have long considered how the authoring of seemingly neutral technical documents are in fact culturally situated, and ideologically-saturated processes that involve rhetorical processes of interpretation, translation, and articulation (Miller, 1979; Slack, Miller, Doak, 1993). For instance, Haas (2012) cogently explained that while some like to think about technical communication as objective, politically neutral, and void of culture, “technical communication [...] has a history of ignoring the ways in which our work is saturated with white male culture—which has real effects related to privilege and oppression on the lives and work of designers, writers, editors, and audiences of technical communication” (p. 284). Scholars have also considered the ways in which technology interfaces

themselves impart particular kinds of ideological and cultural information, and risk re-distributing the biases of the designers who created them (Haas, 2007; Moses and Katz, 2006; Selfe and Selfe, 1994; Tufte, 2003). Through these mechanisms, symbolic representations can play a significant role in upholding and/or dismantling systems of racial inequality.

Technology Design and Ethics

Because technology design contributes to the articulation of cultural values, logics, and perspectives, designers need to consider issues of social impact, ethics, and potential harm to users. This idea is reflected in the stated principles of several professional organizations that support UX design. For instance, the User Experience Professionals Association (UXPA) Code of Professional Conduct states among their “ethical principles” that UX practitioners should “Act in the best interest of everyone,” “Be honest with everyone,” “Do no harm and if possible provide benefits,” and “Avoid conflicts of interest.” To do so, UX practitioners should “give recommendations that are objective, consistent with accepted principles, and/or based on the judgment of qualified professionals.” The Association for Computing Machinery (ACM) working Code of Ethics and Professional Conduct states that ACM members will “Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing and its artifacts,” “Avoid harm to others,” be honest, trustworthy, fair, and take action not to unfairly discriminate.” To truly act in the best interest of everyone and with honesty and human well-being in mind, UX designers must account for the ways in which embodied subjectivities often shape users’ expectations, values, perceptions, and thus their experiences of/with technologies, whether those subjectivities are on the basis of age, generation, gender, disability, race, or a combination of these categories.

It is important to note that UX, human-computer interaction (HCI), and interaction design (IxD) practitioners, advocates, and scholars have laid important groundwork for engaging issues of race in UX design. For instance, I think of Buchanan’s (1992) argument for using design thinking to address wicked social problems; Suchman’s (2002) argument that working relations, or the “sociomaterial connections that sustain the visible and invisible work required to construct coherent technologies and put them into use,” make up the design and use of technical systems (p. 91); and the work of others who have discussed the need to engage in social inquiry and critical design that accounts for the needs and experiences of culturally diverse users (Bardzell, 2010; Bardzell and Bardzell, 2011; Bardzell and Bardzell, 2013; Bardzell and Blevis, 2010; Light, 2011; Muller, 2011; Muller, Wharton, McIver, and Laux, 1997; Oudshoorn, Rommes, Stienstra, 2004; Peddle, Powell, and Shade, 2008; Suchman, 2002).

At the same time, there is currently limited work that centers on issues of race and racism in UX scholarship, even while examples of the challenges of race and other kinds of bias as facilitated by technology design abound. There seems to be an understandable reluctance and slow uptake when it comes to bringing race to UX design—understandable in the sense that there is indeed the risk of approaches that make easy assumptions about large, diverse, and multifaceted groups of people, and racism is a challenging problem to broach, especially for those who do not have experience or training in these matters. As Sun (2012) has demonstrated in advocating for a dialogic view of local culture in technology design, we need to be wary of approaches that work from the premise that a person’s race can be used to make assumptions about their technology

use or technology preferences, or the idea that all users who identify with a particular race will prefer certain types of experiences with technology or approaches to organizing information, which, depending on circumstance, may be more pertinent to issues of class, culture, literacy, or something else. At the same time, what happens if we work from the observation that racialized subjects testify to particular patterns of experience that are apparently based on structurally and culturally entrenched ideologies and values?

Learning About UX from Racialized Users: The Study

For more than the last decade, U.S. popular media has discussed the pervasiveness of cosmetic surgery among Koreans and Korean Americans, labeling South Korea “the country most obsessed with plastic surgery” (Stewart, 2013). News reports on *CNN*, *NPR*, and the *New York Times*; articles in *The Atlantic*, *The New Yorker*, *The Wall Street Journal*, *The Christian Science Monitor*, *Time*, *Business Insider*, and *Marie Claire*; talk shows like *Tyra*, *The Montel Williams Show*, and *The Oprah Winfrey Show*, as well as blogs and online commentary such as on *Jezebel* and *This American Life* have attempted to make sense of why so many Koreans, Korean Americans, and others of East Asian ancestry are getting cosmetic surgery for reasons most other Americans have never had to consider: the most popular procedure both in practice and as discussed in the media is East Asian blepharoplasty, more commonly known as double eyelid surgery (Baer, 2015; Banks, 2007; Chow, 2014; Cullen, 2002; Dolnick, 2011; Ford, 2011; Glass, 2013; Lah, 2011; Laupa, 2007; Marx, 2015; Sauers, 2012; Stone, 2013; Weller, 2017; “What Some Women,” 2007; Williams, 2008; Winfrey, 2004; Woo, 2012; Youn, 2013). Double eyelid surgery is a cosmetic surgical procedure in which the surgeon makes an incision and/or stitches in the eyelid so that a fold forms, making the eye appear larger and rounder.

“Double eyelid” is the colloquial term for the supratarsal fold, the crease in the eyelid that folds in as a person opens their eyes. The supratarsal fold is common among people of many different ethnic backgrounds, including those of South and Southeast Asian descent, but it is significantly less common among people of East Asian ancestry, including those who are ethnically Chinese, Japanese, and Korean. That said, double eyelids are a physical trait that people do or do not have. At the same time, it is not as simple as having or not having double eyelids—some people have a double eyelid on one eye and not the other; some people are born without double eyelids, but acquire them with age; and the appearance, shape, and placement of double eyelids vary, and some get double eyelid surgery to adjust the height of the fold. More specifically, double eyelids tend to look different on Asian faces versus on white faces: generally, the supratarsal fold is lower and closer to the eyelid among people of Asian descent than among those of European ancestry, and Asians tend to have more fat in the eyelids—hence, why Asians with the supratarsal fold “still look Asian.” Cho and Glavas (2009) did a study comparing anatomic properties of Chinese American and Korean American upper eyelids, and they argued, “eyelid anatomies vary greatly in Asian Americans” (p. 1739). Furthermore, double eyelid surgery is distinct from blepharoplasty marketed for white consumers, which is generally intended to turn back signs of aging, reduce wrinkles, and lift eyelids, thus providing a more “youthful” appearance.

It is difficult to provide accurate numbers that show how common double eyelid surgery is because surveys vary significantly depending on time, place, and population, and because people

do not always want to disclose that they have gotten the surgery. To provide a few statistics about general attitudes toward cosmetic surgery in Asia, *The Economist* (2012) reported, “A 2009 survey by Trend Monitor, a market-research firm, suggested that one in five women in Seoul had gone under the knife.” According to the *BBC* (2005), “By conservative estimates, 50% of South Korean women in their twenties have had some form of cosmetic surgery [...] 70% of men said they would also consider surgical improvements” (Scanlon). In a 2005 Gallup Korea poll of 1507 people over twenty, 5.4% had previously had plastic surgery; 11.7% of women in their twenties and thirties had previously had plastic surgery; 16.5% of the entire group had considered it; and 38.3% of women in their twenties and thirties said they had thought about it (“90% of Korean Women,” 2009). A 2009 *Chosun Ilbo* survey of 232 people on a dating site reported that 86.6% of Korean women in their twenties and thirties said that they would get plastic surgery to feel better about themselves. Only 1.7 % said that they did not wish to undergo plastic surgery, and 58.2% had already had cosmetic surgery. None said personality rather than looks is what matters. Finally, according to some surveys, 25% of Koreans are born with double eyelids. On the other hand, a significantly higher percentage of celebrities—and practically all female celebrities—in Korea have double eyelids.

