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From the Editors

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We hope you enjoy contributions in this volume.

Duncan P. McKinnon and Lynita Langley-Ware

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Revolutionized Experiences of Gender in an Internet Dominated World

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Abstract

The construct of gender has manifested itself throughout different cultures across time, and while these manifestations are all complex in their own ways, the Internet has altered the way people perceive and display gender in a fashion that could not have happened prior to its advent. This paper discusses the ways in which the Internet has provided a unique environment for the transgender and non-binary community to thrive, explores new ideas about gender that have emerged as a result of this thriving community, and considers the ways in which these ideas are influencing the structures of our society.

Introduction

In the present-day United States, the masculine/feminine gender binary is well established and influences many of our social structures. We have clear-cut expectations of how men and women should act, think, and feel. Because these gendered expectations rely so heavily on the male/female sex binary, the gender binary is often viewed as being "natural" and is ingrained so deeply into our culture that it is difficult for many people to imagine a world where these rigid binary constructions of gender are not so rigid and binary. Despite the fact that the majority of the population has historically upheld this gender binary in the post-colonial United States, there have always been Americans who have felt more comfortable identifying as something other than masculine or feminine, whether or not they expressed this identity to those around them (Beemyn 2014:1). Due to social constraints that include a lack of language and fear of ridicule from outsiders, it has been difficult, if not impossible, for many non-binary people to publicly express their identities and connect with others who identify similarly to them (Paechter 2021).

The Internet, as this paper will argue, has been instrumental in changing the way non-binary people understand themselves and connect with one another, at least within the confines of gender within our culture. Primarily due to its international reach and anonymous nature, the Internet has provided the perfect space for closeted transgender and non-binary people to discuss their experiences and inner feelings with each other. In the early days of the Internet, anonymous forums became places where queer people could come together to ask questions, offer support, build interpersonal relationships with one another, and engage in discourse about the complex issues within their community (Barrett-Ibarria 2018). Many more young adults today identify as transgender and non-binary than ever before (Meerwijk and Sevelius 2017), and it is easy to point to education

and support systems created by the Internet as primary contributors to this phenomenon of self-discovery. Included in this self-discovery is the disassembly and reconstruction of traditional notions of gender. As a result of this disassembly and reconstruction in online spaces, gender as a concept has evolved to become something much different than it was before the advent of the Internet.

What Is Gender? An Historical Perspective

Gender has been in development for millennia, and because of this, it is difficult to trace exactly where and when our modern, Western notions of gender were formed. Despite this, many scholars agree that our current understanding of the masculine/feminine dichotomy and the expectations of men and women based on that dichotomy took shape in the mid-twentieth century (Brienes 1986:69). During this time, many sociologists subscribed to structural functionalist theories about gender, which strongly enforced patriarchal gender roles (Wienclaw 2011:112). Talcott Parsons was one of these sociologists. Parsons was frustrated by the rising divorce rate and decreasing birth rate in America and sought to explain why these phenomena were occurring. In his 1955 publication *Family: Socialization and Interaction Process,* he explains that families are structured in such a way that each member of the family is intended to perform a different function. Only when all members of the family are fully committed to their functions can a family thrive as an economic unit. The specific functions Parsons outlined are likely ones with which most Americans are familiar, with fathers being expected to work and provide monetary support for their families, and mothers being expected to take care of domestic responsibilities, most importantly nurturing their children. Despite his belief in rigid gender roles, Parsons did not explicitly claim that one gender was superior to the other, saying that there was "no question of the symmetry between the sexes" (Parsons 1955:14). By having differing roles, Parsons

argued that men and women could avoid competition with each other and instead work cohesively as a unit (Breines 1986:77; Parsons 1955). Parsons observed a decline in the rigid enforcement of these gender roles, which he pointed to as the root cause of the problems he was observing in the mid-twentieth century. To him, families in which men and women did not closely adhere to gender roles were the ones that contributed to the declining birthrate and heightening divorce rate (Parsons 1942:612).

Interestingly, Parsons admitted that while gender roles were necessary for the nuclear family to function in Western society, they were "by no means wholly or even mainly a reflection of its biological composition" (Parsons 1955:8). He also later stated, "...the human personality is not 'born,' but must be 'made,' through the socialization process that in the first instance families are necessary" (Parsons 1955:16). These quotes reflect the idea that gender is not innate, but instead learned and practiced within the context of society.

Other scholars of the time agreed that families were beginning to lose the function they once had, in large part due to changing gender roles. In *Crestwood Heights: A Study of the Culture of Suburban Life* (1956), John R. Seeley and colleagues wrote, "...there appears to be a growing convergence between types of social behavior once... distinguished as male and female" (Seeley et al. 1956:103), and noted that men were expected to contribute more to child rearing, while women were beginning to find more visibility in intellectual spaces. Additionally, men were beginning to be expected to show more traditionally feminine characteristics while in white collar spaces, such as showing higher amounts of empathy to coworkers and avoiding conflict (Breines 1986:74).

In her paper *The 1950s: Gender and Some Social Science* (1986), Wini Breines argued against the notion of "convergence" as Seeley et al. (1956) and Parsons (1942) had described. She claimed that while it is true that the roles of men and women were beginning to overlap, there was still very much a divide between the sexes, and while this "had enormous consequences for women, the male authors, less effected and less sensitive to the impact, did not worry about it" (Breines 1986:78). Her analysis exposed the flawed nature of gender theory in the 1950s, highlighting the fact that it centered entirely around the perspective of white men. Breines acknowledged that because men and women had different experiences under patriarchy, they will both come away from their experiences with different takeaways. For this reason, gender theory going forward took on a different approach, typically centering on the thoughts and experiences of women, non-binary, and transgender people.

Gender in the Late Twentieth Century

Until the late twentieth century, gender theory within American sociology was still primarily focused on the male/female sex binary and the implications of gender roles as a result of that binary. Toward the end of the twentieth century, gender theorists began directing their focus to gender identity rather than just gender roles (in other words, how one feels about their gender rather than how they are expected to act based on that gender). With that focus came a discussion of genders other than men and woman, that is, non-binary genders. It is important to acknowledge that various cultures throughout history have acknowledged the existence of non-binary genders within their own societies, and that while theories emerging from gender theorists in the late twentieth century were revolutionary within the context of post-colonial American culture, the exploration of genders beyond those that were strictly masculine or feminine was not new in a wider historical context (Hollimon 2017:54).

In the 1990 publication, *Gender Trouble: Feminism and the Subversion of Identity*, queer gender theorist Judith Butler introduced a new theoretical framework surrounding the nature of gender identity, establishing the work as a staple in the realm of queer theory. Contrary to the early ideas of Parsons and others, Butler argued that sex does not determine gender. In order to assert this fundamental difference between sex and gender, Butler called upon society to reject the notion that gender is something one can "have." Rather, it is argued that gender is something one "does," and it is something developed over time. This doing of gender is not just a passive doing, Butler argues, but rather, an active "performance" (Butler 1990:139).

Because of the deeply ingrained roles and expectations assigned to each gender, particularly within the confines of the modern Western masculine/feminine dichotomy, people must perform their gender so fully that it becomes part of their identity. Because our society has historically equated sex with gender, it is expected that one's gender performance will equate with the gender associated with their sex. Thus, a gender is assigned to them based on their sex (Valdes 1996:169). These assignments are often challenged by transgender people. For example, someone who was assigned female at birth as a result of their external biological sex characteristics may in actuality identify as a man, and someone who was assigned male at birth may actually identify as a woman. While it is important to understand the experiences of binary transgender people as gender performances in their own right, Butler (1990) focuses on gender performances that exist outside of the masculine/feminine binary.

In the book, *Undoing Gender* (2004), Butler breaks down some of the implications of identifying outside of the gender binary. For most non-binary people, gender performance and identity still exist in relation to the masculine/feminine binary. A non-binary person might identify as partially feminine and partially masculine, mostly masculine and somewhat feminine, mostly feminine and somewhat masculine, masculine or feminine depending on the day, and a host of other combinations. Even those non-binary people who identify as neither feminine nor masculine still focus their identities in relation to the notions of masculinity and femininity. The term non-binary attests to this, as it affirms what the person is not (man or woman) as opposed to what they are. As Butler wrote, "To be not quite masculine or not quite feminine is still to be understood exclusively in terms of one's relationship to the 'quite masculine' and the 'quite feminine'" (Butler 2004:42). In a society bound by the rigid gender binary of masculine and feminine, it is only logical that those who identify outside of this binary would still be confined to describing their identities through the lens of masculinity and femininity. After all, what is gender if not the combination of or rejection of the masculine and the feminine? This is not an easy question to answer, and it is one that non-binary people still grapple with today.

Butler claims that although our society binds us to the masculine/feminine binary, we do not have to accept this binary, and genders that do not exist in relation to masculinity or femininity do and should exist, saying, "those permutations of gender which do not fit the binary are as much a part of gender as its most normative instance" (Butler 2004:42). Gender as we know it is fundamentally about the masculine and feminine dichotomy, but Butler calls upon society to dismantle this notion by deconstructing and reshaping that dichotomy. This is no easy task, as it requires one to break down what gender really is and what it means to have gender. It requires one to separate gender roles from gender identity and the ways in which both of those things manifest in everyday lives. For some, experiences of gender are highly personalized and do not fit neatly within greater societal expectations. While they may be difficult for others to understand, they are precisely the sort of experiences that Butler discusses. Today, nearly two decades after the publication of *Undoing Gender*, these sentiments are alive and well in online spaces as people meticulously deconstruct and reshape their innermost identities.

Queer Experiences in the Early Internet

While this paper focuses specifically on the evolution of gender ideology as a result of the Internet, it is important to first understand that the establishment of the Internet also served as a space for queer people to build community with each other, regardless of gender identities. As queer writer Rebecca Torrence writes, "Everything I learned about being queer, I learned on the Internet" (Torrence 2019), and this sentiment is echoed by hosts of other queer people who grew up using the Internet. The Internet provides a unique setting for people from fringe social groups to connect in ways that they could not prior to its advent. Because of the anonymity allowed in most areas of the Internet, queer people are offered the space to explore and discuss their identities without fear of judgement or persecution from others (Evans et al. 2017:131).

Many queer people today look to microblogging website Tumblr as the platform with the most prevalent queer community on the Internet. While the site may be famous now for its queer presence, queer people have been engaging with each other on a plethora of platforms both before and after the advent of Tumblr in 2007. In *Remembering the Golden Age of the Queer Internet* (2018), author Sofia Barrett-Ibarria recounts pre-2007 stories of queer community, most of which occurred in "smaller niche communities, forums, and message boards" (Barrett-Ibarria 2018), most of which occurred in lesser-known online communities, many of which are now no longer in existence.

One such community is Open Diary, one of the first social networking sites. Founded in 1998, Open Diary is still an open space for users to compose diary entries. Users can create diaries or individual entries that are public, private, or only visible to friends. This feature allows users to share their most personal stories and emotions to as large or small of an audience as they choose. Additionally, users can allow their diaries to be open to comments by other users. The anonymous structure of Open Diary, combined with the deeply personal nature of diary keeping, provided the perfect space for queer people struggling with their identities to reach out to others in their community. By writing about their most intimate thoughts and feelings on an anonymous platform, queer people were able to grapple with their identities without outing themselves to people they knew in real life--an opportunity unique to the age of the Internet.

Barrett-Ibarria's (2018) article features an interview with an Open Diary user named B, who recalls receiving advice from Open Diary users during a time in which she was writing about questioning her sexuality. B formed a friend-group of queer people on Open Diary who provided her with support, eventually even helping her to come out. Overall, B says that her experiences connecting with queer people in an online format taught her that her queerness was a possibility worth pursuing.

The queer community has also thrived outside of traditional message boards, forums, and social networking sites. Queer writer Teresa Navarro (2017) detailed their own experiences using Neopets, a popular site in the early 2000s that is still in existence today. Neopets is a game in which the user collects virtual "pets," which they then care for and play with. The game avoids tasking users with any particular objective, encouraging them to explore the virtual world of Neopia while tending to the needs of their virtual pets as they come and go. Because of Neopets free-range format, users have many liberties within the game, meaning that they can set their own objectives and make gameplay whatever they want it to be. While it is entirely possible for users to stick to exclusively single-player gameplay, they do have the option to engage in multiplayer games with other users. It is within these multiplayer games that young Navarro found an online support system of queer people.

Multiplayer games on Neopets allow users to message one another, although the messaging functions are fairly limited and many words are censored. Navarro recalled their experiences attempting to contact people outside of the game, detailing the various methods people used to communicate their usernames on other platforms without flagging Neopets censoring system. Interestingly, Navarro says that once they began speaking with her friends from Neopets in a more free environment, the first thing she learned about them was that they identified as queer. They discuss the implications of this idea, suggesting that it is often easier to interact with others behind a fake persona constructed in a virtual environment rather than to show one's true self up front. Navarro also expresses that they take solace in the fact that Internet friends can be as close or as distant as is needed. All it takes to remove oneself from an emotional or sensitive conversation is to walk away from the screen, making conversations about queerness more palatable (Navarro 2017).

Gendered Experiences on Tumblr

Today, whether famously or infamously, microblogging website Tumblr is known for its prominent and discursive queer community (Oakley 2016:2). Composed mostly of young adults, the Tumblr community has been instrumental in redefining what it means to be non-binary and what it means to have gender at all. Tumblr users have adopted well-established gender labels as well as creating new labels that define and express more niche gender identities (Oakley 2016:4). These developments in the queer lexicon have given way to discourse within the community, as users question the validity of certain identities, the inclusion of specific identities under the queer umbrella, the definitions of particular identities, and much more. Before exploring the varying discussions around gender on the site, it is important to develop an understanding of how Tumblr is structured and how it functions.

Tumblr was created in 2007 by CEO David Karp, who was interested in tumblelogs, also known as microblogs. Instead of constructing longer, article length text posts that would be found in a traditional blog, microblog users write shorter posts, usually ones which can be consumed in a minute or less. Facebook is another example of a popular microblogging site, and it shares quite a few similarities with Tumblr. Both platforms allow users to customize their own profile and create posts in the form of images, text, and hyperlinks, all of which are then displayed on their user profile and shown to followers of the user. There are some functional differences between the two sites. For example, Facebook allows users to post to the profiles of other users, and Tumblr allows for more personalized customizing on individual profiles. While both Facebook and Tumblr are microblogging platforms with similar basic features, the two sites have grown into very different platforms with very different user demographics.

Whether or not this was the intention of the respective founders, each site has taken on a very different role while maintaining its original functionality as a microblogging social networking site. On Facebook, users primarily use their real names and share real photos of themselves and their friends, and the people they connect with on the site are typically people they already know. The same cannot be said for Tumblr, in which users are primarily anonymous. Tumblr users create usernames related to their personal interests rather than their given names and connect with other anonymous users. While users do sometimes make posts about events happening in their personal lives, they often post about interests they share with their followers, and when they do share personal stories, they do it knowing that the people reading them are not intimately involved in their everyday life. This anonymity allows users to share information they may otherwise be afraid to share, such as their queer gender identities. Both Tumblr's microblogging format and its anonymous nature resulted in the site quickly becoming the premier space on the Internet for young queer people to explore themselves and their community, although these are not the only features that facilitate the fostering of this community.

Unlike Facebook, which allows users to construct profiles by filling in boxes about their sex, age, hometown, interests, and other characteristics, Tumblr affords users only an About Me text box, from which they can share any information about themselves they deem pertinent. This provides users a way to share their unique identities in as much detail as they require, and it also allows them to communicate any themes or purposes

they hope their blog will convey as well as laying out any ground rules for users who wish to interact with their blog. Tumblr's About Me box allows for far more nuance and meaning than could be found in the Bio section of a Facebook or Twitter account, which in turn allows users to be intentional about who they choose to interact with on the site, as well as giving them the freedom to convey their identities in a fashion that is highly specific to their own experiences.

Tumblr also popularized the indication of one's preferred pronouns in the About Me box, which is now standard practice in the Bio sections on other social networking sites. Instagram, for example, now provides users with a specialized section within the Bio in which they can specify their pronouns. The sharing of one's preferred pronouns is one of the easiest ways to ensure that gender identity will be respected and affirmed by strangers without requiring an in-depth explanation of that gender identity. Because of the diverse and complex gender identities claimed by Tumblr's users, it makes sense that it would become the site to popularize the sharing of pronouns.

A study conducted by Abigail Oakley (2016) looked at the demographics of a sample of 186 blogs on Tumblr. Of that sample, the most common set of pronouns included in user profiles was they/them, used by 12.4 percent of users (Oakley 2016:5). Additionally, a fairly high percentage of Tumblr users in the study used they/them pronouns in conjunction with other pronouns. For example, 4.9 percent of Oakley's participants used they/he pronouns, and another 3.8 percent used they/she.

The use of they/them pronouns typically, but not always, indicates that the user identifies outside of the masculine/feminine gender binary. The 12.4 percent on Tumblr is a high number, especially when compared with the fact that only 0.3 percent of the United States population identifies as non-binary (Meyer and Wilson 2021:2). Of course, Tumblr is not limited only to those in the United States, but the differences in these percentages attest to the fact that Tumblr is a queer-dominated space.

Gender labeling has also been central to the queer community on Tumblr, with users seeking to find the right words to convey their individualized experiences of gender. Some terms used to describe non-binary gender identities on the site include genderfluid, which describes a person whose gender identity changes between two or more genders at any given time, agender, which describes a person who has no connection to gender, and demigirl, which describes a person who partially, but not fully, identifies with womanhood (Oakley 2016:5). While labels such as these did not originate on Tumblr, the site users popularized them, and they are now commonly recognized even in offline spaces today. The popularization

of these terms stands as another example of Internet platforms facilitating the self-discovery of queer youth and redefining what it means to have gender. By being introduced to a vast array of specific gender labels on an anonymous site like Tumblr, queer youth are allowed the space for self-reflection and experimentation that might not have been afforded them in an offline space.

Xenogender on Tumblr

As increasingly specific gender labeling became more commonplace on Tumblr, some users began to recognize that existing gender labels did not fully describe their unique experiences with gender. As a result, users began to develop their own terms, which they then shared with other users. One example is aerogender, which was coined by Tumblr user Tenderagender in 2014 (Tenderagender 2014). Aerogender is an umbrella term that has been described as a gender that changes depending on one's environment (Oakley 2016:4). Some might characterize this term as being a subset of genderfluid, as it describes gender fluidity with an added layer of context surrounding the cause of that fluidity.

Aerogender is just one example of a xenogender, a term which was coined by Tumblr user Baaphomett in 2014 (Mogai Archive 2015). Baaphomett defines this term as a gender "that cannot be contained by human understandings of gender; more concerned with crafting other methods of gender categorization and hierarchy such as those relating to animals, plants, or other creatures/things" (Mogai Archive 2015). While xenogenders are a subcategory of non-binary genders, they stand out from mainstream non-binary gender identities by separating themselves entirely from the masculine/feminine binary, as they do not engage with femininity or masculinity in any capacity. In a sense, xenogenders are what Judith Butler was asking for when criticizing non-binary identities for relying so heavily on a relationship to femininity and masculinity. By rejecting these concepts entirely, people who adopt xenogender labels are quite literally redefining gender.

Tumblr is littered with posts which introduce new xenogender labels. Sometimes these posts are created by users who are sharing a label they have adopted for themselves, and other times they are created by users who have developed a label which they feel their followers may relate. Typically, these posts include an image of a pride flag created specifically for the new xenogender label, an explanation of symbolism used in the flag, a brief definition of xenogender, and a list of pronouns that might be most suitable for someone who chooses to adopt the xenogender term.