Again, these numbers vary, but it remains clear that cosmetic surgery is an accepted norm in Korean and Korean American culture, and double eyelid surgery is compared by some to breast augmentation, tanning, or teeth whitening in the U.S. Double eyelid surgery is not only commonplace in many East Asian contexts, but it is generally also considered noninvasive, safe, and therefore not a “plastic” surgery per se. As Holliday and Elfvig-Hwang (2012) described, “Cosmetic surgery and skin treatment clinics are now commonplace in urban shopping malls, viewed much like nail and beauty salons in the UK, and providing procedures such as laser removal of blemishes to ‘walk-in’ customers” (p. 59). Even the late South Korean President Roh Moo-hyun, had the procedure done, explaining that his eyelashes were protruding into his eyes. In my own experience as an Asian American woman who was born and raised in Hawai‘i, double eyelids and double eyelid surgery were normal topics of conversation during my high school years; many people I knew had gotten the surgery, and I was often encouraged to have the procedure. In other words, even though the decision and act of getting double eyelid surgery may be considered a major turning point in a person’s life, it is also a remarkably ordinary event for many people of East Asian descent, a stark contrast to the experience of others who have never even noticed that there are folds in some people’s eyelids and not in others.

That said, I studied user engagement with YouTube content about double eyelid surgery because I was interested in gaining a better understanding of how users participate in cross-cultural negotiation online—negotiations that also take place when it comes to racialized issues. Double eyelid surgery itself tends to be read very differently across cultural lines, whether those lines are racial, ethnic, generational, national, political, or something else. What’s more, YouTube is a dynamic space where cultural values and perspectives are articulated, negotiated, and sometimes realigned across users, thus offering a way for technical communicators to observe and learn from users who hold a rich range of perspectives and insights as they engage in sophisticated cross-cultural dialogue.

Methods

While this paper centers on issues of race and user experience, the study that is presented is not a UX study. Indeed, I argue that UX designers need to look beyond traditional UX methods in order to better understand race and user experience, as these methods have evidently been limited for addressing such issues. Part of this is because users are not always self-aware of the racial implications of their experiences or interactions—hence, the term “*unconscious bias*”—nor are they always reflexive about how race functions systemically, across large patterns of experience. That said, I present a case study that draws on postcolonial and Asian American rhetorical theory alongside qualitative analysis of users' cross-cultural negotiation as documented on YouTube as a way of helping UX designers better understand and consider how culturally biased representations are constructed in subtle ways. As Yin (2003) has explained, case studies are apt for studying complex contemporary social processes, and here I use this approach to study the discursive and mediated construction of racism and cultural bias.

In my case study of cross-cultural communication strategies on YouTube, I watched approximately fifty videos on double eyelid surgery posted between 2007 and 2013. These videos spanned genres including mass media excerpts such as talk show segments and news reports, before and after slideshows, testimonials, journals of healing and recovery, short lectures on surgeon techniques, documentary film, and audience commentary. In addition, the users and uploaded content were situated across the United States, Australia, Korea, and Singapore. At the same time, my study was limited to videos posted in the English language or with English language translations, in part because of my own language proficiency limitations, and in part because these were the videos that came up in my search using English language search terms on the U.S.-based website. In addition, given the complexity of studying processes of cross-cultural negotiation on social media about a contested practice, I considered it important for me to first gain an understanding of my own positionality as an Asian *American* researcher, before attempting to study the perspectives of people in another country who would come with a vast array of cultural, social, political, and linguistic nuances, many of which would be unfamiliar to me. In my analysis, I examined the videos themselves including their titles, descriptions, tags, likes and dislikes, as well as user comments and user handles, as these elements work together to frame the way users experience the videos.

These videos were accessed in the same way that I believe many users access them. I began by using several search terms, including: double eyelid surgery; Asian blepharoplasty; Asian plastic surgery; Asian cosmetic surgery; race plastic surgery; and ethnic plastic surgery. I also watched related videos and videos recommended by YouTube that seemed relevant to double eyelid surgery. At the start of this project in June 2011, I watched all of the videos that fit these criteria as, at the time, I considered the number of videos that came up in my search manageable. Over time, however, videos about double eyelid surgery were posted in increasing numbers and I did not continue to watch all of the videos about the surgery. For a list of the videos I analyzed, see Appendix A. Data: YouTube Videos on Double Eyelid Surgery, below. Note that this list is not comprehensive as the table was intended for functional purposes, to facilitate collection and analysis, rather than to present findings.

In my analysis, I focused on two key features within my data set: 1) how users rationalized the decision to get the surgery, and 2) the temporal logics that grounded these rationalizations. I focus on these rationalizations because I believe they are a way to access deeply held cultural values and beliefs that ground the way people understand Others. To be clear, my goal here is not to seek out *why* people get double-eyelid surgery, nor is it to discern the most viable rationalizations that people give, or to critique Korean or East Asian culture as one that is ostensibly plastic; rather, I am interested in exploring these rationalizations in order to gain a sense of the different ways these bodies are publicly represented by and for subjects from across a range of cultural backgrounds. In essence, these two features enabled me to identify the ideo/logical moves used in moments of cross-cultural negotiation as mediated by YouTube—processes that are meaningful for understanding how ideology and culture are transmitted in and through UX design.

My analysis took place in multiple layers, generally beginning with a descriptive analysis before moving to inferential. First, I watched the videos, listening specifically for the reasons people gave as to why they believe people (sometimes themselves) should or should not get double eyelid surgery. When I heard a rationalization, I transcribed that portion of the video into a spreadsheet, and I employed Miles and Huberman's (1994) "descriptive coding" method in which I attributed a class of phenomena to a segment of text, looking specifically for the different ways that people rationalized the surgery (See Appendix B. Sample of Data Collection/Coding.). I also cut and pasted excerpts from comments where users engaged in rationalization of the surgery into my spreadsheet. If I noticed anything about the video that I considered notable, especially as it pertains to cross-cultural communication, but that was not textually transcribable, I made a note of it in the spreadsheet (See Appendix C. Sample Observational Notes.). I then re-watched several of the videos, making sure to be attentive to its visual and audio elements. After I had a general coding scheme of five tropes, I used an inferential coding technique, looking back through my data set "for good explanatory exemplars, not for all instances" (p. 65). Next, I did interpretive work, as I examined each trope and the various ways that it took shape across the data, before extrapolating what I saw to be key temporal logics grounding the tropes. Finally, my analysis draws on scholarship across rhetorical theory, cultural studies, Asian American studies, and postcolonial theory for interpreting and discussing the tropes.

Limitations

Here, I note some limitations of my methods. As a case study, the current study centers on the communicative strategies surrounding a cultural and racialized act, and not the surgery itself, nor the people who get the surgery. It must be noted, then, that observations about user engagement on YouTube cannot be used to make overarching statements about views held by the larger population of Asians, Asian Americans, Asians on YouTube, or any other group of people because YouTube users (makers, posters, and viewers) are limited by technological, economic, and linguistic barriers. The data and methods used in this study therefore should not be used to make wider, general observations about who gets double eyelid surgery. For example, a majority of the vernacular videos I watched featured young women who had gotten the surgery. While this might lead one to believe that it is primarily young women who get double eyelid surgery, we must also take into account how social norms and gender roles affect who is willing to

disclose particular kinds of information about themselves on social media, for example, that they had gotten a cosmetic surgical procedure. Furthermore, neither the data nor the coding of this data was comprehensive or exhaustive. Thus, my findings can be used to make theoretical propositions, but they cannot be used to make generalized statements about any particular population, nor are they useful for making quantifiable determinations (Yin, 2003 p. 10). Nonetheless, the methods used yielded rich and reliable observations about how people rationalized double eyelid surgery on YouTube, how some users negotiated these rationalizations, and the temporal logics that grounded those rationalizations.

Findings

To briefly summarize the findings of this study, I observed that YouTube users rationalized the decision to get—or not get—double eyelid surgery through five overlapping and intersecting tropes: racialization, emotionologization, pragmatization, the split between nature and technology, and agency. In addition, these tropes were grounded in at least five temporal logics: progress, hybridity, timelessness, efficiency, and desire as a future-oriented logic.

Racialization

I use the term “racialization,” as a way of highlighting race as a rhetorical and discursive process of becoming, as a way of naming how cultural meaning about race is articulated across users. In doing so, I see this term working to conceptualize race as a social and rhetorical reality as opposed to a biological one. As Winant and Omi (1994) have theorized, racialization is “the extension of racial meaning to a previously racially unclassified relationship, social practice, or group [...] an ideological process, and an historically specific one” (p. 14).

Racialization appears as a trope used to rationalize the decision to get double eyelid surgery in the current study when users—typically those who disapprove of the surgery—explain that those who get the surgery simply want to look “more white” or “Westernized.” One example video from the current study is titled, *WTF VIDEO – Young Korean Girls Have Surgery To Look More White!!!* This video, posted by YouTube user SirGrowalott (2011) is an excerpt from a CNN news segment, where reporter Kyung Lah interviews a twelve-year-old Korean girl named Lee Min Kyong about her plans to get double eyelid surgery with her mother’s permission. In this video excerpt, the reporter furthermore explains that the girl is getting the surgery for “more Westernized eyes.”

Such rationalizations are based on several problematic assumptions about race, beauty and cosmetic surgery. First, it assumes that identities and desires can be stabilized around race and ethnic location. Second, it assumes that all Asians must desire to look white as reflected in the model minority myth via assimilation. Yet, as Heyes (2006) has argued, “Individuals who undergo cosmetic procedures have diverse rationales, and it is perhaps a conceit—or a projection—of a white interpretive stance to think that all body modifications undertaken by people of color are motivated exclusively by a desire to look white” (p. 145). Third, it assumes that Asians are not aware that they want to be white, and are thus not race conscious. In sum, users extend racial meaning to a motivation that is not necessarily defined in terms of race. In this way, racialization works to highlight the rhetorical making of race—the process by which

racial categories and race-based connotations are attached to bodies, practices, motivations, and desires, through language and other signifiers.

Emotionologization

The second trope, emotionologization is an extension from Stearns and Stearns (1985), who use the term to describe “the attitudes or standards that a society, or a definable group within a society maintains toward basic emotions and their appropriate expression; ways that institutions reflect and encourage these attitudes in human conduct” (p. 813). In similar ways to racialization, this term works to highlight how the expression of emotions is rhetorically and culturally situated.

Examples of emotionologization in the current study include moments when those who want to get double eyelid surgery explain that they wish to do so in order to look “happier,” “friendlier,” “more approachable,” or “livelier” (abchungrybeast, 2011). In making such statements, these individuals express a desire to appear to embody emotions in ways that are more in line with socially and culturally sanctioned modes of expression. For instance, in the video *Why I Got Double Eyelid Surgery/ FAQ*, YouTube user shutupjunie (2011) shared a memory where a teacher thought she was sleeping when she was not, and she described that memory as being one among several factors that led to her getting double eyelid surgery.

Such a rationalization highlights how embodied performances of emotion are also culturally contingent and can thus be misinterpreted across racial, embodied, and cultural differences. Further, it makes clear that such repeated patterns of misinterpretation—as commonly experienced by those who inhabit minoritized subject positions—can be challenging to negotiate.

Pragmatization

The third trope, pragmatization, refers to an appeal to logic, where users highlight the practical benefits of double eyelid surgery, oftentimes based on the capitalist logics of the contemporary workplace. This trope appears where those in support of the surgery provide practical reasons for obtaining the procedure, explaining that making a permanent crease in the eyelid through cosmetic surgery will save them the time and money that it would take to make the crease on a more temporary basis.

For example, in the video *Asian plastic surgery on CNN*, cosmetic surgeon Dr. Charles Lee explains that patients will save the time and money that is expended on processes that enable them to get double eyelids on a more temporary basis, including different tapes and glues that are sold for this specific purpose. Users also described how it is easier to apply makeup with double eyelids, given current beauty conventions in the U.S.

Through such arguments about the convenience of not having to take the time to apply double eyelid glue or tape, or overcoming the limitations of makeup looks and fitting into dominant makeup conventions, subjects move to adjust, or modify the self to fit dominant standards, rather than striving to adjust the standards themselves. Such efforts to fit existing standards are considered a significantly more efficient way, in the short term, of overcoming obstacles to meet potential goals.

Nature/technology split

The fourth trope, or the split between nature and technology, refers to moments when users rationalize the decision to get the surgery in ways that are contingent on the distinction between the “natural” body and the technologically modified body. This trope can be seen where users describe cosmetic surgery as plastic and “unnatural,” or when they argue that those who want to get the surgery should just “love themselves as God made them” (InsightSBS, 2011). This trope is based on the idea that there exists an essential, “natural” identity or self, and that this identity is one that individuals should work toward, whether because it is better, more attractive, or more morally correct.

For example, YouTube user dulcelamiavita (2010) commented on the video *Asian Double Eyelid Surgery (Blepharoplasty) – Why?* “Even Asians don’t like looking Asian... weird.” This comment relies upon the idea that getting the surgery means no longer “looking Asian,” at least not in any “natural” sense. In a way, such statements point to the ways in which Asians and other racialized minorities are often in a double bind, where the “natural” self is simultaneously judged and misinterpreted while the modification of the racialized body is also considered unacceptable. At the same time, cosmetic surgeons have also used this trope in an effort to market their services—by assuring potential patients that they will be able to achieve a “natural” and thus acceptable look, and that no one will be able to tell that they had gotten surgery (DrCharlesLee, 2011).

In these ways, this trope highlights how what is considered the natural body and what is considered synthetic, technologically modified, or “fake” is also a cultural determination.

Agency

Finally, when I say agency, I refer to moments when users explain that they or others should be able to get the surgery without judgment because it will enhance their ability to achieve socioeconomic success, whether through enhanced professional opportunities or marriage. An example of this trope can be seen in a comment by YouTube user JuciShockwave (2011) who says, “I can’t hate, at least [*sic*] she got the money to get this surgery. If it’ll make her feel better about herself why not. [...] Too many idiots on the net saying shit like ‘Looks don’t matter’ can kiss my ass, because it does. Looks for the most part will give you the job/man you want.”

This rationalization is based on the notion that more conventionally “attractive” people are privileged in a visually-motivated society and therefore awarded more opportunities for socioeconomic gain—and also that who is considered attractive is in certain ways contingent on race; that minimizing a facial feature that is often racialized means being more attractive. In a sense, these subjects are being open in identifying the social biases that govern the decisions we make with regards to our bodies, while also being complicit to the idea that beauty, especially as it is defined to a particular type of eyelid, is a kind of symbolic capital.

Temporal logics

After identifying these five tropes, I analyzed how these rationalizations were rooted in five temporal logics. When I say “temporal logics,” I am referring to the epistemological frames *Rhetoric, Professional Communication, and Globalization* October 2017, Volume 10, Number 1, 27-53.

through which we structure, feel, and live time. When I say “time,” I am talking about the series of discursive and rhetorical constructs through which we interpret and organize our lived experiences, whether this be in quantifiable terms such as seconds, minutes, hours, or millennia, or in qualitative terms, such as the progress narrative or the decline narrative (Zerubavel, 2004). I argue that being able to identify the temporal logics that ground our systems of value is important because doing so enables us to observe the ideological grounds on which particular versions of reality are produced—realities that serve as the backdrop for UX. As Lakoff and Johnson (1980) have argued, “The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people” (p. 3). The construct of time is thus based upon logics that ground the way we make meaning of the world—how we read emerging experiences in relation to how we remember the past and think about the future, how we build arguments, and how we make sense of and measure change. What’s more, time has played a significant role in rationalizing the colonization and domination of racial and ethnic “Others.”