For example, Tumblr user Graverobbr created a post with an image of a pride flag consisting of seven horizontal stripes, each in varying shades of red, green,

and brown. They captioned the image, "ok so i have yet to find a good term for my gender outside of nonbinary trans guy, so i made one!! it is called vilegender and is very much rooted in the mad scientist trope, human anatomy, horror, and just being fucked up and evil in the coolest way possible" (Graverobbr 2021). After listing the symbolism behind the various colors on the flag, Graverobbr invited others to adopt this label for themselves, saying "if you want to use this term as well go ahead!!" (Graverobbr 2021). While Graverobbr's post is just one example of thousands of xenogender introduction posts on Tumblr, it shares themes with most other posts of its kind. Graverobbr expressed frustration in the inability to find a label that accurately represented their unique experiences of gender, so they chose to create their own. This "creation" of a new gender based on deeply personal identity is certainly a revolutionary breakaway from the traditional masculine/feminine binary that people have so long been bound to. While there is still much discourse and confusion in online queer communities regarding the validity of xenogenders as "real" genders, people who identify with xenogenders have done their best to explain to others the feelings that go into this sort of self-identification. Tumblr user Intersexfairy (2021) shares the following thoughts:

> xenogenders are so cool like... they're almost like metaphors. like 'i have a gender and the way it makes me feel reminds me of a shining sun, so im sungender' is so? poetic? it's beautiful? they're also like abstract art... with the way a painting can look like one thing but actually be mentally connected to something else. like a abstract painting in varying shades of blue can represent the ocean. i honestly think xenogenders are one of the most beautiful displays of gender variance. it taps into the emotions that gender draws from, and instead of clunking into the box "male" or "female," or even man/woman, they create an entirely new, personal experience. xenogenders are the essence of gender.

The description of xenogenders as metaphors is of particular interest here, and it connects to a bigger picture regarding the use of language to depict our realities. In their publication *Metaphors We Live By* (1980), George Lakoff and Mark Johnson discuss the entrenchment of metaphors in everyday language and how the use of these metaphors can shape the way we understand reality and vice versa. In one example, Lakoff and Johnson point to various phrases in our language that metaphorically equate the concepts of time and money. "You're wasting my time," "You need to budget your time," and "That flat tire cost me an hour," are just a few examples (Lakoff and Johnson 1980:2). In each example, a money-related word is inserted into a context that is not inherently about money, and through this insertion, a new context is formed. While time and money are not inherently interconnected, our capitalistic society has developed a culture in which this has become the case, where people are paid a given sum of money in exchange for working for a given period of time. Our language has adapted as a result of this structure, which in turn reinforces the connection between these two concepts. While "That flat tire cost me an hour," may just be a metaphorical figure of speech, it is representative of the way we really feel about time in relation to money.

Intersexfairy's description of xenogender as metaphor functions in a similar manner. While it is likely that Intersexfairy does not imagine a literal physical embodiment of the sun, Intersexfairy identifies as sungender because the way they feel about themselves reminds them of the way they perceive the sun, similar to how the way we feel about time might remind us of the way we feel about money. Intersexfairy's gender identity is already an interesting variant from the traditional masculine/feminine binary that informs mainstream conceptions of gender, and as the term sungender becomes more ingrained in their vocabulary and identity, the metaphorical nature of the identity may come to feel more like reality, separating it even further from traditional notions of gender.

People who identify with xenogenders are transforming the nature of gender identity. In the past, people were given a limited number of boxes from which they could check their identity. Traditionally, the options were limited to only male and female, and eventually a small array of non-binary options became more mainstream. By identifying with xenogenders, people choose to not confine themselves to the established boxes and instead create their own boxes. This makes gender identity a highly personalized experience that is time consuming to develop. There also seems to be an implication of liberation from gender roles with xenogenders. If one is neither a man nor a woman, and has constructed an entirely new gender for themselves, there are no societal expectations of gender roles for that person, at least in theory. Looking back at the definition of gender referenced earlier as "the roles and expectations attributed to men and women in a given society" (Phillips 2005:1), we can conclude that the widespread use of xenogenders will certainly contribute to the development and change of the definition of gender.

Neopronouns

Because language is largely influenced by culture (and vice versa), as cultures and the structures within them change, so must language (Boas 1942:180). Language has influenced gender identity outside of simple

identity labeling, extending to the gendered pronouns people use to refer to each other. Traditionally, people have used pronouns such as he, she, and they to indicate gender in conversation, but the Internet has popularized other, newer pronouns, often referred to as neopronouns. While some neopronouns, such as ze and hir, existed decades and even centuries before the Internet (Baron 2018; McGaughy 2020:27), websites like Tumblr brought them to the forefront. As neopronouns increased in popularity on the site, an even newer form of neopronouns referred to as noun-self pronouns began to take form. These pronouns first began appearing on Tumblr in 2013 and are typically entirely unique to one's own personal gender identity and expression, and are often used in conjunction with xenogender identity labels (Marcus 2021). Typical noun-self pronouns include multiple conjugations of a simple, single-syllable noun. For example, instead of using he/his/himself, a noun-self pronoun user might use bee/bees/beeself, or star/stars/starself (McGaughey 2020:27). For a sentence such as, "He went to the florist to buy flowers for his wife," "bee/bees/beeself" pronouns would look like this: "Bee went to the florist to buy flowers for bees wife." Often, people who use noun-self pronouns use multiple sets of neopronouns in addition to traditional pronouns. This can be due to a variety of reasons, sometimes because they identify with multiple gender identities and therefore multiple sets of pronouns, and sometimes because they understand that neopronouns can be confusing and wish to grant their peers multiple options to use when addressing them.

People who use neopronouns typically do so because they feel that their gender identities cannot be accurately expressed through the use of more traditional gendered pronouns. Sometimes, however, the use of neopronouns serves a purpose seemingly unrelated to gender. Because online spaces like Tumblr are often used as gathering spaces for fans of movies, music, and other media to discuss their shared interests, some neopronoun users might choose to create neopronouns that center around their area of interest (Marcus 2021). Although personal interests and aesthetics might seem irrelevant to the expression of one's gender identity through pronouns, writer Ezra Marcus asks, "But what's the difference between an aesthetic and an identity anyway?" (Marcus 2021).

In any case, neopronoun users hope that by changing the language used to refer to themselves, their intimate and complex inner identities can be expressed outwardly and better communicated to those around them. Neopronoun users have formed a tight-knit community in online spaces, particularly on Tumblr. Users have crafted entire accounts dedicated to creating neopronouns specific to unique experiences of gender. These accounts operate like a service, with anonymous users submitting requests for pronouns that convey a certain feeling and account owners sharing the request alongside a list of suggested pronouns. Tumblr account Neopronounsmybelovaed is one such service, self-described as "A sideblog dedicated to neopronouns (history, information, positivity, etc.)" (Neopronounsmybelovaed 2021). In one post, Neopronounsmybelovaed shared an anonymous request in which they had received: "Do you have any futuristic, retro, and extraterrestrial pronouns? All three if possible," to which they responded:

Let me know if you don't find anything you like.

- ai/aiself
- byte/byte
- te/tech
- sol/solar
- ae/alien
- ali/alien
- star/stars

In other cases, Neopronounsmybelovaed's followers have anonymously requested pronoun checks, in which they offer a set of neopronouns they are considering adopting and ask for them to be used in a sentence in reference to themselves. These pronoun checks are designed for users to test out neopronouns to gauge the level of gender affirmation they feel from hearing them used in reference to themselves. After testing them, users then decide whether or not they are going to add the neopronouns to their list of preferred pronouns. For example, in one post, an anonymous user asked Neopronounsmybelovaed, "Hello you beautiful person!! Can I get a pronoun validation with it/its, ze/zim, they/them, and he/him pronouns?" to which they replied, "Woah, is that Dylan? I've heard so many good things about it! Ze is super cool, and they should be proud of himself for all its accomplishments" (Neopronounsmybelovaed 2021).

The use of neopronouns indicates that our understanding of gender is evolving, but the practice has met some ridicule from both members and outsiders to the transgender community. In *Understanding Neopronouns* (2020), one transgender man states, "by creating more useless words and pronouns it makes the community look like a bunch of illiterate outcasts who want to be special in every way possible" (McGaughey 2020:28). This argument has been reiterated time and time again in both online and offline spaces, and it is an issue on which the transgender community is still largely divided. Tumblr user Neriumdelusion (2021) defends

neopronouns, saying, "Xenogenders and neopronouns are not the reason institutionalized transphobia exists… AND EVEN IF IT WAS we don't exist to appease cis people" (Neriumdelusion 2021). Other defenders of neopronouns engage in similar logic, claiming that their gender identities and associated linguistic expressions need only make sense to themselves, and that it is possible for outsiders to respect people who use xenogenders and neopronouns even if they do not fully comprehend their reasoning for doing so. Whether or not neopronouns and xenogenders pose a net gain or net harm to the transgender community, their existence demonstrates that gender is changing and forces us to consider the role of language in identity expression, and to also question the difference between aesthetic and identity, as well as gender and personality. Additionally, accounts such as Neopronounsmybelovaed are a testament to the growing community of gender variant people on the Internet and the camaraderie they have developed with each other. They offer open ears and support to experimentation with new identities. This type of camaraderie is what made way for the conversations that led to the advent of noun-self neopronouns in the first place, and it can only be assumed that further camaraderie will lead to more developments and changes within the gender variant community.

Conclusion

Our understanding of gender has developed and changed substantially in the last century and will continue to do so going forward. In the past, men and women have been expected to perform roles assigned to them by society, but now, as more and more young people deconstruct the gender assignments they have grown up with, they are redefining gender to be a much more personal and abstract expression of inner identity. While scholars such as Judith Butler were deconstructing gender binary before the advent of the Internet, the widespread availability of the Internet allowed queer people to connect in a way they had never been able to before. This connection allowed for the strengthening of support networks in times of need as well as creating spaces for queer people to discuss and unpack their own complicated understandings of gender. As people were allowed to stay anonymous on the Internet and connect with people from all over the world, new ideas about gender spread at an unprecedented pace. Without the Internet, a large portion of the modern discussion around gender identity would be nonexistent.

Structures of gender have been essential to the structures of culture for a long time, and it is important for anthropologists to understand and engage with the evolving structures of gender going forward. Gender dynamics within a given culture help us understand how kinship and lineage are tracked as well as understanding the day-to-day expectations of people based on their assigned gender. As we notice the concept of gender changing, we can only expect that our culture will change as well, and as the people who study culture, we as anthropologists need to actively engage with and understand gender as it is changing.

In the past, we have been able to note that the binary masculine and feminine genders have been clearly defined, with clear expectations of each. This binary structure was foundational to the way much of modern Western society operated. Now, as this binary is being deconstructed, the future is somewhat uncertain. It can be assumed that, due in large part to the Internet, the queer community will only continue to evolve and the redefining of gender will become more widespread and more nuanced. Will gender play any economic function going forward as it has in the past, or will it only be an expression of individual identity? As hyper-specific xenogenders become more common, will society begin to assign roles to them just as they have assigned roles to men and women in the past? How will kinship and lineage be traced? We will also likely see many more linguistic changes going forward as neopronouns become more and more the norm. As has been noted earlier, the structures of our language are largely influenced by our culture, and vice versa. In the years ahead, we are going to see significant changes in both our language and our culture, and it will be interesting to see how the two play off one another.

Undoubtedly, there are changes to come. As more people seek liberation from the confines of the patriarchy and unpack what their own gender identity and expression means to them, more people will identify with non-binary genders. This redefining of gender implies a complete cultural and societal structural change, with new genders potentially taking on new roles and our language developing as a result. For anthropologists, keeping an eye on this societal deconstruction and reshaping of gender will be crucial to understanding the intricate complexities of our culture as the future progresses.

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Dynamics of Phonological Variation in Texas English

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Abstract

This acoustic phonetic study examines the stable and deviant phonological features of contemporary Texas accents. The range of Southern American English speech patterns are observed in apparent time to identify possible cross-generational and cross-regional dynamics and the diffusion of potential variants among specific Texas populations. The frames of contrast identified are from a total of eight representative participants-- divided by age and urban or rural residence. In this study, a set of eight vowels were placed in lexical sets with identical environments for sentence readings and an elicited word game. The participant samples of citation speech styles were compiled through recorded interviews for subsequent acoustic measurement. Through comparative analyses using spectrographic displays, I found distinctive contrasts in vowel qualities among the younger generations in contrast to their older regional counterparts. Additionally, the analysis demonstrates a de-localizing shift from Southern American English through vowel shifts propagated by the younger population. The variabilities in population patterns were further subject to t-testing to determine their statistical significance. This method of evaluating hypothesized language change through synchronic variation expands on a related body of work and provides the foundation for future diachronic research on sound shifts in American English.

Introduction

In the following article, I condense the methodology, findings, and implications of nearly a year of phonetic research to examine in detail one of the most transient properties of language--speech sounds. All intensive inquiry into this topic aims to identify the potential segments and approximate direction of phonological change among the many accents of English in Texas.

To understand the dynamics of Texas accents in apparent time, recorded interviews were conducted among eight participants, representative of four groups, to yield acoustic properties of eight phonemes relevant to accent distinction. The purpose of this study is to address questions relating to two social factors (age and location) in linguistic variation and change, and to do so through phonetic analysis. Are there phonological differences between urban and rural Texas population speech patterns? Are Texas accents stable or shifting through time across contemporary generations? Are the relative phonological features of General American and Texas speech generally diverging over time or beginning to coincide? What are the implications of this research for the future of Texas accent study and dialectology as a whole? Data samples collected in this study are examined and interpreted through their synchronic variability, but not in absence of diachronic context.

The Synchronic Perspective

> *To understand and generalize on linguistic change, we must see it as part of the wider process of cultural change* (Hoijer 1948:337).

Historically, the synchronic approach to linguistic description has functioned under the assumption that samples of interest are shared features among the linguistic community of a speaker and independent of personal idiosyncrasies (Duranti 1997). The intent of approaching samples collected for this study from a synchronic perspective is not to negate the relevancy of individual differences in speech patterns. Indeed, these differences are significant and cannot be held to be an absolute model of a linguistic community. However, language, in principle, is a cultural practice constantly undergoing change from the collective attitudes and ideologies of its speakers. It would therefore be impossible to draw conclusions on a speech community without acknowledging such conclusions as products of an amalgamation of individual speech patterns.

When a sample of a speech community is contextualized and aligned with related records, a continuum of language change forms, which illustrates the influences, patterns, and shifts that position an accent in its most recent social context (Bailey et al. 1991; Labov 1972). An individual token of language, such as Texas English, in an auditory database represents a unique position in time and space through its relative phonetic qualities. As accents continuously change, phonetic data such as this lacks infallibility moments after it is recorded. It is therefore essential that updated editions of regional accents be continuously recorded and analyzed to ensure present data remains as relevant as possible.

This section serves a dual purpose to provide both operational definitions and specific details regarding the methodology used to obtain quantitative data for analysis. The goal of phonetics is to describe speech and its many patterns of pronunciation, and in acoustic phonetics this is done by studying speech sounds through their physical properties. These sounds are analyzed through spectrogram displays, which are visible representations of articulated speech as a function of time, frequency, and intensity. The type of utterance relevant to data collection methods and analyses of this study is referred to as citation speech. Citation speech is a semi-conscious pattern of speech characteristic of careful articulation. Among the sections in the recorded interview (see Sample Participant Interview Form), this style is elicited through a fill-in-the-blank word game and lexical set sentence readings. The simple vowels observed in this study are monophthongs, such as /ɛ/ in "head." When vowels are transcribed, they are written using the International Phonetic Alphabet (IPA) as symbols representing the individual sounds of a spoken language. Each of these concepts are essential to interpreting the role of acoustic phonetic analysis in the description of dialectical patterns.

Theory

Every diachronic change passes through a stage of synchronic variation (Meisel et al. 2013:21).

The persistence of a phonological variant in a population requires a level of participation beyond the individual. From the chapter, *Language Change* in Lindquist and Levin's *Corpus Linguistics and the Description of English* (2009), the concept of "change in apparent time" is introduced to explain the direction of language change through the speech patterns present among older and younger populations of a given area. This dimensional approach allows for inference of diachronic change based on synchronic-level variants. Despite sociolinguistic factors that limit the pertinence of the apparent time construct, historical linguists recognize the validity and relevancy of its integration in comparative data analysis (Bailey et al. 1991; Michael 2014:23).

The Diachronic Perspective

One of the assumptions associated with the apparent time construct is the general direction of change. As part of the sociological factors that drive variant diffusion, the change in progress is assumed to be moving through intergenerational transmission, in the direction of the younger generation. Berkeley linguist Lev Michael (2014) describes the phases of sound change in a linguistic community. The first step of differential variant propagation is defined as transmission, by which adolescents adopt the variants present in the repertoires of the adults--or linguistic role models--in their speech community (Michael 2014:16). Although the onset of phonological or dialectical variants is divided among internal and external influences, the relative source of progressive change is generally observed to be of a consistent set of social categories relating to class status and gender identity. This hypothesis, known as the curvilinear principle, identifies those within the centrally located groups of the socioeconomic hierarchy as the innovators of sound change (Labov 2001:31-32). In this study, this theoretical foundation is applied to interpret patterns observed among the relative vowel qualities of a sample population. To briefly implement the diachronic framework of such samples, it is essential to first address the relevant historical and geographic influences on Texas' contemporary speech patterns.

Historical Occupations. The variety of English in Texas, here referred to as Southern American English (SAE), took precedence through the same process many of its contemporary features achieve prevalence: the politicization of language. At the end of the Texas Revolution in 1836, English began to replace Spanish as the dominant language across the territory, later ignited through a south-bound influx of English-speaking migrants (Tillery 2007:115). In the following decades into the late nineteenth century, what scholars termed the prototypical features of SAE began to appear and spread across the state, subsequently replacing older forms (Tillery and Bailey 2003:159). Despite a new Anglo-Texan sociocultural identity adopted by English speakers, by the mid-1940s, German and Czech were still widely in use from generations of European immigration and settlement leading back to Mexican rule (Arnn 2012:9). The 1970s saw an urbanizing Texas, unremittingly flooded with in-migration. Here is where the significant urban-rural split began to form, evident in contemporary forms of Texas English, such as those under consideration in this study (Tillery 2007:115-116). The resultant regional dialects and speech patterns from centuries of resettlement and conquest exist as products of these unique linguistic communities.

Inland versus Lowland Texas Dialects. The phonological features of Texas have commonly led to a bisected regional division of the state, reaching from the northeast to the southwest. East Texas experienced the joint influence of early Anglo settlers with SAE features typical of Mississippi, Louisiana, and Alabama while Inland Southern features of Tennessee and Kentucky clustered in West Texas. With the combined contributions of the German and Czech immigrant populations and Spanish-speaking communities, external dialectical interference
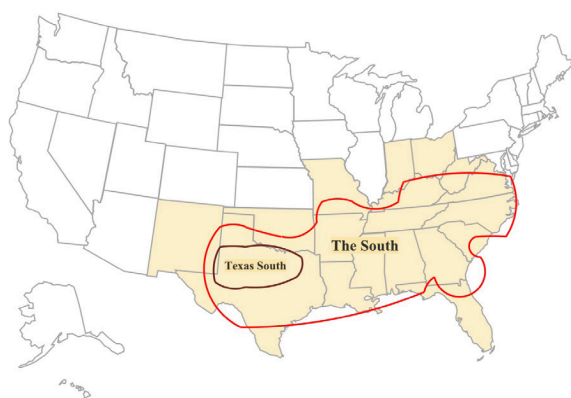
Figure 1. North American Dialectical Regions from *The Atlas of North American English* (after Labov et al. 2006:148).

Figure 2. Map of North American English Dialects, Based on Pronunciation Patterns: The South (after Aschmann 2018).

and internal variant diffusion became the key features in the development of contemporary SAE (Colloff 2003). The resultant subregions have been most cited as Texas South and The South (Figure 1; Labov et al. 2006), but for the sake of minimizing the regional scope to the state of Texas, the northwest and southeast areas of Texas will be referred to as Inland and Lowland, as introduced by linguist Rick Aschmann (Figure 2; Aschmann 2018).

Distinction between Inland and Lowland south rely on the most popular phonological aspect of the prototypical southern accent, known as long monophthong /a/. The Inland segment pronunciation of glide /aɪ/, as in /faɪv/, is not articulated through the diphthong (two vowel qualities) shift, but rather experiences a full smoothing of the vowel to /a/, as in /mæs/. Lowland segments differentiate through partial monophthongization of /aɪ/, wherein the diphthong remains before voiceless consonants. However, previous studies have found the existence of Lowland phonological features concentrated in the Inland Dallas/Fort Worth area, resulting in an overlap between the features of the two geographic areas (Aschmann 2018; Labov et al. 2006:254). This alternative subregion is further characterized by its Lowland speakers belonging to a middle to high socioeconomic class (Aschmann 2018). Although there are divergent assessments of this model, its features are supported by similar observations of the social and dialectical divisions of Texas and will be considered through their relevance to the present study (Labov et al. 2006:250).

Texas English Varieties. Among the forms of spoken English in Texas, three prominent ethnolinguistic categories have emerged due to settlement patterns, class-based divisions, and a multiplicity of sociocultural and ethnic identities. These varieties include Anglo, Tejano, and African American Vernacular English (AAVE). Due to
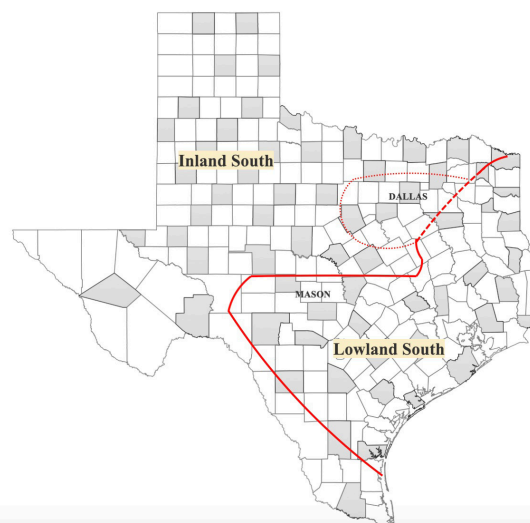
historical occupancy patterns and access to speech communities, Spanish maintains a ubiquitous existence across Texas as the second most spoken language in the state (U.S. Census Bureau [USCB] 2020a). In this context, Tejano English thrives through competing influences of the Spanish language on local English dialects in Texas. However, sociolinguistic studies have demonstrated that the subsequent generation of native Spanish-speaking immigrants to English-speaking communities "adopt the local vernacular with great regularity" (Labov et al. 2006:27). This pattern of change in the SAE context can be utilized to minimize the discussion of Spanish phonological interference when drawing samples from second-generation immigrants and Anglo English speakers of the same population. In contrast, "studies of AAVE have shown a remarkable geographic uniformity in those grammatical and phonological features that are distinctive" (Labov et al. 2006:24), suggesting that where there are differences in the vowel qualities of an Anglo population of English speakers, an AAVE population of the same locale may be demonstrating standardization of the same vowel systems (Labov et al. 2006:24; Wolfram et al. 2000). Researchers point to The Southern Shift as a comparative model for AAVE speaker differences in vowel shifts from Anglo speakers, such as nonparticipation in goat (/oʊ/) and goose (/u/) fronting, swapping of fleece (/i/) and kit (/ɪ/) vowel spaces, and further lowering of the face (/eɪ/) vowel (Labov 2006; Labov et al. 2006:27, 297; Thomas 2007:462). Among Texas populations, Thomas (2007) notes "unrounded variants in walk and lost have spread rapidly among European Americans and Mexican Americans in Texas, but are considerably less common among African Americans" (Thomas 2007:464). Noting the distinctions among these varieties becomes most

crucial when participant demographics are addressed with the intention of demonstrating the validity of subject samples. Additionally, these dialects, existing in all localized forms of Texas speech in this study, must be comparable to other largely recognizable forms of American English.

In a wider scope of speech styles in English, phoneticians refer to a supposed non-accent form of American English known as General American to note deviations in regional dialects from a perceptively standardized form of speech. General American is commonly associated in its distribution of vowel qualities with an American Midwest dialect of English but remains independent from categorization in regional classifications of American English accents (Ladefoged and Johnson 2015:102). Accompanied by other sociolinguistic factors that shape population speech patterns, geographically localizing a pronunciation pattern contributes to the maintenance of a collective identity. Samples of General American will serve in proceeding discussion to characterize Texas accents introduced in this study as either approaching a national norm or maintaining distinctive SAE vowel features.

Propositions

In introducing the populations of interest (urban, rural, older, younger), this study examines hypothesized variant propagation through bivariate contrast. In testing intergenerational samples, I expect to find a consistent shift in relative vowel qualities in the direction of the younger generation in accordance with the apparent time construct. In an examination of urban and rural samples, I expect a level of acoustic variance that approaches a de-localizing shift among the younger population, despite perceptual invariance between subjects. Although the urban and younger populations are hypothesized to be deviating from older, rural speech patterns, I nonetheless expect to find prototypical features of SAE among all populations sampled, maintaining distinctive Texas accent features in contrastive context with General American. All recorded stable and dynamic phonological features are observed as transitory moments along the continuum of linguistic changes in Texas English.

Methods

Sample

Some of the approaches that scholars have used to collect data include telephone interviews and collection of pre-existent data from dialect corpora. Although these methods prove most effective for large-scale surveys, several common issues arise, such as an increase in the margin for sampling error and potentially obtaining low quality recordings. In *The Atlas of North American English*, Labov et al. (2006:25-26, 36) encountered sampling issues across several stages of fieldwork and analyses by use of the telephone method, including a reduced maximum range of 3,000 Hz in attainable frequency values and difficulties establishing rapport characteristic of the sociolinguistic interview when compared to an in-person interview method. Under the conditions of a reduced sample size in a project design, like this study, the in-person interview proved to be an effective design of choice for the necessary selection of speakers and data collection.

To meet the objectives of this study, subjects were recruited across the social categories of sex, age, and location. The process of sample city selection chiefly rests on accurate data regarding population size, regional locality, and relative density for classification in the urban-rural divide. According to data drawn from the United States Census Bureau (USCB), the metropolitan city encompasses a population in number of 50,000 or greater while rural county classifications typically number no more than 10,000 (USCB 202b). Cross-referenced with the bisectional division of Inland and Lowland Texas, the city of Dallas, with a population of 1,343,573, and the town of Mason, with a population of 2,265, were selected to serve respectively as urban and rural sample extraction points (USCB 2021a, USCB 2021b).

Using a preset list of selection criteria, eight individuals were randomly selected. Four were drawn from the rural town of Mason and four from the urban city of Dallas. The criteria for selecting each participant were as follows: under 25 (younger) or over 60 (older) years of age, born and raised in selected location with minimal outer-region exposure (preferably under six months), native speaker of English, and willing to provide demographic background information including residency history, occupation, education, and national ancestry. The purpose of noting occupation and education as relevant social factors relates to prior empirical observations of sound change and the role social stratification serves in linguistic variant diffusion. According to Labov et al. (2006), "centrally located social groups--lower middle and upper working-class speakers"--initiate the phonological changes in use by the population, "which operates below the level of consciousness" (Labov et al. 2006:23). Those referred to in this study were initially identified to belong to this lower middle to upper working economic background, determined by occupation and average annual income relative to the U.S. Bureau of Labor Statistics Consumer Price Index (Horowitz et al. 2020). In each location, there were two individuals who identify as female and two individuals who identify as male that were sampled. The equal distribution of biological male and female subjects recorded in this study relates to the fundamental differences in vocal tract length, which directly correlates to frequency in pitch produced by

the subject. This difference in absolute frequency value has been cited with prior observations of sex-based variant diffusion (Freeman 2014; Kendall and Fridland 2015; Michael 2014). However, "the formant frequencies will remain the same as long as there are no changes in the shape of the vocal tract" (Ladefoged and Johnson 2015:200-201; e.g., aging), and biological sex is not a factor in the contrastive framework of this study. To account for intergenerational differences, one male and one female from each region are above the age of 60 and the adjacent male and female subjects are the age of 25 or below. These age brackets were selected in accordance with average generational ranges determined by birth year--pre-1964 for the older sample and post-1996 for the younger sample (Dimock 2019; USCB 2021c; USC Libraries 2022). In addition to meeting the five conditions, participants were guaranteed anonymity per Institutional Review Board (IRB) requirements, agreeing that all information obtained in the recorded interview was to be anonymously reported and at no point would identifiable information such as a name or photo be requested. As a result, the participants have been assigned standardized labels that categorize by locality (denoted as R for rural or U for urban), age, and sex. For example, the notation R66M represents rural, age 66, and male. The Mason subjects are hereafter referred to as such: R66M, R67F, R25M, and R24F, and the Dallas subjects as U68M, U79F, U20M, and U20F.

Experimental Design

Using eight monophthongs (/i/, /ɛ/, /æ/, /ɪ/, /ʊ/, /ɑ/, /u/, /ɔ/) as medial sounds, all within a predetermined environment /h_d/, a simple lexical set design was implemented to collect tokens of the primary units of perceptive variance in accents (vowels). Phonetic differences that could arise from variations in coarticulation are controlled by use of the same environment for each of the eight vowels (Labov et al. 2006:4).

Subjects participated in a five-component interview comprised of acceptance of permission to record, an invitation to conversational rapport, an elicited word game, sentence readings, and brief demographic questionnaires. (See Sample Participant Interview Form for the complete interview process including its sequential sections.) The solicitation of conversational rapport served to establish a relationship between the interviewer and the interviewee, minimizing the confounding effects of formal speech conditions. The subsequent word game was developed to elicit the production of a fixed set of words using simplistic prompts, such as "What part of your body does a hat sit on?" and, "Complete the title: Little Red Riding _," followed by a request to repeat the utterance for a second repetition. Should the subject respond with an incorrect word to

the prompt, the associated prompts were posed until the desired phrase was obtained. Significant caution was performed as to not produce the intended word prior to articulation by the subject to avoid supplying an alternate pronunciation. After conducting the word game, the participant was instructed to read from a page listing eight phrases, each featuring one of the eight words from the lexical set. The subject was requested to repeat this step as well for a total of two repetitions per phrase. In a trial experiment conducted several months before the interviews discussed here, collection of phonological data rested solely on recordings of lexical set sample sentence readings. This method of citation speech sampling proves effective in guaranteeing collection of the desired tokens and accurate phonetic transcription, as well as revealing the shared phonology of the representative population (Ladefoged and Johnson 2015:277). The goal of requiring four repetitions ensured an adequate representation of the naturally occurring speech pattern of the subject.

Sample Participant Interview Form

"Hi, my name is Caroline Story. I am from Texas State University in San Marcos, Texas. As part of the Anthropology Department, I'm doing research on differences between people from rural and urban parts of Texas, so I'm looking for people who grew up in one place to help by telling me a little about your area and showing me how people say things. Did you grow up in __?"

1. Request permission to record
2. Begin with invitation to conversational rapport, asking questions about hometown. "Tell me about your hometown. What is there to do downtown? What kind of stuff did you do when you were growing up? Did you learn any other languages while growing up? (Do you speak any of them now?)"
3. Word game. When a participant says the elicited word, "Could you repeat that?"
    - "What is the opposite of she?" (HE)
    - "What part of your body does a hat sit on?" (HEAD)
    - "What is the past tense of 'have?'" (HAD)
    - "What's the past tense of the verb 'hide?'" (HID)
    - "Complete the name: Little Red Riding _." (HOOD)
    - "What is the name of a fish that starts with a C?"
    - "How would you pronounce 'C-O-D?'" (Question format changes relative to region) "Now replace that C with an H." (HOD)
    - "What question word does an owl say?" (WHO)
    - "What does a cowboy say after 'Ye-?'" (HAW)
4. Lexical set sentence readings--two repetitions
    - [i] I say heed again

- [ɛ] I say head again
- [æ] I say had again
- [ɪ] I say hid again.
- [ʊ] I say hood again.
- [ɑ] I say hod again.
- [u] I say who'd again.
- [ɔ] I say hawed again.

5. Demographic questionnaire
   - "What year were you born?"
   - "Where did you go to high school?"(If applicable)
   - "Did you complete any education beyond high school?"
   - "Do you know where your parents were raised? (If so, where?)"
   - "What were their occupations?"
   - "What is your occupation?" (If applicable)
   - "What is your national heritage?"
6. Any questions?

While conducting interviews, a format adjustment was made for one of the prompts in the third component of the experiment to suit unanticipated interregional contrasts regarding word association. Regarding the elicitation of the word /hɔd/, the initial phrasing of the question only prompted response of the correct word among the urban subjects. "What is the name of a fish that starts with a C? Now replace C with H," in urging /cɔd/ then /hɔd/, proved to be an ineffective structure when presented to both rural populations given the disproportionate access to freshwater cod distributors in Central Texas, comparable to North or East Texas. Instead, the common association was consistently "catfish." In preserving validity of interview methods, the format adjustment sustained consistent use across the appropriate subjects relative to their representative populations, having no disorderly effect on the number of tokens retrieved or quality of recording required for acoustic analysis.

Acoustic Measurements

All participant interviews were recorded in person using a MacBook Pro laptop with built-in microphone. The recordings were done using the University of Amsterdam speech software Praat, version 6.1.38 (Boersma and Weenink 1992). They were sampled at a frequency of 44100 Hz for both male and female participants. The spectrogram settings consistent across all subject analyses extended the range of visible wide bands to 5000 Hz. Praat was used for all recording, playback, spectrographic display, and formant measurement purposes. Each speaker produced four repetitions of every one of the eight vowels sampled. Overall, this yielded 256 tokens across eight subjects.

8 speakers × 8 vowels × 4 repetitions = 256

By identifying the locus of each word from the lexical set, I extracted frequency values (in Hz) of the first (F1) and second (F2) formants from the center of each vowel token, using Praat's programmed formant listing feature and hand-checked for accuracy (Figures 3 and 4). The point at which the frequency value was selected lies at the convergence of the horizontal and vertical red dotted lines. The resultant value of F2 for this first token of /æ/ from R66M is located at the left of the spectrogram as 1935 Hz (see Figure 3). The F1 and F2 values collected in this manner were noted, apart from three manual formant measurements when the Praat formant tracker did not produce reliable frequency values. This process of spectrographic analysis results in a set of quantitative data necessary for the construction of scatterplots. Each plot demonstrates the scale of shared and deviant relative vowel qualities as compared by population. In the following section, the resultant plots are analyzed in detail to interpret correlative and contrastive relationships between population pairings.

Results

This section focuses on the contrast of urban, rural, older, and younger population samples to observe if there are any differences between speakers based on residency or age. In graphing acoustic space, according to acoustic theory, there is a formal relationship between vowel quality and the shape of the vocal tract as a function of formant. The first formant (F1) is inversely related to tongue height, meaning the higher the tongue and jaw placement, the lower the resonant frequency produced. Furthermore, the more front the tongue is placed, the higher the F2 resonant frequency. These relationships maintain relevance in the analysis of all proceeding figure plots.

Rural versus Urban

In testing the foremost hypothesis regarding urban and rural residency, measurements were obtained for the following monophthongs: /i/, /ɛ/, /æ/, /ɪ/, /ʊ/, /ɑ/, /u/, /ɔ/. F1 and F2 measurements were pooled and averaged for subjects as a function of residence. Each averaged data point represents the pooled raw data of four participant samples for each location. Each vowel plotted accounts for 32 individual tokens, 16 per population. Rural and urban subjects were compared through their respective F1 (y-axis) and F2 (x-axis) values (Figure 5).

Results demonstrate areas of distinctive acoustic space for rural versus urban subjects, apart from overlapping vowels /i/ and /ɪ/ (see Figure 5). The absence of /i/ and /ɪ/ shifting can be attributed to the isogloss that segments the Tennessee-Alabama-Georgia region from the rest of the south. This movement, known as Stage 3 in the Southern Shift, occurs as a frontward raising of the
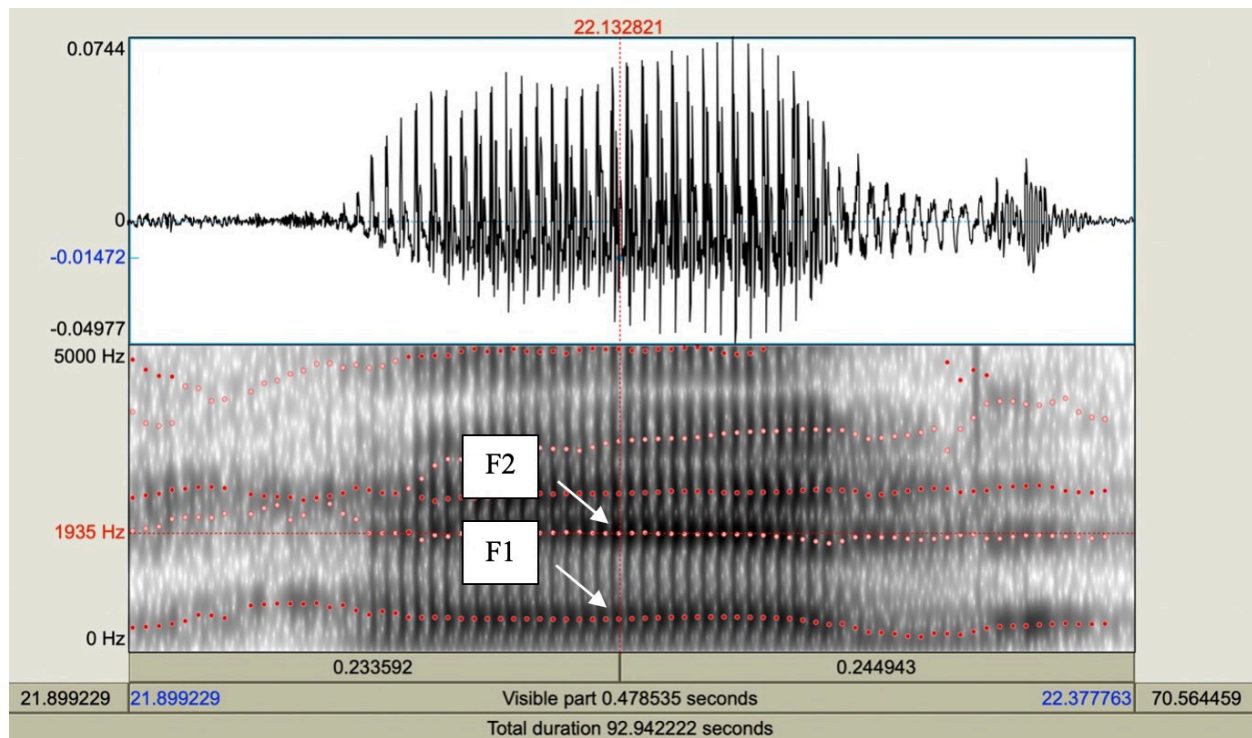
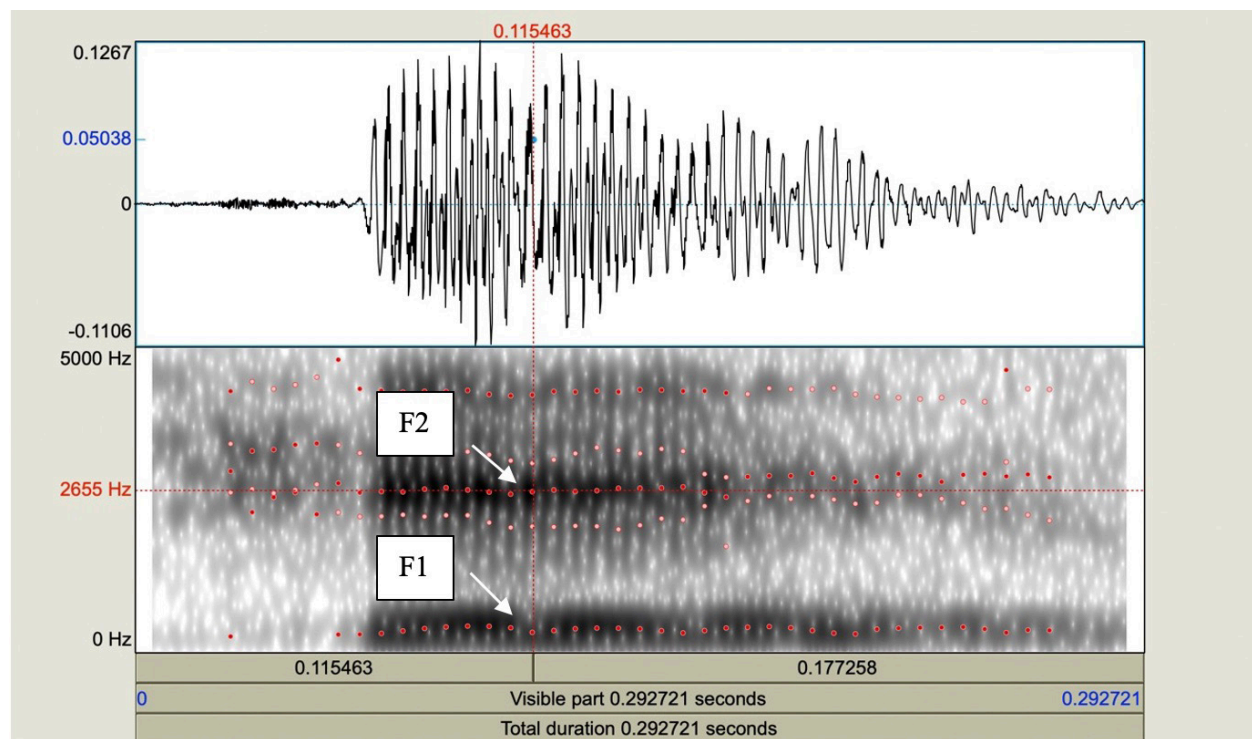Figure 3. Formant measurement tracker R66M "had" F2 sample 1.