The five temporal logics I observed in the study are: progress, hybridity, efficiency, timelessness, and desire as a future-oriented category. Progress refers to a linear sense of time that is based on the assumption that later is better (Zerubavel, 2004). The temporal logic of progress is visible in the trope of racialization, which assumes that Asians get eyelid surgery as a step toward their goal of looking, and being “more white.” Such assumptions treat globalization and modernization as linear processes of Westernization, positioning Euro-American perspectives as the goal and the standard by which other cultural practices are measured.

Efficiency refers to an understanding of time that prioritizes the values of expediency and productivity. For instance, the accomplishment of a task with no “wasted” effort or time, or the idea that the less time one spends on a particular activity the better. This logic can be seen in the trope of pragmatization: to make the case that one should get the surgery to save time, one does so on the basis of the warrant that wasting time is a bad thing, and that saving time is not only possible, but it is better than not saving time.

Timelessness refers to the idea that cultures—or particular elements of cultures—are unchanging over quantitative time, amidst a changing world. That is, racialized bodies are rendered timeless when they are essentialized as uni-dimensional and unchanging over time: there is one kind of Asian body, and one kind of white body, and these distinctions are stabilized despite changing technologies, cross-racial mixing, evolving fashion trends, emerging sociopolitical contexts, and so on.

Desire refers to an embodied sense of longing or want that motivates, directs, and propels one toward particular future activities or goals. For example, the temporal logic of desire in many cases grounds the trope of agency, where those who get the surgery do so in response to the desires of others, and to achieve their own desire for social and economic mobility. In such examples, what tends to be highlighted is less the progression toward a particular moral or aesthetic ideal, and more the importance that individuals make decisions that are guided by their own desires.

Finally, hybridity is a term I borrow from postcolonial and ethnic studies, and it refers to complexity, complicated entanglement, and togetherness-in-difference as a mode of organizing lived experience (Ang, 2001). An example of hybridity can be seen when users problematize racialized narratives; for instance, where users have commented on the influence of Asian popular media/drama, the “Korean wave,” and how people in other parts of Asia as well as in the U.S. have been getting cosmetic surgery according to features of their favorite Asian celebrities. In other words, when patients come in to get the surgery, they are oftentimes bringing in a picture of an Asian face, as opposed to a white face, as a frame of reference. In addition, users make the point that many non-whites, including East Asians and other racialized groups, are born with double-eyelids.

Each of these temporal logics come with implications for understanding culture, race, and the moldability of the human body, and are thus useful ways of framing the conceptual relationships across races and embodiments. In this way, designers of all technologies can improve upon their design if they engage with discussions of temporal logics, asking questions like: How does the design or the technology represent time? What temporal logics are communicated through the design? How does the design shape users’ experience of time?

Finally, I cross-analyzed the two sets of findings—the tropes and the temporal logics—to develop a matrix of questions can guide UX designers through a process of thinking reflexively about the implications of representing bodies. This matrix, which I call a Culturally Reflexive Framework for UX/I, or CRF, is detailed in the section that follows.

A Culturally Reflexive Framework (CRF) for UX/I

By analyzing the rhetorical tropes through which users rationalized the decision to get double eyelid surgery in relation to the temporal logics that ground the rationalizations, I came to compelling questions that can help UX/I designers think about representations and their implications for how users experience technologies, symbols, organizing logics, and so on (See Table 1. A Culturally Reflexive Framework (CRF) for UX/I).

Table 1

A Culturally Reflexive Framework (CRF) for UX/I

	progress	efficiency	timelessness	desire	hybridization
racialization Can race/ethnicity be identified in this design? What about other identifications, i.e., gender, class, sexuality, disability, nationality, immigrant status, age?	Are races or identities linked to particular goals? For example, are particular races positioned as more or less moral, civilized, or “developed” than others? Through what signs, symbols, or representations?	Are particular races, identities, or features positioned as more or less efficient than others?	Are particular races, identities, or features being essentialized?	Are particular races, identities, or features cast as desirable (or undesirable)?	Are predominant ways of categorizing race or identity challenged, complicated, or problematized? What are the affordances of highlighting ambiguity or complexity in this context?
emotionologization Can emotions, personalities, or character traits be identified in this design?	Are particular emotions or character traits tied to particular goals?	Are particular emotional states being depicted as a more efficient means toward some goal/s?	Are particular emotions being essentialized or linked to particular embodied identities?	Are particular emotional states or character traits positioned as desirable (or undesirable)?	Are predominant perspectives about emotions challenged, complicated, or problematized?
pragmatization Can ideas about pragmatism be identified in this design?	Are particular ideas, signs, or symbols positioned as more/less practical than others?	Are particular ideas, signs, or symbols depicted as a more efficient means toward some goal or set of goals?	Are ideas about pragmatism being essentialized as unchanging?	Are particular ideas about pragmatism or the use-value of a person or thing depicted as desirable?	Are predominant perspectives about practicality and use-value challenged, complicated, or problematized?
nature/technology Is there a sense of naturalness, unnaturalness, technological or cultural within this design?	Are ideas of naturalness, unnaturalness, technological or cultural tied to particular goals (as more advanced, more moral, etc.)?	Are natural (or technologically-modified) signs, symbols, or representations depicted as an efficient means toward some goal?	Are ideas about naturalness, unnaturalness, technology, or culture being essentialized?	Are either natural or technologically modified signs, symbols, ideas, or representations positioned as desirable?	How are preconceptions about the natural, or about technological development, being challenged or problematized?
agency Are particular bodies, objects, etc. cast as agents of change?	Are agentive bodies, objects, etc. tied to particular goals?	Are agentive bodies depicted as a more/less efficient means toward particular goals?	Are ideas about agency being essentialized as unchanging?	Are agentive bodies or objects cast as desirable (or undesirable), whether due to power or some other metric?	How are preconceptions about who/what has agency challenged, complicated, or problematized?

To be clear, CRF is intended to foreground complexity and a dialogic view of culture, and it can be used in a range of design contexts, whether in moments of analysis, organization, production, or revision. In other words, the purpose of CRF is not just to produce more culturally reflexive designs, but also to open up conversations about the social and material consequences of design, and to encourage UX designers to be increasingly deliberate with their strategies of representation, keeping issues of race and culture in mind. In this way, CRF works to develop culturally reflexive designers, who are especially needed in contemporary organizations. That said, CRF could be used in a wide range of settings, particularly where representations of culture and bodies are a matter of concern, including contexts of digital production, organization, and/or analysis. As such, CRF illustrates how technical communicators can design for user experiences in cross-cultural contexts, and extends on Sun's (2012) assertion that "we need to integrate action and meaning in cross-cultural technology design to augment the everyday lives of local users" (p. 4).

Here's how it works. First, the designer should identify if they are able to see any of the tropes or temporal logics within a design, whether through an image, video, movement, sound, alphabetic text, or organizing scheme. Second, the designer should move in the direction of the arrows, asking the questions laid out in each of the boxes in that row or column. For example, if the writer notices that their design depicts a representation of emotions or works to draw from users a particular set of emotions, they would reflect on the following set of questions, working across the row on emotionologization:

1. Can emotions, personalities, or character traits be identified in this design?
2. Are particular emotions or character traits tied to particular goals?
3. Are particular emotional states being depicted as a more efficient means toward some goal or set of goals?
4. Are particular emotions being essentialized or linked to particular embodied identities?
5. Are particular emotional states or character traits positioned as desirable (or undesirable)?
6. Are predominant perspectives about emotions challenged, complicated, or problematized?