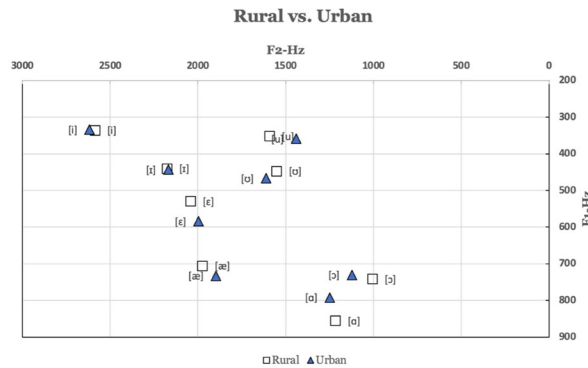Figure 4. Manual formant measurement U20F "heed" F2 sample 1.

Figure 5. Rural versus urban F1 x F2 scatterplot.

Figure 6. Rural versus urban F1 and F2 bar graphs.

/i/ vowel and a parallel lowering of the /ɪ/ vowel (Labov et al. 2006:125, 127; Thomas 2007:462). Both populations engage in the pattern of limited distribution of this feature in Texas (see Figure 5). A closer observation appears to indicate a possible approaching overlap of the low-back vowels in the cot-caught merger (/ɑ/ and /ɔ/) from the urban population and a raised front /ɛ/ approaching a pin-pen merger from the rural population. To compare the independent vowels between rural and urban subjects, two bar graphs were generated (Figure 6). For this, each vowel was averaged across speakers as a function of residence. All rural subjects were collapsed together without distinction for age or sex. The same was done for the urban subjects.

In the F1 bar graph, the urban population F1 values are consistently higher than those of the rural population (see Figure 6). Exceptions to this pattern are the high-front /i/ and the cot-caught vowels, /ɑ/ and /ɔ/. These deviations display the urban population lowering of the tongue body in articulation of most simple vowels, especially front vowels.

The F2 bar graph demonstrates an even split of highest and lowest F2 values between the urban and rural populations, with the rural F2 values consistently higher among front vowels and the urban F2 values consistently higher among back vowels (see Figure 6). Through these articulations, the urban population is demonstrating a constriction of acoustic space through positioning front vowels further back and back vowels further front.

Rural versus Urban Statistics. To determine the significance of urban and rural results, without distinction for age, two two-sample t-tests were conducted, each assuming equal variances. The t-distribution serves as the model parametric test in the case of a small sample size, such as those observed in this study. This method is robust in producing sufficient statistical conclusions while specific assumptions are met, including equal variance and normal distribution (Kim 2015; Lehmann 1999; Student 1908). The null hypothesis states that the true

difference between urban and rural population means is zero. In the alternate hypothesis, the true difference is different than zero. As standard in t-tests, α = 0.05 and results are statistically significant if p < 0.05. Between the rural and urban means, the probability coefficient equals approximately 0.829 for F1 and 0.924 for F2 and a failure to reject the null hypothesis.

Older versus Younger

In testing the relationship between generational speech patterns, F1 and F2 measurements for the eight sampled monophthongs (/i/, /ɛ/, /æ/, /ɪ/, /ʊ/, /ɑ/, /u/, /ɔ/) were pooled and averaged as a function of age and residency, without distinction for sex. Each plotted vowel is a mean sum of two tokens from the subjects. Each subject provided four tokens of each vowel for a total of eight tokens represented per data point. The older and younger rural vowel qualities of subjects are compared through their respective F1 and F2 values (Figure 7).

The scatterplot illustrates distinctive patterning of vowel samples for each population (see Figure 7). The acoustic space of younger speakers does not overlap with the acoustic space of their older counterparts. This space is most significant in the front vowels /æ/ and /ɛ/ and the back vowels /ɔ/ and /ɑ/. These vowel pair distinctions mirror the SAE (pin-pen), and non-SAE (cot-caught) accent features present in the rural-urban contrast. This demonstrates that there is a generational difference in the speech pattern. The individual vowel qualities are contrasted as a function of age within the rural population (Figure 8).
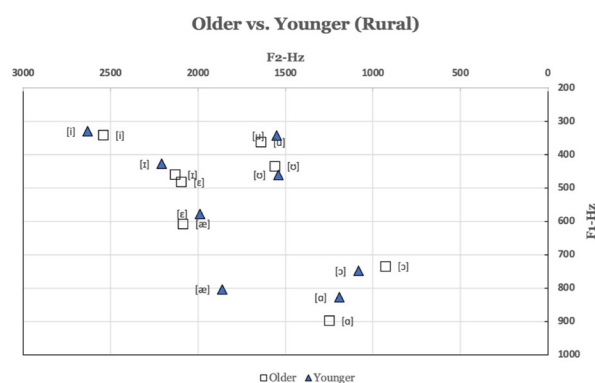
Figure 7. Rural older versus younger F1 x F2 scatterplot.

Figure 8. Rural older versus younger F1 and F2 bar graphs.

The F1 values illustrate an equal divide of front and back vowel high-low placement between the older and younger rural populations (see Figure 8). The younger sample demonstrates a significant lowering in tongue position of the low front /æ/ vowel at a variance of +197 Hz. The /ɛ/ tokens of the younger sample fall close behind in degree of lowering at +96 Hz from their older counterparts.

The F2 values show a similar relationship of a nearly even pattern in front vowels of front-back positioning in older and younger vowel qualities (see Figure 8). The F2 values of the older population are consistently higher among back vowels (/ʊ/, /ɑ/, /u/). The younger population is thus positioning most back vowels further backward.

The acoustic space between older and younger urban samples demonstrates no overlapping of vowel qualities (Figure 9). The high-front vowels of the younger population are further fronted while the low-front vowels are constricted back. The back vowels are also farther to the front for the younger population, except for the high-back, unrounded /u/. Finally, all front and back vowels are produced with a lower tongue placement among the younger population. This relationship demonstrates generational differences in the urban speech patterns. The degree of significance is further demonstrated using bar graphs (Figure 10).

The F1 values are consistently higher among the younger urban samples (see Figure 10). This deviance of the younger generation is most distinguishable in the front vowels /æ/ (+329 Hz) and /ɛ/ (+213 Hz), and the back vowels indicative of the cot-caught merger. The younger population produces all simple vowels with a broader acoustic space through a consistently lower tongue position.

F2 values show a corresponding pattern of higher frequencies from the younger sample (see Figure 10). The /æ/, /ɛ/, and /u/ vowels are exceptions to this relationship.
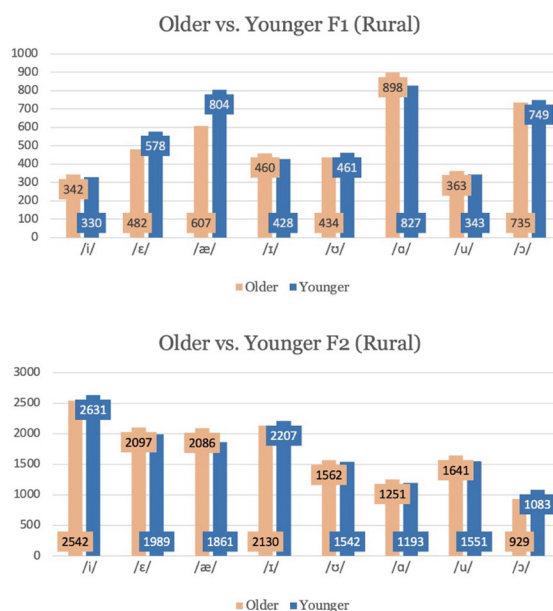
The younger population produced all remaining sampled vowels through a further forward tongue position.

Older versus Younger Statistics. Two additional two-sample t-tests were conducted by contrasting the older and younger population means without distinguishing residency. The parameters were the same as the rural-urban t-tests where each assumes equal variances, α = 0.05, and results are statistically significant if p < 0.05. The same null hypothesis states that the true difference between population means is zero. The alternate hypothesis states that the true difference is different than zero. Between the older and younger means, the null hypothesis is rejected as the probability coefficient equals approximately 0.024 for F1 and 0.924 for F2. In rejecting the null for the older versus younger test, it is assumed that variance between the populations is not due to chance.

Summary and Region-Generation Hypotheses

Two principal research questions were explored in this study. Are there phonological differences between urban and rural population speech patterns? Are Texas accents stable or shifting through time across contemporary generations? In the first section, I tested the sampled data as a function of rural-urban residency. Although the difference in means between the two populations resulted in statistical insignificance, mixed patterns of distinction emerged including constriction of front-back acoustic space and lowering of the tongue position among the urban population. The second section was comprised of tests in which the older and younger generations were set
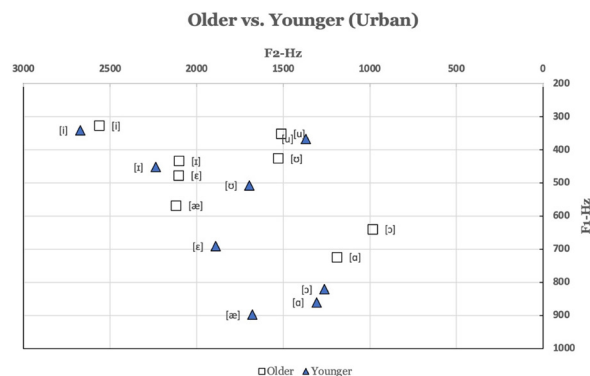
Figure 9. Urban older versus younger F1 x F2 scatterplot.

against each other. The resultant t-tests showed statistical significance between generational speech patterns as well as distinctive acoustic spacing with no overlapping vowel qualities. The younger urban population consistently positioned the tongue lower while this feature is only present in the vowel samples of one younger rural subject. The F2 values show some rural variation in front-backness (see Figures 8 and 10), but a higher degree of variation present between the urban generations. While there is conclusive evidence of shifting from the older to younger generation in both regions sampled, the younger urban population is demonstrating broader variance from their regional seniors than the younger rural population.

General American

The presented contrastive plots respond to the question of the presence of a population of Texas English speakers demonstrating a de-localizing pattern of speech. Ladefoged and Johnson (2015:207) developed a formant chart that shows the F1 and F2 values of a generalized American speech pattern. Using this as a measure, I compared older and younger population data to understand how contemporary Texas speech patterns relate to a generalized speech pattern in American English.

Older. I paired the formant measurements for older Texans with the F1 and F2 values derived from Ladefoged and Johnson (2015) for comparison (Figure 11). For this plot, data from the urban and rural older populations, both male and female, were pooled to represent an overall older generation of Texas English speakers. The two sample sets occupy distinct acoustic space. The older Texan sample demonstrates lower and further fronted front and back vowels relative to General American, apart from two higher front vowels, /i/ and /ɪ/, and one higher back vowel /ʊ/.

Younger. The F1 and F2 Ladefoged and Johnson (2015) values were paired against the pooled sample of younger Texans (Figure 12). This sample also does not distinguish
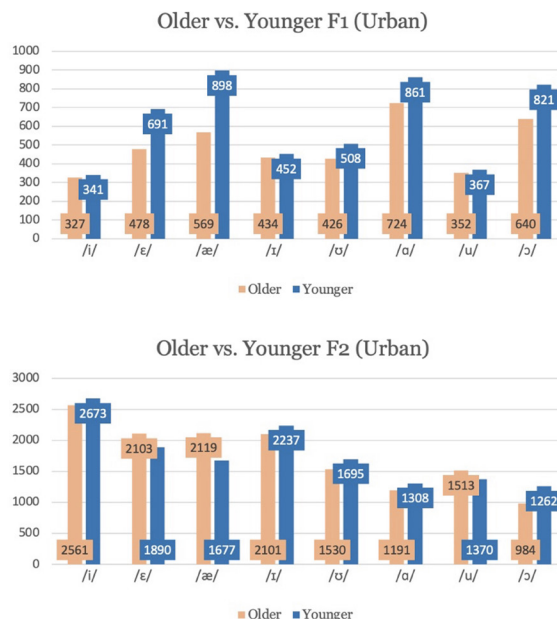

Figure 10. Urban older versus younger F1 and F2 bar graphs.

for residency or sex to demonstrate average sums for all younger representative subjects. There is distinctive acoustic space between the two populations with all vowels produced at higher F2 and F1 frequencies. These contrastive samples demonstrate a distinctive speech pattern present among both the older and younger generations within the population sample (see Figures 11 and 12).

Summary and De-localization Hypothesis

In exploring the relationship between Texas speech and General American through their relative vowel qualities, I tested my averaged sampled data, with distinction for age, against the F1 and F2 values of Ladefoged and Johnson (2015). A conclusive pattern of lower and further front vowel articulations emerged among both generations in the sample population. This acoustic space is broader in contrasting General American with younger speakers of Texas English than older speakers. The older population demonstrated three exceptions to the low-front vowel shift: /i/, /ɪ/, and /ʊ/. Overall, each representative population in this study produces characteristic SAE phonological features at varying degrees of deviance from General American, but the speech pattern of the younger population shows more consistent deviation in vowel quality from SAE.

Discussion and Conclusion

Language is one of the ways that we negotiate identity; as long as there is a need for unique and different identities, there will be requisite for linguistic change and diversity (Bailey 1991:133).
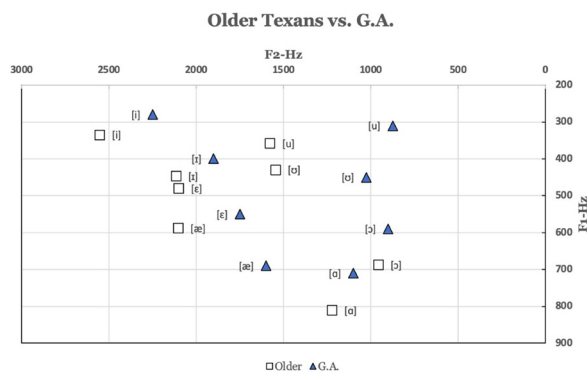
Older Texans vs. G.A.

Figure 11. Older Texans versus General American F1 x F2 scatterplot.

Younger Texans vs. G.A.

Figure 12. Younger Texans versus General American F1 x F2 scatterplot.

Observations to Findings

Observations of the English-speaking Urban-Inland and Rural-Lowland populations of Texas reveal patterns of dynamic phonological features, both those articulated in prior synchronic studies of Texas English and those newly propagated with the decisions of the younger population. In testing the cross-generational and cross-regional hypotheses, the existence of variant phonological features between the older and younger populations supports the proposition that innovation in sound change is being driven by variants transmitted by the younger generation within the population sample. The SAE features--goose-fronting (/u/) and pin-pen merging (/ɪ/-/ɛ/)--were concentrated in the speech patterns of older subjects while the non-SAE feature--cot-caught merging (/ɑ/-/ɔ/)--was present in all younger subjects. These generational contrasts are present through relative vowel qualities from both regional populations but are stressed to a greater extent among young Texans in the urban environment. This greater variance is illustrated by consistent lowering and fronting of the tongue and jaw across eight monophthong vowels by the urban younger generation. The conclusive statistical significance supports the probability of these variants propagating due to non-random chance. Furthermore, the findings drawn from the bivariate contrasts with a sample of General American, and demonstrate that generational phonological differences vary in proximity to approaching a non-local style of Texas accents. Overall, the younger generation of Texans is shifting away from phonological characteristics typical of the SAE speech pattern.

Participant Demographics: Tell 'Em You Met the One-Thumb Cowboy

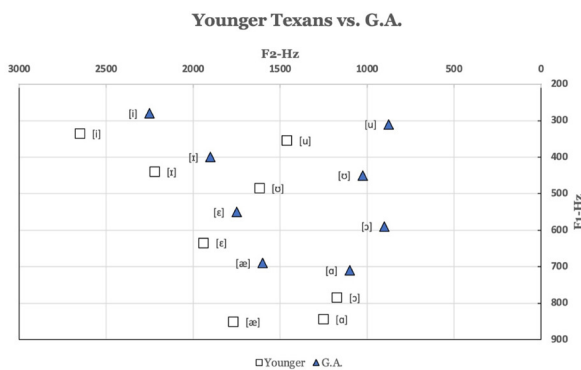Among the subject selection requirements in this study, a crucial component was the extent of residency in one of the two regional categories to further interpret the demographic details of each participant. Evidently, all four rural representatives noted their place of birth as Mason, Texas, and all four urban representatives as Dallas, Texas. Each of the Mason subjects attributed their residency histories within Mason to extend at least two generations (R24F) and as far as six generations (R66M). As commonly the case among natives to urban Texas areas, only one Dallas subject reported having a parent from the same location (U20F). When questioned regarding national identity beyond American-born ancestors, four of the eight participants identified as having Anglo ancestry, evenly divided between urban (U68M, U79F) and rural (R24F, R66M) residency. Additionally, three of the eight subjects identified as having German ancestry, all of which belong to the rural category. As for racial and ethnic identity, two out of eight subjects identified themselves as Hispanic (U20M, U20F), while the remainder of subjects were classified as White, Non-Hispanic. In accordance with the prevalence of the Spanish language across Texas, four subjects claimed to speak both English and Spanish, also evenly divided between urban (U20M, U20F) and rural (R66M, R25M). The English as a first language status of all eight participants substantiated their eligibility to represent their respective Texas accents without a confounding level of Spanish phonology influence. Finally, each subject stated the occupation of their parents, highest education level, and most critically, personal occupation to establish an even set in socioeconomic status in accordance with the curvilinear principle. This includes, R66M rancher, R67F teacher, R25M cowboy, R24F vineyard manager, U68M cyber security specialist, U79F retired secretary, U20M barista, and U20F YMCA representative.

Suggestions for Future Research

In naming several considerations given the controlled scope of this survey, the course of selecting subjects for sampling, organizing populations for analysis, and interpreting spectrograms gave rise to two key

limitations. These derived primarily from constraints regarding the period through which this study took place. In selecting eight subjects to represent four distinctive Texas speech patterns, the qualitative conclusions on regional and generational accents must be observed at the degree of their imposed margins. Additionally, in outlining the theoretical and sociolinguistic factors that influence change, the concept of identity could be further analyzed with participant demographics as a confounding factor in variant propagation and use among populations. I composed a sample form of potential questions to implement this experimental method, intrigued by the relationship between individual identity derived from environment and speech pattern development.

The survey questions are formatted to follow the steps to constructing social reality--from externalization to internalization. The questionnaire begins with a focus on the environment of the individual. Then, the individual is posed to consider their environment as a part of their identity. Finally, the individual is asked to observe their speech as compared to exterior environments.

Sample survey form

1. How likely would you be to recommend living in Texas to someone? Not at all, Somewhat, Quite a bit, A great deal

2. How would you rate the standard of living in Texas? Poor, Fair, Good, Excellent

3. I feel a strong connection to my identity as a Texan. Disagree, Somewhat disagree, Somewhat agree, Agree

4. My accent is distinguishable from those in other regions of Texas. Disagree, Somewhat disagree, Somewhat agree, Agree

5. My accent is distinguishable from those of other states in the U.S. Disagree, Somewhat disagree, Somewhat agree, Agree

In recording, contextualizing, and interpreting forms of languages at intermittent points in time, the progression of phonological change can be better understood for related historical linguistic descriptions and sociolinguistic methods. According to the apparent time hypothesis, these points on the timeline of Texas English mark significant patterns in the development of language and can be used to compare diachronic change in future forms of English in Texas. The data presented in this study in the shared context of related data can be used to draw a continuum of change in the language through time.

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Homegoing: The Evolution of Black Funeral Practices

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Abstract

In the wake of the global COVID-19 pandemic, the concept of remembrance and celebrations of life have shifted, specifically within faith-based communities. In this article, I discuss the significance of collective memory through public memorialization. In many ethnic communities, seeing a person to their final resting place is one of the most sacred communal gatherings. As these ceremonies and traditions began to take a more virtual and socially distanced format as the pandemic began to take over and "Zoom fatigue" became more prevalent as the total number of deaths climbed, memorialization rituals that have long been the centerpiece of many faith-based communities have changed. This article begins with a history of Black funerals and their relation to the institution of Black American church (traditions) and it ends with discussion of the climate of the on-going global pandemic. The innovative alternatives for gathering have been quite striking as "drive-thru" funerals and parking lot worship services have served as a midway point for those seeking the physical elements of community. As times change, methods evolve. The use of technology and physical (social) distancing allows for accessibility in ways that were not previously possible or considered thus yielding increased participation.

Introduction

In the wake of the global COVID-19 pandemic, the concept of remembrance and celebrations of life have shifted, specifically within faith-based communities. Scholars have examined the growing desensitization to death and the constant cycle of collective forgetting as people steadily transition without any formalized memorialization practices. Within Black communities across the globe, there has been a deep reverence for the practices and traditions of honoring the lives and legacies of those who are in the process of transitioning from life to death. An essential part of these rituals is the physical gatherings of people. Families and friends who have encountered the dead person throughout different points in their life, coming together to see them to their final resting place. Perhaps what makes these celebrations of life so special is seeing so many people come together in community as they grieve. The physical place matters in that it provides a space for, in some ways, the release of the shared heaviness of the grief that comes with mourning a loved one's passing. That space is in many ways a space for healing but it is also a true testament to the character and impact of the person who has died. It speaks of their characteristics, such as being a bridge-builder or one who has been able to connect with a wide range of people. It provides an insight into the company that the person kept during their time of life, and that says a lot about who they were. Additionally, these final celebrations give way for the person to receive the honor and dignity that they might not have received during their moments of physical life (Nora 1989). With in mind the dark and traumatic history of colonization, chattel slavery, and other forms of racial violence, for many Black people,

the celebrations of their being (and their impact on the world) only came in response to their death.

Black Homegoings and Religion

Black homegoings, as they are called within Black Christian spaces, and celebrations of life have been a part of Black American culture since an era that predates civilization. However, as times have changed and society has evolved, so have these traditions and rituals. The circumstances of the COVID-19 global pandemic has caused a shift in the way that people and their lives and legacies are typically memorialized. For ethnic communities, such as Black communities, that hold space in mourning as a cultural practice, accessibility is increased by the opportunity to re-imagine the idea of physical proximity. Thus, allowing for increased participation and a new perspective on death and collective grief.

The origins of Black homegoings and celebratory rituals trace back to the continent of Africa, but the adaptations that have been most notable became prevalent during the era of the Transatlantic Slave Trade and the voyage of Africans from the African continent to other colonized lands. During the times of captivity and enslavement, mortality increased immensely, and because of that "funeral ceremonies were an urgent and central rite in slave communities. They also formed the foundation of the black church tradition" (Stanley 2016:2). The desire and need for religious spaces that made room for Black traditions and rituals initiated this natural construction of the phenomenon we now know as the Black church. The Black church is a space for expression and a deeply political institution that has been at the foundation of several social and political liberation movements. The very nature of the existence of the Black church is a

disruption to the status quo that is white supremacy. One of the most important elements of enslavement was the act of forcing white religious practices onto Black people. The religious practices and theology of white people was not only forced onto the enslaved through the structures of chattel slavery and American plantation life, but it was also used as a justification for the enslavement of African people. At castles like the Elmina and Cape Coast Castle on the shores of Ghana, West Africa, the dungeons that held the enslaved were often placed below crosses and churches that were built in the structure of the castles.

Religion has long been an important piece of community and the social landscape of African nations, and much of that can be attributed to the influence and impact of white colonization. Additionally, religion also served as an opportunity for punishment and consequence for the enslaved people particularly in the American south. In Richmond, Virginia, as a result of the 1800 slave rebellion that took place at a child's funeral that was led by Gabrielle Prosser, slave masters became increasingly restrictive regarding funerals amongst the enslaved people. Through the consistent practice of honoring those who have passed as they transition to death, Black people have reclaimed their autonomy while also building the foundation for religious institutions of their own. It is from these religious traditions that we began to see the emergence of Black Baptist, Black Pentecostal, and Black African Methodist Episcopal churches among others.

Funerals were such a sacred practice and much like the current day, for some, those gatherings were one of the only, few, or first religious traditions that they have participated in, making way for the desire to engage with religious spaces beyond that singular practice. This is especially why the role of the Black church became so crucial. The role of the church as a gathering space and social and political leader has evolved over time up to the current day. Some of the changes and the roles that the Black church has played can be interpreted as both progressive and regressive depending on when and who is asked, but the impact on the Black community is undeniable, and it is worth noting that funerals have paved the way for much of the institutional existence of the Black church.

Similar to the role of the Black church as an institution, Black mourning is political (Stow 2010). The traditions that have been created to serve as vessels for that mourning, both publicly, and privately, are also platforms for discussing and highlighting the important political issues and nuance of the time for Black Americans and across the diaspora. These homegoing services offer opportunities for reflection around the larger ideas of freedom, liberation, and agency over this metaphoric democracy for Black people. These last celebrations of life have become opportunities for social and political mobilizations through the usage of commonly known phrases and religious texts in leveraging their messages to build cross-cultural and intergenerational connections and political awareness for Black people. (Stow 2010).

Memory and Blackness

Underlying the different styles of rituals and traditions to celebrate the life and legacies of those transitioning from life to death is this concept of memory--the desire to remember and reflect on the existence of a person and the impact that they had on both society and those around them. Much like every other concept and social construction comes political hierarchies and power dynamics, which brings into question the idea or concept of deservingness.

For enslaved Africans and later Black Americans who have been born in the American South the question of whether or not their lives were worth celebrating and remembering, and whether that should take priority over the memory and celebration of white deceased people is worth noting. During times of high death tolls, such as the Civil War, Black enslaved people were tasked with the responsibility of burying white fallen soldiers. The war changed the landscape of death, mourning, and memory (Faust 2009) and it specifically changed for Black people. Stanley (2016) focuses specifically on the ways that the Civil War laid the foundation for Black funeral homes, in addition to Black worship spaces, as the war ended there became more of a need for people to bury and memorialize civilians who were dying in hospitals and other institutions.

Essentially, death was creating a demanding industry and Black people in the south rose to the call as they worked to continue honoring those who were passing and created sustainable practices for those who would in the future. Black morticians and undertakers were able to build community connections through their role in assisting families during these very vulnerable times. For some, it was only in their death that they received the dignity and humanity that they deserved, and Black professionals were helpful in facilitating that reclamation and restoration of dignity. As a result, political careers became a natural next step for many who were working in the funeral industry because they garnered respect and notoriety throughout Black communities. As noted, "With growing clout, funeral directors often went into politics, and served as mayors, pastors, and community leaders" (Stanley 2016:3).

Community leaders who ensured that Black people were laid to rest properly were also pillars of what is known as the beloved community. The heart of the Black community strived toward social and political progress to cultivate a community of love and awareness.

The Black church as a social institution and gathering space has served as physical point of reference and an instrument for social change throughout history and specifically during the civil rights movement of the 1960s in the American South. Funerals served as clear moments that contributed to cultural shifts in the traditions of Black collective mourning and memory. These moments highlighted the politics of movements that were often resting on the shoulders of individuals. Their untimely deaths served as reminders of mortality to the communities who followed and revered these leaders. Their funerals often served as political statements; particularly in the cases of Emmett Till and Medgar Evers.

Emmet Till, who was falsely accused of being violent toward a white woman, was kidnapped and lynched. Till's mother, Mamie Till, insisted that her son have an open-casket funeral so that the world could observe the evidence of the ways that her son had been tortured. He was the victim of a hate crime as was Medgar Evers. Their funerals along with that of profound civil rights leaders were highly publicized and are cited as events that demonstrated widespread collective mourning within the Black community and globally. However, as we remember the names and legacies of several Black leaders who have had an undeniable impact on society, there will always be those whose names are not remembered, not even uttered. That within itself is political.

For Black people who have not fit and do not fit the specific genre of what a leader is supposed to be, according to the various white supremacist and patriarchal standards, are often left out of the ranks of those who are deserving of being honored. Thus, the further into the margins one finds themselves based on their identities, they will more likely be forgotten by the collective instead of remembered. Those who are labeled as leaders at the very beginning are often positioned in that way due to the intersection of social and political structures and power dynamics. Those who are the most marginalized are often consulted and used for their labor, both physical and theoretical, yet they are the last to be named and credited for their work. That erasure only exacerbates the further they are settled into the margins in comparison to the normative and most privileged-white men. Black funerals have been pivotal in restoring dignity and honor to those who are the most unlikely to be granted it by the larger social power structure that governs society and thus create the boundaries of our collective memory.

Black Funeral Traditions and COVID-19

Black funerals have many elements; the eulogizing of the dead, the amplification of the word of God, the (re)

unification of families and communities, and underlying it all--the performance of Black religious thought and praxis. There is usually a culminating kumbaya moment at the conclusion of the funeral combined with a moment of reflection and a call to action. Families are encouraged to keep in touch as attendees reflect on the fragility and fleeting nature of human physical life. For many, these final good-byes are the extent of their interaction with the church or other Black religious spaces. Furthermore, for those who travel from outside of the space or community in order to be present at these events, there is a sense of connectivity that can only be achieved through the in-person nature of these events. The act of being in proximity to one another is what makes these traditions what they are. Because of this, the COVID-19 pandemic has been a disruption to the normal way of conducting these traditions (Panagiotis 2022). Just as times of war have permanently shifted the ways that we as a society memorialize the deceased, the pandemic has introduced a new normal for the standards of gathering to celebrate the transition of loved ones from physical life to physical death.

The challenge that the pandemic has posed is beyond just the loss of in-person gatherings, but also the experience of Black funerals, one that is associated with the adequacy of the homegoing tradition which is an important piece of Black cultural life. The extravagance, as noted by Stanley (2016), is a part of that experience. Without it, the funeral is arguably not distinguished as Black cultural practice and rite.

It is the combination of all of those elements that make the tradition what it is. The musical ensembles, the power in the eulogy, and the emotion that takes over the space is in some ways not at all conveyed through the screen of a computer on platforms such as Zoom. Because of this, when there would normally be an unstated yet understood feeling of responsibility to attend and be fully present, is interrupted by the existence of other things taking place in a home environment combined with the fatigue of virtual platforms being the only method for social interaction. The otherwise clear distinction between work spaces and sacred spaces can become conflated and blurred, leading to less of an inclination to engage. However, Black funerals thrive on participation. It is the presence of people and the act of gathering that makes these funerals cultural practices. When individuals are checked-out it can begin to feel less authentic and less intentional. A few ways that Black funerals have been adapted throughout the pandemic, aside from Zoom options, include socially distanced outdoor funerals with limited capacity "drive-thru" funerals and body viewings (the origin credited to R. Bernard Funeral Home located in Memphis Tennessee) and the utilization of the memorial service structure in lieu of the longer funeral format.

Then, there also are those who passed and there was no funeral, no form of gathering to honor their life and legacy at all. This can be attributed to the conditions of the pandemic. Many people fell to unforeseen deaths and financial circumstances that could not be predicted, in addition to people of all ages falling to their untimely deaths while people of all ages and walks of life were being laid off and losing their income altogether. The layers and impact of disaster that is the COVID-19 pandemic will be studied for decades to come, and as the world transitions back into in-person events and traditions it will be interesting to observe how these Black funeral traditions remain the same or whether they change altogether.

This idea that time is merely a social construct has been amplified during this era of COVID-19. Things that many individuals would not have imagined happening before the pandemic became more of a realistic possibility with regard to mortality and the time that life spans. Being described as generally healthy was no longer enough. Just as the comfort that individuals had in the time they had left to expand and live their legacies quickly dissolved, so did the social order that structured the ways we mourn. Aside from the distant thoughts of the world reaching a literal end, many could have never imagined mourning publicly and privately through digital platforms on phone and computer screens. The stoic black dresses and the classic accessories were no longer the necessary standard. However, in some ways digital platforms were able to provide a sense of normalcy to those longing for the communal and collective mourning of the past (Levy 2021).

With regard to accessibility, the virtual format has created the opportunity for an expanded audience. Those who are unable to join in person are able to experience the surface of the tradition by clicking just a few buttons and joining a live stream. A common adaptation that has been popular during the pandemic, and is expected to continue into the foreseeable future, is the hybrid structure where there is an in-person gathering but also perhaps a Facebook or YouTube streaming link made available. While it can potentially take away from in-person attendance, it is nice to grant agency to individuals to decide what works best for their level of comfort and in some cases their health and tolerance. This certainly changes the experience of these Black funerals, but some might argue that those changes are not as substantial as being limited to no funeral at all or strictly virtual options only.

Closing

In the wake of the global COVID-19 pandemic, the concept of remembrance and celebrations of life have shifted. The growing apathy toward death can be attributed to the desensitization of rapid death during the time of global crisis. The evolution of Black memorialization practices are steeped in both a radical political tradition that is rooted in the South and emerged out of the resilience of Black people, despite the perpetuation of racial trauma and violence. This global practice of restoring honor and dignity to Black people posthumously is one that has laid the foundation for the growing prominence of Black Christian religious praxis and thought that is relevant to the most pressing social and political issues of our time and throughout history. Memory is found at the very foundation of Black church and political spaces as a priority by and of which Black people should be viewed as being deserving. It is understood that one of the highest honors and measures of a person is the way that they are brought to their final destination or resting place. Black funerals are political, inherently, but in many ways they seek to remove the political barriers that have kept Black people captive in their physical life. That is a complex and honorable task within itself, and one that is worth much discussion and dissection.

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The Complexity of Organ Donation: A Review of the Literature

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Abstract

Organ transplantation is a relatively new yet rapidly advancing field that solely relies on donors, living and deceased. Increasing transplantation rates thus results in an increasing need for donated organs, but there was a deficit of over 65,000 unfulfilled transplants in 2021. Compounding this problem is a lack of registered donors, despite favorable views of transplantation. This research investigates the factors involved in facilitating or impeding people's desires to register as organ donors to increase transplantation rates. By reviewing previous quantitative and qualitative literature of education, religious beliefs, altruism, trust in the systems responsible for organ donation, and narratives of those involved, this research attempts to provide a more comprehensive view of the problems facing the system. Additionally, by comparing the different perspectives offered by quantitative and qualitative literatures, this article argues for a more united approach to increasing donation rates. This research suggests transplantation, and especially the quantitative research on this subject, is heavily skewed by the worldview of biomedicine, one that views the body as a machine with replaceable parts that can be fixed. In order to increase organ donation rates, especially in communities that lack trust in the medical field, systematic change is needed.

Introduction

Nationwide there are over 106,000 people waiting for an organ transplant, yet in 2020 only 39,000 transplants were performed (Health Resources and Services Administration [HRSA] 2021). A national survey of donation attitudes and practices found that over 90 percent of people in the United States had favorable views of organ donation, yet only 60 percent of these individuals (approximately 156 million) were registered as organ donors. Complicating this situation, only 3 in every 1,000 deaths occurs in a manner that is suitable for organ donation, further straining the supply. To increase organ donation, research has repeatedly sought to assess the discrepancy between cognitive perceptions and behavioral outcomes in an effort to increase organ donation and alleviate the healthcare crises created by the organ shortage. This research reviews existing literature to better understand the factors facilitating or impeding individuals from registering as organ donors.

Understanding considerations related to organ donor registration is an important aspect of increasing donation rates. This is true for individuals choosing to become organ donors and for family members who may be approached about organ donation following the death of a loved one (Shah et al. 2018). The United States employs an expressed consent ("opt-in") system of organ donation (Zink et al. 2005). Thus, an individual must explicitly state at the Department of Motor Vehicle (DMV) or through online donor registries that they wish to donate; this decision is considered first person authorization. Registration status is especially important in the United Sates because all 50 states, including the District of Columbia, enacted the Uniform Anatomical Gift Act of 2006 that makes first person authorization legally binding (Traino and Siminoff 2013). Consequently, organ procurement organizations (OPOs) do not need to seek consent from family members of a designated donor, but they do inform the family of each individual's legally-binding decision.

Methodologically, Texas State University online research database and Google Scholar were the primary databases used to find the literature cited in this article. The collection of literature specifically sought to include qualitative and quantitative research as both types of research are crucial to understanding the complexities of the donation process, yet they are rarely taken together. The terms "quantitative" or "qualitative" were added to search criteria in each database to filter results to one type throughout this research. In gathering literature for this research, international and cross-cultural studies were often cited. However, the implications of the international literature remains within the United States system of organ donation and transplantation. Thus, the conclusion focuses on systematic change within the United States.

By reviewing both quantitative and qualitative literature in conjunction with each other, this research bridges the schism that currently exists between the two approaches by discussing the factors that are most often cited as determining donation. These factors include education and knowledge, religion, altruism, and medical trust. It also recounts narrative perspectives of individuals directly involved in the transplant process. It discusses the problematic nature of qualitative approaches from a theoretical standpoint and the limitations of quantitative literature. This research concludes by summarizing

potential methodological revisions that could increase registry numbers to help alleviate the organ shortage primarily in the United States.

Lastly, organ donation research is framed by two main theories. The first, the Health Belief Model (HBM), is a multi-faceted theory that explores an individual's beliefs on health and disease (Pauli et al. 2017). It originated from social psychology and the exploration of why people were not participating in programs designed to prevent and detect disease (Champion and Skinner 2008). Within organ donation, the HBM identifies factors influencing decisions to register as an organ donor at an individual level. The second, the social capital theory, is widely defined and interpreted, but in the context of organ donation, most often takes Putnam's interpretation as, "features of social organization such as trust, norms, and networks, that can improve the efficiency of society" (Putnam 1993:5). This definition takes a broader community-level and regional approach to factors relating to donor designation compared to other interpretations of social capital and the HBM that focus on the individual.

Knowledge and Education

Knowledge of organ donation is consistently a variable in quantitative studies and a large focus of qualitative studies. Interpreting the knowledge and understanding of donation by the general public is important to researchers because a supposed lack of knowledge can be solved by increasing educational efforts. As a result, an intense focus on education as a method to alter attitudes and change organ donation behaviors is superficially proposed because as Li and colleagues (2013:119) explain, "Education [regarding organ donation] is a non-controversial solution." This idea is boasted as numerous studies report an increased understanding of organ donation correlates with more positive attitudes (Wakefield et al. 2010). Additionally, knowledge of organ donation increases willingness to donate, and this is a key distinction that separates cognitive thoughts from behavioral action. Knowledge of organ donation in the literature also extends to knowing an organ donor, transplant recipient, someone waiting for an organ, or someone registered to donate. At a small Midwestern university, knowing someone who donated after death was associated with greater likelihood of registering as an organ donor. Overall knowledge and education were factors that most contributed to likelihood to register (Rumsey et al. 2003). Despite the importance of education among organ donation behavior and attitude, the prevalence of this variable in quantitative and qualitative literature is unsuspectingly, but sometimes explicitly, tethered to the over reliance on the Health Belief Model (HBM). A key focus of the HBM in this context is to improve dissemination strategies to communicate the

need for organ donors (Quick et al. 2012). To achieve these goals, six constructs constitute this theoretical approach: severity, susceptibility, benefits, barriers, self-efficacy, and cues to action (Quick et al. 2012).

Analyzing the individual constructs of the HBM reveal how heavily skewed the theory is towards education as the solution. Of the six constructs, half represent analogous concepts relating to knowledge and education. The severity construct investigates perceptions of the need for more organ donors, and the susceptibility construct investigates the perceptions of being personally impacted by organ donation (Quick et al. 2012). Together these constructs are labeled as the perceived threat (Champion and Skinner 2008). Pairing these constructs together also draws on the two psychological learning theories of which the HBM was founded: stimulus response theory and cognitive theory (Champion and Skinner 2008). Understanding severity confirms the need for organ donors as quantified by organ procurement organization statistics, but coupled with susceptibility, a global threat is transformed into a personal threat. This perceived threat is consequently twofold. Cognitively, there is an expectation that registering as an organ donor can reduce the organ shortage, yet behavior can be reinforced by perceived personal consequences and experiencing the personal consequences of ill family and friends in need of a transplant.