On the other hand, if the writer notices that a text seems to be grounded on notions of desire—as consumer capitalism often is—they would ask the following set of questions, working down the column on desire:

1. Are particular races, identities, or features cast as desirable (or undesirable)?
2. Are particular emotional states or character traits positioned as desirable (or undesirable)?

3. Are particular ideas about pragmatism or the use-value of a person or thing depicted as desirable?
4. Are either natural or technologically modified signs, symbols, ideas, or representations positioned as desirable?
5. Are agentive bodies or objects cast as desirable (or undesirable), whether due to power or some other metric?

These questions are largely phrased as yes or no questions to help UX designers identify tropes and temporal logics within a design, but should serve as starting points that help the designer identify spaces for further exploration and engagement rather than end points that enable them to make easy or binary good/bad, appropriate/inappropriate assessments. In other words, it is insufficient to simply look at the framework and say, “Yes, race and ethnicity can be identified in this design, therefore it is a problem, or we must remove that sign.” In fact, such an approach can work to silence racist thinking without fully addressing the complex factors and affordances that need be engaged in any responsible discussion of race. Instead, CRF is meant to get designers talking about race and its representation in ways that are reflexive and thoughtful. For this reason, designers should use the terms presented in CRF as a way of reflecting on how culture is represented, while also thinking about context, purpose, and audience. Indeed, to treat culture reflexively means to understand that when it comes to the design of culture and cultural artifacts, there are no simple, easy answers. Rather, designs come with multiple and sometimes conflicting implications for diverse groups of people—groups of people who are endlessly complicated, whose identities are entangled in complex, ever-shifting, and intersecting webs of meaning.

Conclusion

It is true that there are no quick or easy solutions that will instantly “eradicate” the deeply embedded systemic, social problem of racism; however, I argue that there are steps that UX designers can take to discourage and minimize the kinds of racial profiling, stereotyping, and discriminatory language that are too often facilitated by web-based applications. In fact, the case can be made that UX design practices constitute one of the many moving parts that support larger systems of inequality, as these practices are shaped and upheld by institutions like education and professional training, and as they are informed by technological changes, institutionalized histories, and cultural values.

In this article, I have made the case for engaging issues of race and cultural difference in considerations of UX design, and I did so on the basis of several widely held premises about the relationship between technology, culture, and ideology. I then described a case study that allows us to learn from the engagements of racialized users on YouTube, as they use the social media site to participate in a dialogue about a contested, cultural, and technological practice that is itself racialized. Next, I presented my Culturally Reflexive Framework for UX/UI Design. I imagine CRF being useful in a variety of UX and UI design contexts—both as a way of teaching students how to engage in reflexive UX design, as well as a tool for UX practitioners.

My hope is that CRF will contribute to disentangling one particularly knotty strand in the complex knowledge work involved in UX design. Ultimately, I believe CRF should work to *complicate* rather than simplify race, as it enables UX and UI designers to more fully think through and address potential cultural and social issues in the context of technology design. Mostly, I believe CRF has the potential to bring these complex and important issues to the table rather than to ignore them through erasure or through rhetorics of neutrality. In some ways, this framework may be seen as ultimately functioning as a “thought exercise”—albeit with real and significant consequences—as opposed to a “practical” or efficient guide for quickly producing culturally nuanced UX. Indeed, CRF demonstrates that culturally reflexive design is difficult, challenging work, and that designers need to be persistently deliberate, thoughtful, and reflexive if they are to do it well.

Finally I close with a call for more research at the intersection of race, UX, and technology design. Given the current sociopolitical climate, especially around issues of race in the U.S., it is apparent that we need to have more conversations that reflect on the relationship between technology design and systemic racial inequality, as well as innovative approaches to designing for diverse users.

References

- abchungrybeast. (2011, April 6). *Surgery to Alter Your Ethnicity (HUNGRY BEAST)*. [Video file]. Retrieved from http://www.youtube.com/watch?v=HZy_2-3tD-A
- Anderson, M. (2015, April 30). Racial and ethnic differences in how people use mobile technology. *PewResearchCenter*. Retrieved from <http://www.pewresearch.org/fact-tank/2015/04/30/racial-and-ethnic-differences-in-how-people-use-mobile-technology/>
- Anderson, R. E., G. Engel, D. Gotterbarn, G. Hertlein, A. Hoffman, B. Jawer, D. G. Johnson, D. K. Lidtke, J. C. Little, D. Martin, D. B. Parker, J. A. Perrolle, and R. S. Rosenberg. (1992, October 16). ACM Code of Ethics and Professional Conduct. Task Force for the Revision of the ACM Code of Ethics and Professional Conduct. Association for Computing Machinery. Retrieved from <https://www.acm.org/about-acm/acm-code-of-ethics-and-professional-conduct>
- Ang, I. (2005). *On not speaking Chinese: Living between Asia and the West*. New York: Routledge.
- Ayers, J. (2016, September 29). Out-of-the-box UX design can eradicate racist user behavior. *Appmakr*. Retrieved from <https://www.appmakr.com/blog/ux-design-can-eradicate-racist-user-behavior/>
- Baer, D. (2015, October 10). The most popular plastic surgery operation in South Korea has a controversial past. *Business Insider*. Retrieved from <http://www.businessinsider.com/popular-plastic-surgery-in-korea-2015-10>
- Banks, A. J. (2006). *Race, rhetoric, and technology: Searching for higher ground*. New York: Routledge.
- Banks, A. J. (2010). *Digital griots: African American rhetoric in a multimedia age*. Carbondale: Southern Illinois University Press.
- Banks, T., B. Medina, K. Moriarty, and J. Redman (Producers). (2007). *The Tyra Banks Show* [Television series]. Los Angeles, CA: Warner Bros. Television Distribution.

- Bardzell, S. (2010, April). Feminist HCI: taking stock and outlining an agenda for design. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1301-1310). Association for Computing Machinery.
- Bardzell, S., & Bardzell, J. (2011, May). Towards a feminist HCI methodology: social science, feminism, and HCI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 675-684). Association for Computing Machinery.
- Bardzell, J., & Bardzell, S. (2013, April). What is critical about critical design? In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 3297-3306). Association for Computing Machinery.
- Bardzell, S., & Blevis, E. (2010). The lens of feminist HCI in the context of sustainable interaction design. *Interactions*, 17(2), 57-59.
- Boateng, B. (2011). *The copyright thing doesn't work here: Adinkra and kente cloth and intellectual property in Ghana*. Minneapolis: University of Minnesota Press.
- Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 5-21.
- Christen, K. (2005). Gone digital: Aboriginal remix and the cultural commons. *International Journal of Cultural Property*, 12(03), 315-345.
- Cho, M and Glavas, I. P. (2009). Anatomic properties of the upper eyelid in Asian Americans. *Dermatologic Surgery*, 35: 1736-1740.
- Chow, K. (2014, November 17). Is beauty in the eye(lid) of the beholder? *Code Switch: Race and Identity, Remixed*. National Public Radio. Retrieved from <http://www.npr.org/sections/codeswitch/2014/11/17/363841262/is-beauty-in-the-eye-lid-of-the-beholder>
- The Chosun Ilbo* (English Edition). (2009, October 26). 90% of Korean women would have plastic surgery, poll shows. Retrieved from http://english.chosun.com/site/data/html_dir/2009/10/26/2009102600798.html
- Chun, W. H. K. (2008). *Control and freedom: Power and paranoia in the age of fiber optics*. Cambridge: MIT Press.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-1299.
- Cullen, L. T. (2002, August 5). Changing faces. Time. Retrieved from <http://content.time.com/time/world/article/0,8599,2047454,00.html>
- DocShopVid. (2010, September 20). *Asian Double Eyelid Surgery (Blepharoplasty) - Why?* [Video file]. Retrieved from http://www.youtube.com/watch?v=xfd23LF8l_M
- Dolnick, S. (2011, February 18). Ethnic differences emerge in plastic surgery. *The New York Times*. Retrieved from <http://www.nytimes.com/2011/02/19/nyregion/19plastic.html?mcubz=1>
- DrCharlesLee. (2011, April 7). *Asian Eyelid Surgery*. [Video file]. Retrieved from <http://www.youtube.com/watch?v=dAZ4UmHLYk0>
- The Economist Online*. (2012, April 23). A cut above: Who has the most plastic surgery? *The Economist*. Retrieved from <http://www.economist.com/blogs/graphicdetail/2012/04/daily-chart-13>
- File, T and C. Ryan. (2014, November). Computer and internet use in the United States. U.S. Department of Commerce: Economics and Statistics Administration. United States Census Bureau. Retrieved from <https://www.census.gov/history/pdf/2013computeruse.pdf>