The HBM provides the theoretical framework for focus groups conducted by two different studies. One focused on the perception among African American, Hispanic, and White high school students, and the other investigated the perceptions of African Americans of all ages (Quick et al. 2012; Williamson et al. 2017). Qualitatively, understanding the severity of the organ shortage varied widely among high school students. When asked for estimates of the potential number of patients in need of an organ transplant, the answers varied from 1,000 to six million (Quick et al. 2012). Meanwhile, African American participants in the second study were all aware of the organ shortage and the need for more organ donors. Susceptibility perceptions were more congruent between the different studies. The majority of participants of both studies perceived a high probability that themselves or a family member would need a donated organ at some point in their lives (Quick et al. 2012; Williamson et al. 2017). These perceptions were based both on abstract senses and personal experiences of knowing someone who needs or received a transplant. The personal experiences with ill family members of a few high school study participants influenced their perceptions of susceptibility and illustrates the stimulus-response theory that guides the HBM (Quick et al. 2012). The "Cues to Action" construct of the health belief

model is the third to focus on knowledge and education. When applied to organ donation, this construct describes various messaging strategies to mobilize individuals to register. This construct guided quantitative researchers to consider educational-based programs (Li et al. 2012) and qualitative researchers to ask focus group participants to provide feedback on how campaign strategies can be more effective and improve registry rates (Quick et al. 2012).

Regarding education in examining registration and donation rates, quantitative studies less explicitly follow the HBM; the qualitative studies mentioned in this section directly follow the HBM constructs when structuring focus group discussions. Despite this difference, the influence of the HBM is problematic in terms of organ transplantation because it skews the research foci to knowledge and education. Although authors may conclude that education improves attitudes and willingness regarding donation, this does not translate into behavioral changes. When qualitatively assessing barriers to registering for donation, researchers all noted the perceived barriers outweighed the benefits of donation which were conveyed through increased knowledge of transplantation (Quick et al. 2012; Williamson et al. 2017). Qualitative studies have the potential to challenge quantitative survey data through a more intensive understanding of individuals' concerns. Williamson and colleagues (2017:211) even recognize these concerns as they note African American mistrust of the medical system encompasses a "much broader, more institutionalized, and systematic discrimination" against their community. However, their perception of potential solutions to these beliefs is drastically skewed by the HBM, and they conclude by offering additional educational resources and dissemination strategies to increase registration rates.

In contrast to the focus of HBM on education is recognition of the psychological aspects involved in individuals choosing to become potential organ donors through a theoretical framework for analyzing donor behavior (Radecki and Jaccard 1997). The general framework states that individual beliefs determine attitude toward organ donation. Attitude determines willingness to donate, and willingness to donate determines one's commitment to donate, as evidenced by official registration. Five different beliefs influence attitude: religious, cultural, knowledge, altruistic, and normative (Radecki and Jaccard 1997). This could be a potentially useful theoretical approach that seems more tailored to the specific concerns regarding donation. This theoretical approach guided one quantitative survey, but only two of the five beliefs (knowledge and religion) are explored in the study (Rumsey et al. 2003). This focus on knowledge and religion exemplifies the powerful influence that the HBM holds in this field of study and exemplifies biomedicine's search for a "quick fix" to changing beliefs and therefore behaviors.

Lastly, Radecki and Jaccard (1997) note organ donation research lacks a strong theoretical foundation. This observation is supported by a systematic literature review finding 22 of the 33 articles reviewed did not have a theoretical theory specified (Wakefield et al. 2010). Given the resulting lack of knowledge and structure of such studies, there is potentially a "niche" within the field for the health belief model as a theoretical framework. Although the HBM may easily fill a need for theoretical structure in the field, the ethically-fraught nature of organ transplantation challenges the utility of this framework. The following sections more closely align with Radecki and Jaccard's (1997) theoretical theory to explore the different beliefs that shape attitudes and ultimately influence registration rates.

Religion

Religious beliefs can affect one's attitude toward becoming an organ donor (Radecki and Jaccard 1997). Religion has been studied in various quantitative studies to determine the effect of such beliefs. Three main ideas are the result. First, major religious faiths transmit positive attitudes of organ donation (Gillman 1999). Second, despite these favorable attitudes of donation, many potential donors cite their faith as a reason to not donate (Holman 2012). Lastly, religious leaders can influence decisions about donation in their congregation (Gallagher 1996).

Of the various world religions, their tenants, attitudes, and histories generally support donation practices. The tenant of Buddhism for compassion aligns with principles of donation, Hindu mythology includes stories of using body parts for the benefit of others, and Sikhs have a tradition of altruism (Gilman 1999). The monotheistic religions largely support donation. Historically though, resistance to donation from followers of Judaism resulted from the view of the body as a "holy vessel" (Rumsey et al. 2003) However, Jewish legal principle affirms that saving a life takes precedence over all other laws (Gillman 1999). Despite today's seemingly universal religious support of donation, individual religious practice is very nuanced and postmortem modification is still very much a personal choice.

This idea may be why, despite these positive attitudes of donation from many different religious faiths, many individuals still cite religion as their reason for not donating (Boulware et al. 2006). Underlying this contradiction may be a lack of awareness about the position on organ donation within their religion. One study found an overall low willingness to donate and concluded no significant differences existed between different monotheistic religions in Israel (Tarabeih et

al. 2020). The authors concluded, "large numbers of believers are confused" about how donation is viewed, officially, within their religions (Tarabeih et al. 2020:5).

This confusion can be addressed by religious leaders. Multiple quantitative studies noted the importance and influence of religious leaders in shaping the attitudes on donation (and therefore willingness to donate) among their congregation members (Gallagher 1996; Tarabeih et al. 2020). One study found that over 90 percent of religious leaders, hospital chaplains, and seminary students in the western United States were comfortable discussing organ donation and counseling families on the matter (Gallagher 1996). In the same study, a significant percentage of chaplains (80 percent) and clergy (54 percent) said the public has asked about their professional opinion, and over 85 percent of each group did not view organ donation as body mutilation, which can be a concern for the public (Gallagher 1996). Overall, religious leaders have the capacity to discuss death and donation to guide and educate grieving families in this process (Gallagher 1996).

Although religious leaders can often facilitate donation, there are rare cases where they can undermine this utility. A quarter of participants in Gallagher's (1996) study were uncertain or agreed that organ donors were not really dead. This finding can potentially hinder their opinions of donation while also understanding its benefits. Among Turkish religious leaders, over 90 percent believed in the importance of organ donation, yet only one percent of these leaders had actually signed an organ donation card (Güden et al. 2013). This finding diminished their efforts to educate their religious followers, and thus these leaders only convinced three percent of the study population to donate (Güden et al. 2013). This study was a particularly extreme instance of the difference in attitude and behavior but reveals the influence of attitudes and behaviors of such leaders.

Despite the potential negative influences religious leaders may have over donation decisions, they have major positive influence in donation decisions as well. A conference in Minnesota facilitating conversations between American Indian healers and Western healthcare professionals shared knowledge of the process and reassurance in the act of donating with this community (Hodge et al. 2011). Reassurance was particularly important to address the fear of breaking tribal taboos by donating. Through a two-day workshop focused on increasing awareness of donation, qualitative researchers analyzed American Indian perceptions of donation and their discussions between Western healthcare providers.

When analyzing the discussions between Western health care providers and spiritual healers at the conference, it is important to recognize that in some societies religion is medicine. Spiritual healers in these communities typically use their spiritual influence and power to address health issues within their communities. Throughout the conference, the biomedical worldview and culture, which is so drastically different from the traditional American Indian worldview, was imposed on the participants. Western healthcare providers found knowledge to be one of the biggest barriers to donation; the need for knowledge was one of the biggest themes identified by the researchers (Hodge et al. 2011). Throughout the conference, healthcare providers shared information on transplant surgery, protocols for donation, return and disposal of remains, and post surgery care. However, increasing knowledge does not address the cultural and spiritual dimensions of donation and reception. One healer explains, "Our spirit resides in our body" (Hodge et al. 2011:85). By accepting organ donation and reception, this community must incorporate the biomedical view of their body into their existing cultural and spiritual beliefs. For American Indians, spiritual healers become the best people to bridge this gap.

Recognizing these types of dynamics can explain why it is often difficult to capture the dynamics of religion through quantitative surveys. By categorizing survey participants into religious groups, the nuance of each religion and individual differences of practice is ignored. Moreover, the culture of biomedicine, which views bodies as machines with replaceable parts, has a pertinent influence on these surveys. This understanding can explain why the answer to the contradiction between religious views and individual willingness is often attributed to a lack of information. Ultimately, the body and our views of our bodies are intertwined with religion, culture, and society which are absent in quantitative studies stemming from a biomedical perspective.

Altruism

Identified both quantitatively and qualitatively, altruism is often the main perceived benefit of donation. Focus on the altruistic perceptions of donation are often perpetuated by the organ donation system itself through the promotion and construction of a "gift economy" (Sharp 2001). This explains the willing exchange of organs without an expectation of monetary compensation. The "gift economy" not only obscures the commodification of each organ but has resulted in altruism being the most pervasive benefit of organ donation (Quick et al. 2012; Williamson et al. 2017).

Legislation explicitly outlaws the direct sale of human organs in the United States, yet commodification is central to the success of organ transplantation. Transplantation would not take place without financially supporting the sophisticated technology and personnel that allow for successful procurement and

transplantation. The money that flows into this specialty explains why transplantation is the highly developed field of medicine it is today and why some hospitals can support entire transplant wings. Given the current legislation, OPOs must mask the commodification of organs through prolific rhetoric that almost exclusively describes organs as "gifts of life" (Sharp 2006). Masking the reality of monetary exchange in this process even presents itself through the corporate names of many organizations like LifeGift and Donate Life America. Through these constructions, decommodification becomes a central and forced point driven by OPOs. By restructuring the commodification of donors, OPOs can appeal to public altruism to mitigate the organ shortage. Yet even when money is exchanged at various levels by insurance companies, patients, hospitals, and OPOs, it never explicitly covers the cost of the organ itself; instead it covers "technical, transportation, and other support services" (Sharp 2006:31). Although the actual transfer of money in transplantation is less visible unless directly involved, the avoidance of commodification continues to assert the "gift of life" idea which casts harsh judgments on those not willing to donate.

Altruistic motivations are often a focus in quantitative studies. One study showed that individuals previously registered as a donor were statistically less likely to be in favor of incentives for donation, including financial reimbursement for medical or funeral expenses, a certificate of recognition, or cash payments to family or a charity of choice (Boulware et al. 2006). Additionally, a correlation between lack of empathy and unwillingness to donate existed in a quantitative Polish study (Wilczek-Ruzyczka et al. 2014). Both findings imply the importance of altruism in the matter. This is reflected by participant concerns that monetary compensation could erode the perceived altruistic features of donation (Boulware et al. 2006).

The saturation of this selling point makes the benefit of organ donation clearly understood by the public. As one African American study participant mentioned when discussing the perceived benefits of donation, "It's all about giving back. It's love…With the last breath of my life, I want to help somebody" (Williamson et al. 2017:204). Despite this conviction, this individual was not a registered donor. This contradiction is most likely based on multiple factors dissuading this individual from donating, but others propose community factors, like social capital, may factor into one's altruistic motivations to donate.

Putnam's community-based definition of social capital guides the perspective that views organ donation as a form of civic engagement, similar to voting, volunteering and community participation (Ladin et al. 2015). Additionally, social capital captures a sense of solidarity, moral obligations, and social values which is how it directly impacts the number of organ donor designators in various communities (Ladin et al. 2015). This closely reflects Putnam's categories of bonding social capital, which reinforces our ties to those with similar backgrounds as us, and bridging social capital, which brings people across social divisions together contributing to a positive society (Sharp and Randhawa 2016).

Social capital was measured in one study by investigating residential segregation, voter registration and participation, residential mobility, and violent death rate (Ladin et al. 2015). These factors, although not exclusive measures of social capital, are gauges of trust in the community and norms of reciprocity that influence donation. For example, residential segregation reflects wealth inequality within the United States, but communities with more residential segregation perceive negative social inequalities (including limited social and residential mobility) which decreases trust in the community and public programs like organ donation (Ladin et al. 2015). Ultimately, this study concludes that more than half the variation in donor designation is due to community-level factors, as opposed to individual-level factors like education (Ladin et al. 2015). This conclusion is particularly useful as it frames the main motivational factor to donate, altruism, among multiple community-level factors instead of the often individual-level factors that are studied extensively.

This broader perspective not only provides potential solutions to increasing donation rates across multiple communities, but it can break the self-created problem within organ donation that positions minority groups as the "problem" to organ transplantation. As pointed out in multiple studies, a paradox exists within transplantation. Specifically, communities most in need of transplants have very low donation and donor designation rates (Ladin et al. 2015). In the United Kingdom, low donation rates among certain populations (Black and minority ethnic communities) may be due to the specific ways in which the transplant system targets these groups (Kierans and Cooper 2011). By consistently appealing to the morality of helping others within the distinct racial and ethnic communities, transplant organization reinforces the differences between groups and further perpetuate the existing paradox within donation. By investigating the problem through social capital, we can separate such entrenched ethnic boundaries and view the problem through a broader environmental and community lens, less focused on biological differences between ethnic groups.

Interestingly, as OPOs in the United Kingdom emphasize donation as a method to giving back to one's community, this factor in donating is not lost

among populations within the United States, specifically Black communities. A few African American focus group participants mentioned that they would love to donate organs directly to other African Americans. Simultaneously they believe the increased number of African American recipients on the waiting lists is evidence of a "rigged" system working against them (Williamson et al. 2017). Understanding these dynamics proves altruistic motivations are not lost among minority populations, but instead other stronger and deeper factors are working against the altruism of donation.

Medical Mistrust

Medical mistrust is a major factor that often underlies hesitation or outright refusal of individuals to donate their organs. The mistrust ranges from fear of inadequate medical intervention if one is a registered donor to conspiracies tying police brutality with supplying the organ shortage (Quick et al. 2012; Williamson et al. 2017). Medical mistrust in the United States has historical precedent that warps outlooks of organ donation and transplantation. Unfortunately, the transplant system inadequately addresses systemic and historical injustices that create medical mistrust and skepticism towards donation. Instead the focus is on how low donation rates are a result of a lack of individual knowledge on the process and its benefits.

Underlying medical mistrust, particularly the fear that medical professionals will not try as hard to save a registered organ donors life, is the transplant system's own emphasis on the organ shortage. As Sharp (2001) points out, there is scarcity anxiety that underlies procurement efforts. However, procurement efforts focus solely on the supply side, burdening the public with remedying the organ shortage, and ignoring the increasing number of patients being placed on the wait lists by surgeons (Sharp 2001). This skewed attention on increasing donation rates also drives the academic efforts in quantitative and qualitative literature; it is unlikely to read an article on donation without mentioning the number of people on the transplant wait list. Fundamentally though, the scarcity anxiety driven by OPOs creates anxiety. However, this anxiety is counterproductive since a portion of the population is now fearful of presumed eagerness to remedy the shortage by the healthcare system.

As mentioned, mistrust in the medical system also exists due to historic injustices fueled by the institution of slavery in the United States that creates stark health disparities today. Author Harriet Washington describes in her book, *Medical Apartheid* (2006), the long and dark history of Black bodies being used for scientific experimentation. A few events include: the unanesthetized surgical experiments of enslaved women leading to the founding of modern gynecology, the well-known Tuskegee syphilis experiments, and the lesser-known horrors of the Holmesburg Prison complex which elevated the field of dermatology under Dr. Albert Kligman (Washington 2006). These all contributed to the view of disposable Black bodies that fuels medical mistrust and skepticism towards organ donation. This fear is exemplified within many African American focus groups. In an examination of their qualitative study of perception of organ donation among African Americans, Williamson and colleagues (2018) identify four types of medical mistrust in African American sentiments: societal distrust, distrust of institutions, distrust of medical institutions, and organ donation specific distrust.

Societal distrust was embedded among experienced and witnessed societal discrimination toward African Americans and historical discrimination and oppression (Williamson et al. 2019). One woman's grandparents commented that organ donation was not a good idea because their ancestors had been wronged and held back from being socially mobile. She stated, "And we're going to give our organs to someone who's privileged or had more. I'm not going to do that" (Williamson et al. 2017:205). Distrust of institutions also existed due to a history of, and continued experience with, systematic discrimination including an extreme belief that physicians had genocidal motives (Williamson et al. 2019). Organ-specific concerns revolved around the belief many participants held that they would receive less adequate care if a known donor (Williamson et al. 2019). This last concern is shared among other racial groups, but it is clear that for African Americans, concerns about a premature declaration of death does not provide a full picture of the perceived barriers to donation.

In discussing the multi-faceted nature of mistrust for African American individuals, Sharp (2001) validates some of these concerns by noting, "Young men and boys of color who are victims of street violence can be a significant source for donated organs" (Sharp 2001:119). Specifically, 20 percent of all donors were in the United States were from gunshot wound and stabbing victims (Sharp 2001). Sharp's observation consequently details the challenge faced by organ procurement leaders to create targeted campaigns for African American communities. Since concerns and mistrust are historically and socially rooted, change much first be initiated by organ procurement organizations themselves by talking about the violence that frequently drives their work. Understanding the systemic injustice that has plagued the grieving family members of a brain-dead donor must be met with understanding and, more importantly, respect by organ procurement professionals.

Narratives of Involved Parties

At the crux of organ transplantation is the donor. Without this new medically-specific agent, suspended in a ventilator-dependent stasis, organ transplantation would not exist. However ambiguous the personhood of the donor, their organs function biologically and thus hold power over transplant surgeons, coordinators, recipients, and donor families (Yasuoka 2019). This section focuses on illustrating the narratives of each concerned party. These narratives are largely absent from quantitative literature, but provide rich insight to more fully understand the complexity of organ transplantation that ultimately shapes the attitudes and behaviors of potential donors.

Dr. Maria-Keiko Yasuoka explores organ transplantation in Japan and interviews multiple involved parties in her research. Organ donation remains low in Japan and consequently transplantations rely more heavily on living and overseas donors than in the United States (Yasuoka 2019). Regardless, narratives still provide perspectives on Japanese reactions and feelings in response to the universal medical issues that transplantation creates.

Surgeons

Transplantation in Japan has shifted the culture of medicine, particularly abandoning the traditional paternalistic relationship of surgeons to patients (Yasuoka 2019). The role of Japanese surgeons is now more similar to those in the United States, acting as mediators between donors and recipients. Surgeon narratives allow greater understanding of the impact of transplantation as an emerging and highly specialized technology. The views of surgeons differ depending on which organ they specialize, but a common denominator between each specialty is a focus on the revitalization of recipients, which drives their work (Yasuoka 2019). Heart surgeons in Japan alter their perspective of transplantation with more effort than liver and kidney surgeons to solely focus on saving the life of the recipient as they physically stop the donor heart during the recovery process (Yasuoka 2019). As one heart transplant surgeon reports, "I feel that I gave them [the donor] the finishing blow!" (Yasuoka 2019:22). Another Japanese heart surgeon mentioned going out for drinks with an American heart surgeon and discussing leaving the field due to the mental and physical tolls. Despite this, the surgeon reported that he, like his American colleague, remains because of transformations and joy of recipients (Yasuoka 2019). This anecdote reveals that although the United States conducts the greatest number of transplants each year, the emotions associated with this position may be independent of nationality. The effort of surgeons to refocus the recovery procedures on recipients may also be one reason why donor families feel silenced by the transplant system once procurement is complete (Sharp 2001).

Unlike heart transplants, liver and kidney transplants can be donated by living donors, and given the low rate of brain dead donation in Japan, this option is relied upon more frequently than in the United States (Yasuoka 2019). Liver and kidney specialists have a more positive view of brain dead donation and procurement than heart surgeons: "I think that organ donation from a dead person is a wonderful thing" (Yasuoka 2019:32). However, this dedication to recipients is also a challenge. A kidney transplant surgeon mentioned difficulties staying objective, especially when performing transplants among children, "is a very difficult thing to do" (Yasuoka, 2019:36). Liver and kidney transplant surgeons have specific concerns about procuring from healthy living donors given the potential for harm (Yasuoka 2019). This concern may explain the less troubled views of procurement from brain dead donors by kidney and liver surgeons in comparison to heart transplant surgeons.