- Ford, P. (2011, March 1). My, what big eyes you have: Young Chinese drive Korea's plastic surgery boom. *The Christian Science Monitor*. Retrieved from <https://www.csmonitor.com/World/Asia-Pacific/2011/0301/My-what-big-eyes-you-have-Young-Chinese-drive-Korea-s-plastic-surgery-boom>
- Glass, I. (Host and Executive Producer). (2013, January 4). 483: Self-improvement kick. *This American Life*. Podcast retrieved from <https://www.thisamericanlife.org/radio-archives/episode/483/self-improvement-kick>
- Green, V. (1995). Race and technology: African American women in the Bell system, 1945-1980. *Technology and Culture*, 36(2), S101-S144.
- Haas, A. M. (2012). Race, rhetoric, and technology: A case study of decolonial technical communication theory, methodology, and pedagogy. *Journal of Business and Technical Communication*, 26(3): 277-310.
- Haas, A. M. (2007). Wampum as hypertext: An American Indian intellectual tradition of multimedia theory and practice. *Studies in American Indian Literatures*, 19(4), 77-100.
- Hardy, Q. (2016, October 9). Looking for a choice of voices in A.I. technology. *NYTimes*. Retrieved from <https://www.nytimes.com/2016/10/10/technology/looking-for-a-choice-of-voices-in-ai-technology.html?mcubz=1& r=0>
- Harshaw, P. (2015, March 24). Nextdoor, the social network for neighbors, is becoming a home for racial profiling. *Splinter News*. Retrieved from <http://splinternews.com/nextdoor-the-social-network-for-neighbors-is-becoming-1793846596>
- Heyes, C. (2009). Changing race, changing sex: The ethics of self-transformation. In Laurie J. Shrage (Ed.), *You've changed: Sex reassignment and personal identity*. (pp. 135-154). Oxford: Oxford University Press.
- Holliday, R. and Elfving-Hwang, J. (2012). Gender, globalization, and aesthetic surgery in South Korea. *Body and Society*, 18(2): 58-81.
- Hum, S. (2015). "Between the eyes": The racialized gaze as design. *College English*, 77(3), 191-215.
- InsightSBS. (2011, August 28). *Beauty Race*. [Video file]. Retrieved from http://www.youtube.com/watch?v=ONtGn5fF_SU
- JuciShockwave. (2011). Re: *Why I Got Double Eyelid Surgery/ FAQ* [Video file]. Retrieved from <http://www.youtube.com/watch?v=pCMR3-T08U>
- Lah, K. (2011, May 23). Plastic surgery boom as Asians seek 'western' look. CNN. Retrieved from <http://www.cnn.com/2011/WORLD/asiapcf/05/19/korea.beauty/index.html>
- Lakoff, G. and Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Light, A. (2011). HCI as heterodoxy: Technologies of identity and the queering of interaction with computers. *Interacting with Computers*, 23(5), 430-438.
- Marx, P. (2015, March 23). About face: Why is South Korea the world's plastic-surgery capital? *The New Yorker*. Retrieved from <http://www.newyorker.com/magazine/2015/03/23/about-face>
- Miles, M. B. and Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks: SAGE Publications.
- Miller, C. R. (1979). A humanistic rationale for technical writing. *College English*, 40(6), 610-617.
- Moses, M. G., & Katz, S. B. (2006). The phantom machine: The invisible ideology of email (a cultural critique). In Bernadette Longo, J. Blake Scott, and Katherine V. Wills (Eds.), *Rhetoric, Professional Communication, and Globalization* October 2017, Volume 10, Number 1, 27-53.

- Critical power tools: Technical communication and cultural studies.* (pp. 71-105). Albany: SUNY Press
- Muller, M. (2011). Feminism asks the “Who” questions in HCI. *Interacting with Computers*, 23(5), 447-449.
- Muller, M. J., Wharton, C., McIver Jr., W. J., & Laux, L. (1997, March). Toward an HCI research and practice agenda based on human needs and social responsibility. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems* (pp. 155-161). Association for Computing Machinery.
- Murphy, L. W. (2016). Airbnb’s work to fight discrimination and build inclusion: Submitted to Airbnb. Laura Murphy & Associates.
- Nakamura, L. (2008). *Digitizing race: Visual cultures of the internet*. Minneapolis: University of Minnesota Press.
- Nakamura, L. (2013). *Cybertypes: Race, ethnicity, and identity on the Internet*. New York: Routledge.
- Nelson, A., Thuy Linh N. Tu, Alicia Headlam Hines. (2001). *Technicolor: Race, technology, and everyday life*. New York: New York University Press.
- Oudshoorn, N., Rommes, E., & Stienstra, M. (2004). Configuring the user as everybody: Gender and design cultures in information and communication technologies. *Science, Technology & Human Values*, 29(1), 30-63.
- Peddle, K., Powell, A., & Shade, L. R. (2008). Bringing feminist perspectives into community informatics. *Atlantis: Critical Studies in Gender, Culture & Social Justice*, 32(2), 33-44.
- Pratt, J. A., Hauser, K., Ugray, Z., & Patterson, O. (2007). Looking at human–computer interface design: Effects of ethnicity in computer agents. *Interacting with Computers*, 19(4), 512-523.
- Rhodes, M. (2016, August 31). Nextdoor breaks a sacred design rule to end racial profiling. *Wired*. Retrieved from <https://www.wired.com/2016/08/nextdoor-breaks-sacred-design-rule-end-racial-profiling/>
- Roh, D. S., Huang, B., & Niu, G. A. (2015). *Techno-orientalism: Imagining Asia in speculative fiction, history, and media*. New Brunswick: Rutgers University Press.
- Sauers, J. (2012, October 23). New documentary explores eyelid surgery in Korea. *Jezebel*. Gawker Media. Retrieved from <http://jezebel.com/5954310/new-documentary-explores-eyelid-surgery-in-korea>
- Scanlon, C. (2005, February 3). The price of beauty in South Korea. *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/programmes/from_our_own_correspondent/4229995.stm
- Selfe, C. L., & Selfe, R. J. (1994). The politics of the interface: Power and its exercise in electronic contact zones. *College Composition and Communication*, 45(4), 480-504.
- shutupjunie. (2011, August 22). *Why I Got Double Eyelid Surgery/ FAQ* [Video file]. Retrieved from http://www.youtube.com/watch?v=pCMR3-_T08U
- SirGrowth. (2011, June 1). *WTF VIDEO - Young Korean Girls Have Surgery To Look More White!!!* [Video file]. Retrieved from <http://www.youtube.com/watch?v=3yKqOSpDDp4>
- Smith, A. (2014, January 6). African Americans and technology use: A demographic portrait. *PewResearchCenter*. Retrieved from <http://www.pewinternet.org/2014/01/06/african-americans-and-technology-use/>
- Slack, J. D., Miller, D. J., & Doak, J. (1993). The technical communicator as author meaning, power, authority. *Journal of Business and Technical Communication*, 7(1), 12-36.
- Rhetoric, Professional Communication, and Globalization*
October 2017, Volume 10, Number 1, 27-53.

- Stearns, P. N., & Stearns, C. Z. (1985). Emotionology: Clarifying the history of emotions and emotional standards. *The American Historical Review*, 90(4), 813-836.
- Stewart, D. (2013, January 16). I can't stop looking at these South Korean women who've had plastic surgery. *Jezebel*. Gawker Media. Retrieved from <http://jezebel.com/5976202/i-cant-stop-looking-at-these-south-korean-women-whove-had-plastic-surgery>
- Stone, Z. (2013, May 24). The K-pop plastic surgery obsession. *The Atlantic*. Retrieved from <https://www.theatlantic.com/health/archive/2013/05/the-k-pop-plastic-surgery-obsession/276215/>
- Suchman, L. (2002). Located accountabilities in technology production. *Scandinavian Journal of Information Systems* 14(2): 91-105.
- Sun, H. (2006). The triumph of users: Achieving cultural usability goals with user localization. *Technical Communication Quarterly*, 15(4), 457-481.
- Sun, H. (2012). *Cross-cultural technology design: Creating culture-sensitive technology for local users*. Oxford: Oxford University Press.
- surgeryvideo99. (2007, May 3). *Asian plastic surgery on CNN*. [Video file]. Retrieved from <http://www.youtube.com/watch?v=OWOUyFOYR2E>
- Tufte, E. R. (2003). *The cognitive style of PowerPoint* (Vol. 2006). Cheshire: Graphics Press.
- UXPA Code of Professional Conduct. (2005, September). User Experience Professionals Association. Retrieved from <https://uxpa.org/resources/uxpa-code-professional-conduct>
- Weller, C. (2017, August 4). The Japanese are obsessed with eyelid surgery, and it's incredibly controversial. *Business Insider*. <http://www.businessinsider.com/japan-obsessed-eyelid-surgery-2017-8>
- What some women will do for beauty. (2007, October 4). *Marie Claire*. Retrieved from <http://www.marieclaire.com/beauty/news/a784/ethnicity-extreme-makeover/>
- Williams, M. (Host). (2008, March 24). Embarrassed by my race [Television series episode]. In M. Williams (Producer), *The Montel Williams Show*. New York, NY: CBS Television Distribution.
- Winfrey, O. (Host), & Terry, J. C. (Director). (2004, October 6). Around the world with Oprah [Television series episode]. In E. Rakieten (Producer), *The Oprah Winfrey Show*. Chicago, Illinois: Harpo Productions.
- Winant, H., & Omi, M. (1994). *Racial formation in the United States: From the 1960s to the 1990s*. 2nd Ed. New York: Routledge.
- Woo, J. (2012, October 9). More men opt for plastic surgery. *The Wall Street Journal*. Retrieved from <http://blogs.wsj.com/korearealtime/2012/10/09/more-men-opt-for-plastic-surgery/>
- Yin, R. K. (2003). *Case study research: Design and methods*. Third Edition. Thousand Oaks: Sage Publications.
- Youn, A. (2013, June 26). Asia's ideal beauty: Looking Caucasian. CNN. Retrieved from <http://www.cnn.com/2013/06/25/health/asian-beauty/index.html>
- Zerubavel E. (2004). *Time maps: Collective memory and the social shape of the past*. Chicago: University of Chicago Press.

Appendix A. Data: YouTube Videos on Double Eyelid Surgery

Title	Posted By	Date Posted	URL
Asian plastic surgery on CNN	surgeryvideo99	May 3, 2007	http://www.youtube.com/watch?v=OWOUyFOYR2E
NEVER PERFECT trailer	fightingfilms	Jul 20, 2007	http://www.youtube.com/watch?v=YzV15eUEXcE
K tells Montel about asian nose eyelid plastic surgery	surgeryvideo99	Dec 6, 2007	http://www.youtube.com/watch?v=hUIAvGfT0CY
Tyra Banks-Asian Eyelid Surgery	Flaw3dBeauty	Jan 9, 2008	http://www.youtube.com/watch?v=OOcSJSJWD60
Japanese Double Eyelid Glue	timtak1	Mar 11, 2008	http://www.youtube.com/watch?v=tJXpEoQS318
Re: Tyra Banks on Asian Eyelid Surgery	LoWang99	Jun 8, 2008	http://www.youtube.com/watch?v=SXhd5HGzI18
Rant: Asian Eyelids!	ThuyTBird	Jul 10, 2008	http://www.youtube.com/watch?v=iS1IFYD9TDg
Re: Tyra Banks on Asian Eyelid Surgery	EZserenity	Aug 26, 2008	http://www.youtube.com/watch?v=FT3ml5HkcOs
DALLAS ASIAN DOUBLE EYELID BLEPHAROPLASTY DIARY	samlammd	Apr 22, 2009	http://www.youtube.com/watch?v=SleD7BxfMfI
Lid Differences Can Affect Asian Eye Surgery	plasticsurgerychan	Jun 8, 2009	http://www.youtube.com/watch?v=5vRoLVwZmQM
The double standard of cosmetic surgery	RoxStew5	Oct 10, 2009	http://www.youtube.com/watch?v=qMh1AJzjOU
Dr. Phil discussing the upper eyelid surgery	mikaonake	Oct 16, 2009	http://www.youtube.com/watch?v=rsKGV9ib0xk
double happiness	jinknoddyPRODUCTIONS	Feb 11, 2010	http://www.youtube.com/watch?v=e7WGVp5e2sE
Why are Koreans so into their Looks? [Arirang Today]	arirangnews	Apr 28, 2010	http://www.youtube.com/watch?v=OIV_OnBnGmI
Asian Double Eyelid Blepharoplasty 33 News (Dallas, Texas)	samlammd	Jul 20, 2010	http://www.youtube.com/watch?v=yGjr4IAhXp8
review: double eyelid tape	lechatn0ir	Sep 15, 2010	http://www.youtube.com/watch?v=Uhd6fJWszKA
Asian Double Eyelid Surgery (Blepharoplasty) - Why?	DocShopVid	Sep 20, 2010	http://www.youtube.com/watch?v=xfd23LF8l_M
Modern Asian Internalize racism	asianamericanissues	Jan 31, 2011	http://www.youtube.com/watch?v=gXVC_h5-Dg4

The Mental Illness of White Identification Part 8	cowsclips	Feb 12, 2011	http://www.youtube.com/watch?v=BrVutw_nDhQ
double eyelid surgery blog 1	jinyjinjin	Feb 20, 2011	http://www.youtube.com/watch?v=BQHSM7YyZil
WesternEyes	Fathom Film Group	Feb 24, 2011	<i>No longer available.</i>
Surgery to Alter Your Ethnicity (HUNGRY BEAST)	abchungrybeast	Apr 6, 2011	http://www.youtube.com/watch?v=HZy_2-3tD-A
WTF - Double Eyelid Tape	simonandmartina	Apr 6, 2011	http://www.youtube.com/watch?v=oF-Bnz5sAEQ
Asian Eyelid Surgery	DrCharlesLee	Apr 7, 2011	http://www.youtube.com/watch?v=dAZ4UmHLYk0
Part 1: Plastic surgery questions answered!	TheXiaxue	May 11, 2011	http://www.youtube.com/watch?v=7VQW8mOyMJ0
Part 2: Plastic surgery questions answered!	TheXiaxue	May 12, 2011	http://www.youtube.com/watch?v=vUXidWrouZ8
Korean Fashion (Cosmetic Surgery)	pattie0071	May 15, 2011	http://www.youtube.com/watch?v=ceVGpNt2bRI
Part 1: Double Eyelid Surgery	lovechi7	May 18, 2011	http://www.youtube.com/watch?v=KhGmdRebkk8
Asians Have Surgery To Look Caucasian	TheYoungTurks	May 27, 2011	http://www.youtube.com/watch?v=KJ5kFRCreUE
WTF VIDEO - Young Korean Girls Have Surgery To Look More White!!!	SirGrowalott	Jun 1, 2011	http://www.youtube.com/watch?v=3yKqOSpDDp4
Incisional vs. Non-Incisional Double Eyelid Surgery - Dr. Kenneth Kim	drkennethkim	Jun 10, 2011	http://www.youtube.com/watch?v=fy3TnbXcNmA
Advantages of Suture Technique Double Eyelid Surgery	drkennethkim	Jun 22, 2011	http://www.youtube.com/watch?v=LUn_Qv4Bcis
Problems of Suture Technique Double Eyelid Surgery	drkennethkim	Jul 7, 2011	http://www.youtube.com/watch?v=4QzwrLeYFNs
Single to Permanent Double Eyelid Girl	esthyAnn729	Jul 11, 2011	http://www.youtube.com/watch?v=BSxJMfLAApw
Double Eyelid Tape	RetardedxDinosaur	Jul 18, 2011	http://www.youtube.com/watch?v=3Y6Lxv1ZcKA
Documentary on High School in South Korea (part 1 of 2)	kelleykatz	Aug 4, 2011	http://www.youtube.com/watch?v=8jvHgNB4HM0
Korean vs North American Beauty Standards	simonandmartinabonus	Aug 18, 2011	http://www.youtube.com/watch?v=Q7zW9KjSzOQ