Donor Coordinators

The second involved party in transplantation are recipient and donor coordinators. These individuals work separately at each end of the transplantation process. Recipient coordinators support recipients before and after their transplant, both physically and mentally (Yasuoka 2019). Donor coordinators approach donor families to obtain consent and maintain the stability of each donor preceding procurement (Sharp 2001; Yasuoka 2019). Recipient coordinators express similar positive views of transplantation when describing children being revitalized by their new organs, but also express similar concerns of liver and kidney surgeons regarding living organ donation (Yasuoka 2019). However, unlike surgeons who feared potentially harming a healthy donor, the fears of recipient coordinators focused on family tension and relationship fallout between living donor candidates and waiting transplant patients, as one coordinator noted, "I don't think living transplantation is a good thing like organ donation" (Yasuoka 2019:38). This pressure on living donors by an ailing family member may be heightened in Japan due to a lower volume of brain dead donation procedures, but also by a technological imperative.

The success of transplantation transformed a once experimental and risky procedure into standard practice, and standard practice created an expectation to prolong life and receive a new organ (Kaufman et al. 2006). Specifically focusing on living kidney donation, Kaufman (2006:3) recognizes the loss of choice in this process that leads to "the perceived impossibility of saying no" to life-extending interventions. Additionally, there is intense pressure on family members, particularly adult children, to donate (Kaufman 2006). The normalization and naturalization of older kidney recipients, who increasing rely on living donors, consequently normalizes

and naturalizes the denial of our inevitable deaths (Kaufman 2006). Kaufman's conclusions are recognized by a Japanese recipient coordinator. She notes that organ transplantation provides an opportunity to think about death, a topic not discussed while growing up in Japan (Yasuoka 2019). However, the coordinator then explains, "Suddenly, when told 'Let's think about death,' we can't think about it" (Yasuoka 2019:38). The international denial of death speaks to the influence of biomedicine in our society that is often not realized by the nurses, doctors, donors, or recipients involved.

Recipients

The third involved party in transplantation are recipients. Recipient happiness, health, and appreciation are direct evidence of transplantation's success and are frequently promoted by organ procurement organizations to promote donation. Many recipient narratives reflect these emotions, but some narratives uncover the problematic conceptual framework reinforced by the transplant system and individual cultural and political contexts (Kierans 2011; Yasuoka 2019). A shared emotion of all the recipients interviewed by Yasuoka (2019) was gratitude toward the donor family. However, gratitude was quickly mixed with other feelings of guilt, knowing an individual died allowing them to live (Yasuoka 2019). As a result, many recipients attempted to offer reciprocation for the donated organ to the donor's family (Yasuoka 2019). The Japanese gift exchange tradition conducted twice a year, may contribute to the obligated sense to reciprocate gifts; it may also influence the low donation rates within Japan as there is often no way to reciprocate a non-material gift such as a life-sustaining organ (Yasuoka 2019).

Regardless of the cultural forces affecting decisions and feelings, each recipient had unique experiences based on the circumstances of each transplant. One recipient of a simultaneous pancreas and kidney transplant expressed overwhelming positive emotions and praise to the donor, donor's family, and doctors. This expression was influenced by his critical condition before his transplant, "I don't have to be overcome with terror of a hypoglycemic attack anymore" (Yasuoka 2019:55). Despite the renewed lease on life, this recipient only told his parents about his transplant out of fear of being shamed or accused of cannibalism by conservative members of his family and community (Yasuoka 2019). One traumatic experience left another recipient with survivor guilt. At the age of fourteen, this recipient was sent abroad to Australia among eight other children suffering mild to critical liver failure. She received a new liver from a brain dead donor and was the only one out of the eight other kids she met in the hospital waiting room to survive. Paradoxically, she describes she had the mildest symptoms but the highest chance of survival which is why doctors chose her as the recipient (Yasuoka 2019). Relating to this experience, another recipient mentions transplantation trades physical pain for psychological pain, and that "organ transplantation is a medical treatment that requires mental toughness" (Yasuoka 2019: 58).

Given the increased reliance of international brain dead donors by Japanese recipients, there is the legitimate concern, specifically addressed by Black communities, that their donated organs go to someone in their community (Williamson et al. 2017). Yasuoka (2019) notes that American hospital systems accept five percent of their patients from countries with low healthcare provisions, but also that this five percent can be entirely Japanese in some cases. The international sharing of organs is mainly supported by the advancement of immunosuppressant therapy which reduces the reliance on genetic matching (Kierans 2011). However, this advancement is consequential for the world's most vulnerable populations (Kierans 2011). Cyclosporine, the ubiquitous immunosuppressant drug, may contribute to more international transplants. Thus, vulnerable communities in the United States may be less likely to reap the benefits of transplantation within their community, and perpetuating medical mistrust. This circumstance is recognized by Japanese recipients who are often hesitant to disclose their nationality in thank you notes to donor families (Yasuoka 2019).

The narratives of Japanese recipients reflect similar sentiments from medical anthropologist Kierans (2011:1473) who notes, "Transplantation does extend life, but the lives so extended are radically altered in the process." Kierans (2011) critically remarks that the immunosuppressant therapy that is essential for a successful transplant has many consequences on recipient health and wellbeing. She also notes that the transplant system itself positions recipients as "beneficiaries of medical technologies," and further that recipient suffering is downplayed as donor kin suffering is simultaneously elevated (Kierans 2011:1470). Daily immunosuppressants often cause devastating and unforeseen side effects for recipients which can include weight gain, excess bodily hair, and increased susceptibility to viruses and infections (Kierans 2011). Renal recipients in Mexico expecting to resume a normal healthy life instead face the side effects of daily immunosuppressants and often may not be healthy enough to return to work (Crowley-Matoka 2005). Additionally, Irish transplant recipients note mental and physical effects of immunosuppression including difficulties with continued sickness, forming relationships, and maintaining a regular working life (Kierans 2005). The difference between expectation and reality for recipients is created by the transplant system which promotes a collective narrative of recipients centered around the

"gift of life" (Kierans 2011). Specific to living transplants where the donor may personally know the recipient, there is often an unspoken expectation on recipients to be good stewards of the donated organ and pressure to be well when one is not (Kierans 2011). Thus, some recipients disengage with family and friends, who no longer view them as patients, to alleviate some of the effects of recipiency (Kierans 2011).

Donor Kin

The last involved party to discuss are donor kin. Donor kin are the family members who decide whether to donate or not in the absence of first person consent, granted at the time of registration. In the presence of first person consent documentation, donor kin will often be asked to grant the wishes of the deceased, alleviating this decision to donate or not from immediate family members. Narrative data supports the finding from quantitative literature that the strongest familial authorization rates occur when the donor is registered (Shah et al. 2018; Yasuoka 2019). When families make a donation decision without knowing the wishes of the donor, it is important to allow family members to discuss among themselves and make this decision freely, because feeling coerced or pressured in this decision often increases the intensity and length of the grieving process (Yasuoka 2019). Coercion also contributes to mistrust toward medical professionals and the donation process. Pressure and coercion from donor coordinators in the United States may be intrinsic to the system. Sharp (2001) mentions that procurement professional themselves endure pressure from superiors who may implement unofficial monthly donor quotas. In one case, the pressure from coordinator superiors led some to offer to cover burial costs to persuade hesitant donor families (Sharp 2001).

The narrative of a Japanese father who chose to donate his twenty-one year old daughter's organs without her preexisting agreement to donate illustrates this finding. The donor father agreed to donation "unquestionably" when it was mentioned by his daughter's doctor, but without the full consideration of his family's opinions, he reported feeling guilt and regret twelve years after the decision (Yasuoka 2019). Pressure in this scenario may be tied to the paternalistic relationship between doctor and patient, but as this dynamic changes in Japan to reflect a more American physician-patient relationship, more attention should be paid to the techniques doctors and donor coordinators use to persuade family members.

Even if an individual registers, it is still important for family members to explicitly discuss their wishes with each other to prevent negative personal experiences through this process. For an African American mother approached by doctors who disclosed her son's donor registry, she worried if he still wanted to donate at the time of his death. Her hesitation to support the decision created a sour experience which left her feeling very disrespected by medical professionals (Williamson et al. 2017). Only her son's corneal tissue was viable for procurement by the time these issues were resolved (Williamson et al. 2017).

In addition to the way medical professionals shape donor family narratives, Yasuoka (2019) also explains that a mother's reaction to donating her child's organs may be more intense than other family members. This phenomenon is partly due to Japanese culture which creates a much stronger relationship between mother and child, and may be due to the experience of childbirth (Yasuoka 2019). One Japanese story reveals the emotional intensity of a mother crying in the arms of an Australian nurse. The emotional intensity faced by this mother morphed into feelings of isolation without any chance to communicate with her son's organ recipients, which highlights the need for mental healthcare for donor families (Yasuoka 2019). Long-term mental health care for donor families is also supported by Sharp's (2001) data revealing that the process of donation, especially after a traumatic death, may actually prolong or intensify mourning. Donation may actually make closure an impossibility, despite the claims by OPOs believing it will speed up the mourning process and lessen grief (Sharp 2001).

Along with the unreliable claims of OPOs regarding donor kin emotions, there is a more deliberate professional repression of donor kin by OPOs. Donor families in the United States often feel silenced and ignored by OPOs (Sharp 2001). OPOs view donor kin as volatile and dangerous, potentially expressing their grief or sharing the traumatic or violent nature of the donor's death (Sharp 2001). This concern by OPOs is a problem created by themselves; donor coordinators purposefully mask the violent nature of the donor's death from conversation, instead only promoting life despite both sides (life and death) being inextricably linked in the process (Sharp 2001). Life is situated at the center of transplantation through ecological metaphors like trees, flowers, vegetables, and birds as powerful symbols of life (Sharp 2001). This promotional material that uses these metaphors invites open abhorrence from donor kin, because it deliberately ignores the grief and painful end-of-life decisions family members face after losing a loved one (Sharp 2001).

Green imagery, particularly "donor gardens" de-personalizes donors long after procurement. Donors are still objectified; trees and rose bushes purposefully do not have names. However, donor kin have defied the system attempting to silence them through donor quilts and virtual donor ceremonies (Sharp 2001). Online memorials remove censorship and scripts that OPOs

strictly enforce. Family members can share their darkest thoughts and struggles with their loss and the transplant process, bringing some peace in the process.

Reviewing the different narratives of surgeons, coordinators, recipients, and donor families adds new perspective in understanding organ donation and transplantation. Surgeons and coordinators reveal the difficulties of working in a technologically advanced yet relatively young field. Their narratives reveal some of the ethical dilemmas that the globalized system of transplantation faces, particularly regarding living transplantation. Recipient narratives illustrate immense feelings of gratitude, but also the untold aftereffects of life with a transplanted organ. Donor kin narratives share a largely ignored and silenced perspective throughout the whole process. These narratives, practically non-existent in quantitative literature, highlight the ethically fraught problems created by the system itself and give voice to the statistically significant finding of quantitative surveys. These narratives also prove the interconnected nature of each party, who are all connected to the donor. Organ procurement organizations share only the benefits of donation and transplantation, and this sentiment is perpetuated by biomedical research and professionals. However, understanding the concerns of each involved party can strengthen the system as a whole. To ignore any party in this process may only hurt the goals of donation and transplantation from the inside out.

Shortcomings, Limitations, and Future Directions

This article initially began by exploring the factors involved in facilitating or impeding decisions of individuals to register as organ donor. Yet this examination exposed some of the shortcomings and limitations of the organ donation and transplantation process. Some might question if organ transplantation is justifiable, given its ethically fraught nature is largely veiled by national transplant organizations. This line of thinking is misleading though because organ transplantation as a whole saves lives. In fact, thousands of lives are transformed each year through transplantation. The most important aspect in assessing complications associated with transplantation is maintaining a balance between positive outcomes and negative consequences. This last section addresses the most salient issues of studying and increasing donation rates and then outlines potential solutions.

As each section has illustrated, quantitative and qualitative literature both provide important perspectives on the attitudes and behaviors of the transplantation process. However, quantitative and qualitative research are rarely conducted in tandem with each other and rarely cite each other. This is problematic because only focusing on one side of the literature prohibits a comprehensive view of the system to understand what shapes behavior and, ultimately, donation rates. A holistic perspective is particularly useful within transplantation, as people are the main focus of the process. Understanding these unique human experiences, guided by quantitative analysis, can produce statically significant data with a voice. The richest conclusions are made when combining these literature sources because it exposes the complex web of attitudes, behaviors, and influences that affect donation.

Analyzing how donation and transplantation are studied reveals the problematic nature of the Health Belief Model (HBM). The theoretical framework of HBM positions education and knowledge of transplantation as the deciding factor to donate, despite clear evidence that this decision involves multiple factors. The HBM frames both quantitative and qualitative literature, but is futile in truly understanding the barriers to donation. By singularly viewing donation rates as an education problem, researchers in both fields downplay the other factors dictating donation decisions. In qualitative studies, potential barriers were discussed in depth, yet the proposed solution to these problems was simply to improve promotional materials. Qualitative focus groups have potential to add perspective and even challenge the value of education as presented by the HBM. In fact, the study by Williamson et al. (2017) illustrates how medical mistrust within the African American community challenges the value of education in decision making, but the influence of HBM over these valuable perspectives only finds increasing education as the solution. As long as the framework of HBM continues to influence research in this field, the full scope of influences on potential donors cannot be explored.

One of the perceived barriers identified following the HBM framework is medical mistrust. Medical systems including transplantation have systematically and historically worked against minority communities. Although OPOs cannot change past events, they can recognize their contributing part in perpetuating mistrust. Recommendations could involve reviewing the criteria that puts patients on the transplant list in an attempt to reduce demand and lessen the burden on the public. However, this may be challenging given the forward direction and momentum of transplantation technology as it becomes standard practice. An alternative option to reduce demand would be for OPOs to partner with various health initiatives to prevent kidney, liver, and other preventable organ diseases that increases the demand of organs. Promoting healthy living habits in hopes of reducing the pressure on the public to donate may also transform the image of OPOs from being "vultures" and may improve trust among the community.

In the 2021 Annual Report of Donate Life America, a page on diversity and inclusion reports they have promoted healthy living in multiethnic communities to reduce the need for transplants (Donate Life America 2021). However, this initiative is primarily disseminated through social media. More needs to be done at the ground level by these organizations to promote healthy living in these communities. OPOs could also contact community leaders to host monthly picnics or potlucks to connect with the community, and connect the community itself, while sharing healthy habits. Interestingly, OPOs recognize the need to reach out to local leaders and influences in the community. The 2021 Annual Report discusses a collaboration with streetwear designers and brands to reach the community through popular culture (Donate Life America, 2021).

In addition to these recommendations and the ongoing efforts of Donate Life America, the organization can further impact these communities by increasing their social capital which drives voluntary and altruistic behavior (Ladin et al. 2015). Increased social capital increases prosocial behavior. And, living in areas with less crime, less residential segregation, more social cohesion, and greater political participation increases prosocial behavior (Ladin et al. 2015). Out of these variables, it seems most reasonable for OPOs to invest in communities to increase social cohesion as they often frame organ donation as a moral imperative (Kierans and Cooper 2011). Increasing social cohesion might include hosting monthly community events, and investing in the restoration or construction of community spaces like libraries or activity centers. Again, investing directly in communities will also transform OPOs image among skeptical communities and increase trust.

One of the ominous uncertainties of transplantation is the technical imperative that complicates living donation and drives the cultural force of biomedicine. As coordinator narratives detail, our collective denial of death transforms the view of our bodies. Biomedicine dictates that our bodies are machines with replaceable parts. This idea is a treacherous path to follow because it quickly leads to ideas of immortality. Transplant leaders must recognize the biomedical worldview they operate under and define boundaries for the system to balance the benefits against negative consequences, specifically those of living donation. Additionally, thoroughly understanding the influence of biomedicine allows transplantation leaders to foster understanding and respect among other communities and cultures to find common ground as humans in a technologically advanced world. The field of transplantation is culturally situated and fraught, thus respect for the decisions of others, regardless the reasoning, should remain a top priority for transplant professionals to maintain healthy relationship with the community and allow the system to flourish.

Conclusion

This research identified several factors influencing decision-making of registering as an organ donor. Through a literature review, the differences between quantitative and qualitative data were considered. At the forefront of donation decision conversation is education. However, most people understand the need and benefits of organ donation and still choose not to donate. Thus, other factors exist.

Problematically, these factors are often overlooked by the Health Belief Model, the primary conceptual framework that guides both literature perspectives. Religion can be beneficial to increasing donation rates because it connects local leaders with the community. Although, the nuances of different religions and individual interpretations of religion may persist beyond the formal acceptance within major religions. Altruistic motivations are the biggest benefit to donation, but this factor is further influenced by community-level variables according to the social capital theory. Medical distrust is a particularly strong barrier to donation that is shaped by a history discriminating against minority communities, those with the lowest donation rates.

Narratives reveal a dimension of the innerworkings of the transplant system that is not seen by potential donors, yet heavily shapes the system and potential donor attitudes. With all these factors in mind, transplant leaders have an important role to address the hesitation of many potential donors through a more holistic approach to their field. Understanding the complexities and untangling the web of involved parties helps these professionals better the experiences of everyone involved in transplantation.

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The Choreography of the Digital Mundane:
How Smartphones Transform Place Experience

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Abstract

Smartphone technology is a mundane feature of everyday mobility in contemporary spaces. As a result, hyperconnected digital media is increasingly woven into place experience. This raises questions addressed by research on the gradual blur between real and virtual, the placeness of digital environments, and the erosion of a sense of place. However, this paper is centered on observations of the physical body movements performed by people interacting with screens in transitional places. I conceptualize human relationships to smartphones as choreographed performances that habitually disrupt place experience, draw attention into the screen, and work to informatize the attentional and kinesthetic labor intrinsic to mobility through place.

Introduction

Today, we are faced with challenges and contradictions of hyperconnectivity. The constant proximity to cybernetic devices renders us ever-vulnerable to compulsions of capital and power formations designed to stoke, craft, and weaponize spontaneous connective desire (Iveson and Maalsen 2019; Celis Bueno 2016). As digital media technologies are increasingly enmeshed into the quotidian, I dive headfirst into key questions of anthropological place and habitus. How might this constant proximity change the way we experience place or the way we act in and perceive the world (read: places)? The latter is a question of habitus, defined by French sociologist Pierre Bourdieu as "systems of schemes of perception, appreciation, and action" that enable humans "to perform acts of practical knowledge" (Bourdieu 2000:138). Acts of practical knowledge include how one comes to know a place and therefore how to orient oneself in it. But, for Bourdieu, a crucial component of habitus is his notion of body hexis, defined as "motor function, in the form of a pattern of postures that is both individual and systematic…linked to a whole system of techniques involving the body and tools, and charged with a host of social meanings and values" (Bourdieu 1977:87). I have observed children no older than one year pick up, unlock, and swipe on their mother's phone. I have seen a child of the same age pick up a television remote, navigate to Netflix, and select their favorite show. These behaviors are associated with what I describe as a constant proximity, and they are rudimentary techniques of a cybernetic habitus.

What does this constant proximity--the habitual participation and interaction with hyperconnected machines--look like in the context of everyday mobility through places and from the perspective of daily compulsions and behaviors? The answer to this question falls into a reframing of human relationships to smartphones in the anthropological contexts of place (and non-place). Just as the landscape has been modified to adapt to automobile technology, it has been modified around ubiquitous smartphone use. However, while we acknowledge the limitations and the problems with suburban sprawl--the disastrous result of betting all-in on infrastructure designed around cars--we appear unable to come to grips with smartphone sprawl. We know how sprawl has affected the built environment and the experience thereof, but we should also investigate the effects of this evolving habitus of hyperconnected digital media beyond the restrictive frameworks of smartphone addiction and over-reliance on social media. So, there is the question of how the design of places influences the quality and frequency of smartphone interaction, but we should specifically ask how smartphones might change the way places are experienced.