Why I Got Double Eyelid Surgery/ FAQ	shutupjunie	Aug 22, 2011	http://www.youtube.com/watch?v=pCMR3-T08U
Part 2: Double Eyelid Surgery Q&A	lovechi7	Aug 26, 2011	http://www.youtube.com/watch?v=3dmZimK0Prc
Beauty Race	InsightSBS	Aug 28, 2011	http://www.youtube.com/watch?v=ONtGn5fF_SU
My Double Eyelid Surgery and post surgery pictures! 8D	chicky96734	Aug 28, 2011	http://www.youtube.com/watch?v=vOPTtquel2o
Asian Eyelid Surgery	DrCharlesLee	Oct 6, 2011	http://www.youtube.com/watch?v=ju8unS4TgJw
Liz: Asian Eyelid Surgery	DrCharlesLee	Oct 6, 2011	http://www.youtube.com/watch?v=Gt5lVFGHzI0
How successful is DST surgery?	DrCharlesLee	Oct 6, 2011	http://www.youtube.com/watch?v=R0tDe-ZrUaM
Asian Eyelid Surgery : Erase Your Race? on The Doctors	channelapa	Oct 12, 2011	<i>No longer available.</i>
Asian Double Eyelids 101	11x11PM	Nov 26, 2011	http://www.youtube.com/watch?v=IsOPBoRDp2k
5 Months later...	chicky96734	Jan 29, 2012	http://www.youtube.com/watch?v=K7FXYnexX4k
My Double Eyelid Surgery쌍꺼풀 성형수술 (Asian blepharoplasty)	Wang Pyeong Seon	Feb 16, 2012	http://www.youtube.com/watch?v=B1-Ij_JmeFU
Seoul Fashion Week - K-Pop to Double Eyelid Surgery	vice	Oct 23, 2012	http://www.youtube.com/watch?v=0wWKjxxM6q8
Plastic Surgery in Korea: Double Eyelids, Rhinoplasty, Jawlines & Beauty Tourism (KWOW #68)	sweetandtasty	Dec 6, 2012	http://www.youtube.com/watch?v=8jvHgNB4HM0

Appendix B. Sample of Data Collection/Coding

Quotes from Videos	Quotes from Comments
<p>Dr. Charles Lee, Liz; “we are known for...a non-cutting method called a DST” (double suture technique) “You will be able to return to work in a very short period of time, probably about 4 days as opposed to 1 or 2 weeks that you usually have to wait for when you’re doing an incisional type of procedure” (Lee). “I went into surgery, it was painless, I came out, three days later I continued working, and no one really noticed a difference. I got a lot of compliments, but no one even questioned surgery, and that was my main concern.”</p>	<p>Well if those ladies feel good about themselves after the surgery then that's what matters. (scorchedcandy) the music -.-" ctinacho 5 months ago // all political corectness aside; They just want to look more western. Being it unconsciously or not. Even anime characters have huge eyes, not something which asian people naturally have TheScoutingSniper in reply to helenprd (Show the comment) 2 months ago Wtf? Where does it indicate that they do not want to look asian? Alot of asians are naturally born with double eyelids you know. So maybe the single-lidded asians just want to emulate their look? helenprd in reply to dulcelamiavita (Show the comment) 5 months ago Wow. Even Asians don't like looking Asian... weird. dulcelamiavita 8 months ago pathetic really denshaotoko89 1 year ago</p>
<p>“most often times when children are moving onto adulthood or going into college, when they’re transitioning to a different life, it’s a time where they are changing their career paths, I find that to be the most common impetus to do this procedure” “many Asian women overseas have cosmetic surgery to attain a more western look. But that’s not the case for Jennifer; her reason was much more practical.” “it was always kind of hard being a little teenage girl wanting to go and try on makeup and stuff like that, it was always difficult to find somebody who can actually apply it correctly and make it look nice” “I think for whatever procedure you do, for whatever race you do it for, you want to make them look natural, and make them look appropriate...” “As for Jennifer, she’s still the same person before and after.”</p>	<p>i hate how so many people think that asians are doing this because the "western look" is more desirable. that's not the reason. a number of asians are born with double lids, therefore double lid isn't a "nonasian" feature. it's just something that not everyone has. it's not like you'll see an asian girl after the surgery and be all like, "is she asian? i can't tell because her eyes aren't tiny." NO. just no. they'll just look like an asian with double lids. (thatscaraful)</p>

Key: orange=racialization; blue=emotionologization; purple=pragmatization; green=split between nature and technology; pink=agency.

Rhetoric, Professional Communication, and Globalization
 October 2017, Volume 10, Number 1, 27-53.

Appendix C. Sample Observational Notes

Many surgeons themselves have gotten double eyelid surgery
Compares to breast augmentation. Mentions makeup. Tailoring to specific needs of Asians. Turnaround time. Stereotypical Asian music in intro and background.
No sound, slideshow of before/after
Tracks journey of healing. Ends with speaker speaking Deutsch/German
Comment removed Author withheld This has been flagged as spam show babYKittyization 1 month ago
CNN report cited a couple times.
2:53-5:03 Larger segment of plasticsurgerychan clip above.
Description: I just watched the vid and got straight pissed off...and since i have the opportunity to state how i feel i took it...this is what happens when i press record without first really thinkin about what im gunna say...kinda like tyra does when she talks...makes us look uneducated :p Let me further clairify, i made this vid as a response to the way that tyra responded to her guest. it was unprofessional, and quite rude. despite what the guest's reasoning was, there was no need to attack her the way that tyra did. i didnt analyze the guest's response, however i did breifly describe my feelings in the comments. this was just another "i-think-tyra-is-a-dumb-talkshow-host" vid. enjoy!
Description: Often, when a person of color has cosmetic surgery particularly when they are altering their features to have more of a Caucasian look, people judge that person and say they must hate their race or want to be white. However when a white or Caucasian person has a similar surgery to make their physical features more "exotic" or of another ethnicity, nothing is said and no one thinks of them as being embarrassed of their race. This video just looks at the degree white plastic surgery patients go to have more of an ethnic look with none of the backlash that comes with changing their features.
Documentary. Offers multiple perspectives.
Rant about not having double eyelids. Limitations of makeup looks.
“fix”; how to tell natural from surgically modified. “How painful is it?” Cost benefit analysis. “Is plastic surgery addictive?”
Being called plastic/fake vs. being called a liar. Think everything else about you is plastic. How to know if someone got a nose job. Is it reasonable to ask for a celebrity nose? No. “I can never have a white person’s nose...because I have thick ‘alars.’” Not realistic.
See extensive comments in description. Poster often responds to comments.
Goal of increased critical media literacy

Rhetoric, Professional Communication, and Globalization
October 2017, Volume 10, Number 1, 27-53.