To begin an exploration of this question, I collected data through participant observation in the places where these two stories collide, in direct observation of people as they were compelled to pick up and hold their devices while moving through or dwelling in liminal or transitional sectors of the built environment. I focused on transitional sectors to investigate the degree to which they are conducive to compulsions toward screen-space. Observations took place over the span of two semesters while I was attending the University of Central Arkansas (UCA), and much of my data were collected by observing people traveling through campus. As such, the specific conclusions drawn therefrom are biased toward the academic community at UCA.

Before I provide the content of these observations, it is important to situate them and the following discussion in an historical context by drawing a connection between two techno-cultural developments. The first development is the reciprocity between evolving mobility technologies (i.e., cars and phones) and the design of public and private spaces. The second is the

historical situation in which technological advancements gradually reduced the size of computers, while at the same time weaving them tighter into the fabric of contemporary social fields. After providing this historical context, I provide further context using the anthropology of place, specifically in reference to anthropologist Marc Auge and human geographer Yi Fu Tuan.

I then consider my observations in relation to three closely related points of inquiry: 1) the effect of smartphones on the motion of bodies in place, 2) the characterization of those body movements, and 3) the effects of the motions on place experience.

Finally, I discuss how the results of this inquiry signal a deep misapprehension of mobile communication technology that calls for a place-oriented reframing of human relationships to smartphones. This reframing draws insights from connections between sense of place and an emergent habitus of smartphone use, and it reveals precisely what the normative objectification of the smartphone qua phone obscures. That is, how smartphones transform place experience.

The Transposition of the Body's Journey to the Internet

Where does one go to access the Internet, and how might the answer to this question change in relation to historical time and geography? Before internet service providers, wifi, and especially handheld devices with wifi capability, the experience of accessing the Internet or its precursors was much different than the experience today. In the 1980s, public spaces with internet access like Internet cafes and library computer labs had yet to be designed. To be clear, the Internet as we know it today did not exist. The U.S. Department of Defense, for example, used a data sharing network called Computer Science Network (CSNET) to communicate about defense research projects with consultants at universities. But, the foundation of the World Wide Web did not emerge until 1989 with the CERN network (Pew Research Center 2021a; Comer 1983).

I interviewed someone who occasionally accessed a precursor to the Internet at the University of Arkansas at Little Rock in the late 1980s. In this case, my interviewee was required to access a data sharing network (i.e., the university computer bulletin board service) for an Introduction to Programming Language assignment. I asked this person to recount each stage of mobility on the journey. The experience was remembered like this:

> Walk to the garage. Start the car. Drive 50 miles away to the university. Park the car. Walk to the college of business. Ride the elevator to the second floor. Locate the computer lab. Sit at an available PC. Read instruction print-out. Enter identification. Enter series of DOS commands. Wait for connection.

In this example, access to a data sharing network required a sequence of multiple non-trivial stages of mobility. That is, it required physical travel to a place with access to a specific network. Even in the late 2000s, a decade after such bulletin board systems and other pre-web services were superseded by the Web, access to the Internet required travel to an Internet cafe or a university for people living in certain geographical locales like Tanzania or Greece. Broadly speaking, the United States, Europe, Japan, and the Hong Kong metro area followed a faster pace of internet access. As public spaces with Web access expanded over time, the mobility sequences changed in tandem.

Thirty years later and the entire sequence has been transposed into the palm of the hand. The importance of this transposition cannot be overstated. As of 2021, 85 percent of the adult population in the United States own smartphones (Pew Research Center 2021b). From close to a decade of immersion in the cultural context of Conway, Arkansas, I have observed that when people need to access the Internet, they reach for their phones instead of their car keys. From numerous conversations and interviews with locals across multiple ages and backgrounds (e.g., students , non-students, and professors), it is safe to conclude that when asked to recount the stages of mobility required to access the Internet today, the numerous steps above would be reduced to a single motion of reaching into a pocket.

We take for granted this immediacy of the computer-world. It is almost unthinkable to travel through digitally networked cities without depending on a computer, on digital media, or on networked technology. The literature confirms my observations that we "carry digital connectivity around in our pockets" (Halstead 2021:563), rendering the distance--the journey--between the body and the internet, in most cases, an utterly trivial distance. In the past, we went to the Internet. Now, the journey to the Internet--all the physical motions and kinesthetic techniques required of a body to travel to networked places--has been transposed to the close proximity of the body.

Changing Mobilities, Changing Places

One should think of this transposition in parallel with the redesign of public and private spaces that followed both the unrelenting rise in automobile ownership throughout the 1900s and post-World War II capitalism as captured in one phrase, suburban sprawl. Andres Duany and Elizabeth Plater-Zyberk describe this as "soulless subdivisions, residential 'communities' utterly lacking in communal life; strip shopping centers, 'big box'

chain stores, and artificially festive malls set within barren seas of parking; antiseptic office parks, ghost towns after 6 p.m.; and mile upon mile of clogged collector roads, the only fabric tying our disassociated lives back together" (Duany et al. 2000:23).

What I mean by in parallel is to envision the transposition next to the images of sprawl and inquire about potential connections between the two. On the one hand, we have a techno-historical pattern of evolving internet accessibility. As computers became more powerful, they also shrunk in size to the point of fitting into a pants pocket, bringing the Internet to us and transposing the journey to the Internet to the close proximity of the body. On the other hand, we have a story in which post-World War II advancements in city design, riding the wave of automobile ownership, led to the curse of suburban sprawl. The task is to picture this story adjacent to the evolution of internet accessibility.

The adjacency is justified at the outset because the development of suburban sprawl cannot be separated from the mobility assemblage that enables traversal through it (namely, cars and phones). Both have become necessities, but not in isolation. The symbiosis between these technologies creates a "single coordination/ transportation complex that facilitates our movement in contemporary society" (Ling 2015:28). Mobile communication devices, in coordination with automobiles, enabled more efficient travel over the landscape (Ling 2015:29). In fewer than two decades, owning a phone, much like owning a car, became a "necessarily patterned part of life over which we have little choice" (Ling 2015:1). Automobiles and smartphone technology are "woven into the very structure of daily life…[into] the very structure of society" (Ling 2015:29). They are part of the mundane routines of daily life (Leszczynski 2019). The key distinction to be made here is that owning a phone became a necessity much faster than owning a car. Part of the reason for this is that the mobile phone fills in the spaces of the built environment, so to speak. In other words, the symbiosis tells us that the material conditions for smartphone sprawl (i.e., the physical infrastructure over which smartphones coordinate travel) were built into the landscape before consumer-level mobile phones existed. The foundation had been laid.[1.]

The key comparison to draw here is that underneath the mobility symbiosis is an economic symbiosis. To put it simply, while suburban sprawl connects places by road to maximize the circulation of capital, smartphone sprawl collapses places together (e.g., work and home) to further maximize this circulation. So, this leaves us with the dual question of what happens to place under each form of sprawl?

Under suburban sprawl, landscapes are torn apart with little concern for life outside of productivity and consumption, and as a result, the built environment-- designed not for bodies but for cars--is disembodied. The disembodiment of place that comes with sprawl can be seen on the dehumanizing stroads littered across the country. These are the nightmarish meldings of places designed for bodies and places designed for cars, all utterly indistinguishable from each other, generating never-ending lines of the same few fast-food joints and gas stations (Marohn 2021:29). The only bodies to be seen on a stroad stand in the median, holding signs for help as cars ceaselessly pass by. Despite the tremendous excess of capital circulating around them, panhandlers stand in the median and wait for sputtering flashes of empathy to be handed out of car windows at red lights. This is not to say that the stroad is the cause for panhandling. No, the point is that this image reveals the hostility of spaces built primarily to maximize the circulation of capital. Hostility is the emergent placeness of suburban sprawl.

The stroad is a good example of what French anthropologist Marc Auge calls "non-place" (Auge 1995). Non-places are produced by contradictions of supermodernity (e.g., sprawl) with "all the air, rail and motorway routes, the mobile cabins called 'means of transport' (aircraft, trains, and road vehicles), the airports and railway stations, hotel chains, leisure parks, large retail outlets, and finally the complex skein of cable and wireless networks that mobilize extraterrestrial space…" (Auge 1995:79). This non-place is the space of sprawl. Note the uncanny similarity of the Auge (1995) quote to the quote from *Suburban Nation* (Duany et al. 2000). Auge, in describing non-place, does an excellent job at characterizing what I call the emergent hostility of sprawl:

> A world where people are born in the clinic and die in hospital, where transit points and temporary abodes are proliferating under luxurious or inhuman conditions (hotel chains and squats, holiday clubs and refugee camps, shantytowns threatened with demolition or doomed to festering longevity); where a dense network of means of transport which are also inhabited spaces is developing; where the habitué of supermarkets, slot machines and credit cards communicates wordlessly, through gestures, with an abstract, unmediated commerce; a world thus surrendered to solitary individuality, to the fleeting, the temporary and ephemeral, offers the anthropologist (and others) a new object, whose unprecedented dimensions might usefully be measured before we start wondering to what sort of gaze it may be amenable (Auge 1995:78).

Again, note the similarity between Auge (1995) and Duany et al. (2000), with the matching place descriptions and in the tone. But, the Auge quote ends

ambiguously. It intentionally raises the questions of, what gaze and, what new object? The ambiguity here creates room for the anthropologist to consider multiple possibilities for the exploration and identification of a new object and an associated gaze, like a variable in an equation. Supposing that the new object is non-place itself, I want to make a generous interpretive leap here, and choose to interpret the gaze not as the scholar's eye, but instead as the gaze of digital screens--the totalizing gaze that draws us into the screen and out of our bodies. After all, non-places (and the space of suburban sprawl) are highly amenable to screen gazing.

This interpretation of Auge (1995) extends and enriches the idea of a disembodied built environment under sprawl. It also serves as a connecting point between the two forms of sprawl. But, the second question remains. What is the emergent placeness under smartphone sprawl? To answer this question, I use *Non-Places* (1995) to explore the anthropological implications of urban sprawl and then weave in the implications of smartphone technology.

Non-Place

Non-Places was written in 1995, before the ubiquity of pocket computers and by the time suburban sprawl was normal. The work is an attempt to anthropologically problematize the logic of late capital in terms of its transformations of place. It is crucial to note that Auge wrote *Non-Place* before smartphones were invented. What this means is that screen-space interactions of the kind I observed during my fieldwork for this project were utterly absent from observations of social relations in non-places. Knowing this, it is no wonder why Auge claims that "non-places are spaces which are not themselves anthropological places" (Auge 1995:78). Places, for Auge, as opposed to non-places, are relational, historical, and concerned with identity. The two are "like opposed polarities: the first is never completely erased, the second never totally completed..." (Auge 1995:79). Auge recognizes that non-places "mediate a whole mass of relations, with the self and with others, *which are only indirectly connected with their purposes*" (Auge 1995:94; emphasis added). If written today, Auge would have to consider how smartphones consume the wandering attentions of people traversing or dwelling in non-place, which, to say the least, changes things a bit.

The spaces that Auge uses as examples of non-places are mostly sites that facilitate travel. These sites are in-between, and they call for a pause or interstice of some kind. Hotel rooms, airport terminals, and cars moving on the highway are all places of pause in this sense. What Auge means by a mass of relations indirectly connected with the purpose of non-place is that non-places mediate relations that are not directly

mediated by the specific functions of the space itself. People may "travel, make purchases, [or] relax" in a non-place like an airport terminal, but these relations are not fundamentally tied to the purpose of the airport (Auge 1995:94). Home, by contrast, becomes home through a continuous ascription of meaning, a continuous tie between the relations happening in place and the place itself, so that the purpose of the home becomes tied to the relations which take place in it. Our memories, anticipations, and experiences anchor parts of ourselves to the places we love. Meaning tied to space transforms it into place. The specific tile in the hallway that makes a creaking sound enunciates its presence as a feature of place. Its nightly rhythm unfolds over time, and it is this continuity of experience, the rhythms, that imbue places with affective forces and meaning. Though Auge is correct that non-places offer an experience of "solitary contractuality" (Auge 1995:94), where one participates more in an economy than a society, they gain an ascribed placeness over time by the rhythms of people who frequent them.

However, one corollary of this thesis is that changing techno-social conditions have rendered non-places directly connected with their purposes. A rhythm of screen-space interactions associated to non-places reifies Auge's argument that non-places are never totally completed, but in an absolutely fascinating way non-places have been *retroactively purposed* to amplify and exploit attentional forms of labor (Celis Bueno 2016).

Non-places are liminal sectors of sprawling, networked cities that, by virtue of their in-betweenness, unmoor attention and compound the attractive force of cybernetic devices. In such places, we are coming from a place where attention is attuned here, and we are going to a place where attention will be attuned there. The result is a space where attention wanders. Hence the liminality of an airport terminal where travelers are no longer home and at the same time not yet at their destination. While we reside in such places, we are both at once coming from and going to. So, where does attention go? Do travelers during layover just sit and do nothing? Of course, there is plenty of money to be spent at an airport terminal, but what happens in the lobby when the pretzels and coffee are gone?

When our gaze has not settled on any particular place to linger, our feet begin to shuffle, our eyes begin to wander, and we start to look outside of us. But, from numerous observations while conducting fieldwork in a variety of places in Conway, Arkansas, I have found that if one takes the time to people-watch in a liminal space, one will no doubt observe that a wandering, nomadic instinct is short-circuited by the screen. Spaces in-between--waiting rooms, lobbies, passenger seats, airport terminals, etc.--appear built for compulsions toward screen-space.

As features of the built environment, they acquire a peculiar placeness in their repeated association to bored people scrolling on social media. And, these are precisely the spaces already mentioned--spaces championed and proliferated by post-World War II city design with the primary intention of circulating capital.

Interstices of the built environment--non-places created as a result of transportation change--have been re-purposed as a result of communication technology to facilitate and amplify attention capture, and data collection. Consider, for example, the fast-charging USB ports installed between every seat in modern airport terminals that ensure no battery goes uncharged. It is not only the battery that is charged. Scrolls, taps, and swipes of the screen generate data through attention that charges the economy. Our attention to the screen is captured and mobilized to create targeted advertisements as well as entirely new markets. In this way, attention to smartphone screens in non-places constitutes a form of exploited labor (Celis Bueno 2016).

What makes this reification of Auge (1995) interesting is that it happens out of a contradiction. The intrinsic incompleteness of non-place made its re-purpose possible, rendering the mass of relations mediated by non-places directly connected with the purpose of non-place. This contradicts Auge's claim that the relations of non-places are "only indirectly connected with their purposes" (Auge 1995:94). Readers have criticized Auge for neglecting the airport as a site of occupation. Surely, the airport is an anthropological place for its official workers. But, work has diffused across space. The smartphone makes it impossible to not bring work home. Even the travelers in an airport, who are in a space of idle attention, are working (cognizing, attentioning), and this work is directly facilitated and amplified by built features of non-place. The re-purpose of non-place is simple. Everyone on their phones in non-place is working and consuming, producing capital for entities unknown to them. There is an attentional labor underlying these screen-space social relations, and this work is one of the ways we can observe how non-place becomes place. Or, at the very least, how smartphone technology alters the purpose and experience of non-place.

This extension of Auge can be taken further, if it is accepted that smartphones are focal points of a portable connected space. Then, non-places become physical, spatial triggers which amplify behaviors, compulsions, and associations to digital environments. Auge himself argues that the notion of anthropological place includes the "possibility of journeys made in it, the discourses uttered in it, and the language characterizing it" (Auge 1995:81). So, if we consider journeys through digital space, the discourse of meme creation and circulation, and the vast techno-lexicon used to navigate such spaces, then non-

places are anthropological in their repeated association with and facilitation of cyberplace (Halstead 2021; Boos 2017).

Auge's hypothesis is that the excesses of supermodernity with its "overabundance of events and spatial overabundance…produces non-places" (Auge 1995:39, 77). And yet, it is precisely this spatial overabundance that drives repeated immersion into a digital space that captures far-away places in the boundary of the screen that provides a kind of bare-essential space (seating, shelter, fast-charging USB ports), as well as the network connectivity that makes it possible to be in multiple places at once. It is an overabundance of space that facilitates a super-abundance of hybrid digital-physical place. This is yet another reification of Auge through forces that gradually contradict his original claims. Non-places, in their inability as spaces of idle attention, create and maintain the conditions for habitual immersion into cyberplace, where places are shattered through, reconfigured, and folded over onto themselves. When idle or lingering in non-place, the call of the screen becomes irresistible. To be clear, not only are non-places places, but the cyberspace they drive us into is a portable, connected place. Car passengers scroll, patients in waiting rooms scroll, and travelers in layover scroll. When they zone-out from the world they are zoning into the screen? Where do they go? Where are they?

We take our bodies out of their place when we zone into the screen and a space that demands attention. It attracts our eyes, pulls our bodies in, and our spines down. This can be directly observed. Doomscrollers[2] hold their bodies in contorted positions as they slowly sink into their chairs, and it is only a flash of presence in the place that brings their posture to awareness and reminds them to sit comfortably. The screen intervenes in place experience, and this repeated intervention transforms non-places into places. What this means is that we can study these transformations of place as anthropologists. The idea is to observe people interacting with smartphones in non-places, to situate oneself in a social milieu with a specific set of questions in mind.

Field Observations

During my field observations for this project, I observed people traveling through or dwelling in transitional or temporary places while on their phones. Some of my observations include, slouched students gazing downward at screens while walking to class, holding conversations at cafeteria tables while intermittently tapping and scrolling, browsing social media while waiting for appointments with professors, pulling phones out of pockets and returning them without even a glance, bored doomscrollers holding their bodies in awkward positions for several minutes at a time, people using urinals while

texting with their idle hand, eating entire meals while watching videos, sending messages, scrolling, and people noticing interesting things in their surroundings, stopping, immediately pulling a phone out to take photos and then continue walking. I observed countless moments of wonder and curiosity be interrupted by compulsions to search Google.

Before interpreting these social relations and place experiences anthropologically, it would serve to remark on the way we talk about them in ordinary, every-day language. Especially since the phrases we use to describe observations like those listed reveals widely held assumptions about the observed social phenomena and our limited awareness of the places they occur, which is the very assumptions this research seeks to deconstruct.

One might assume that what I studied boils down to individuals using their phones. But, it was quickly apparent that this ordinary language used to describe my observations is a severe mischaracterization that obscures more than it reveals. This normative objectification of the smartphone may first appear trivial, but it signals a disconnect, a deep misapprehension of smartphone technology and the extent to which it has transformed us and our places. While we, in our attempts to characterize human relationships to phones, remain bound by the restrictive language of object-ownership and individual psychology, smartphone technology continues to evolve beyond the antiquated language we use to describe relations to it.

"People using their phones" assumes the smartphone foremost as an object that individuals possess. But, the phone is not a thing one possesses, it is a place one resides. And, when observed this way, through the lens of placeness, a different picture appears that looks less like people on their phones and more like people in a place with their phones. This place consists of a whole series of physical body movements across a hybrid physical and digital social field, and this field is conducted in obsessive collaboration with an always-on, ever-present pocket companion. The result is a routine orbit around a vast network of non-human or extra-human actors (e.g., parasocial entities, advertising algorithms, social media modulators) that cannot themselves, excluding their effects, be physically observed outside the screen. What this means is that although most of my field observations took place on UCA campus, the space of my observations reached far beyond the physical boundaries of campus, into latent virtualities and intersecting bubbles of cyberplace. Every observation I made of people interacting with smartphones had an extra dimension woven into its social relations by moving thumbs and attentive eyes.

I characterize what I observed as obsessive collaboration with pocket companions. One of the features of this collaboration is a constant interplay between the body in place and the data that can be generated from it.[3] Nearly everything people do (or do not) and every place people go (or do not) can be translated into information, such as location, personal aesthetics like the clothes people buy or wear, the make and model of cars people drive, popular media preferences, frequent conversation topics, among others. People do all of these things with pocket panopticons. Waiting patiently to be unpocketed, there is a constant attractive potential for our bodies and the places we move through to be informatized.

We collaborate with our phones constantly. They tell us about the weather before we step outside, direct us along optimal GPS routes, and remind us of important events. But, the underlying purpose of this collaboration is to translate our bodies and the places we move through into information, which requires attention to be constantly re-routed away from place and to the screen. The habitual disruption of place experience is a choreographed relationship to smartphones. It can be observed as a series of physical, interruptive techniques of the body or special habits that we perform with screens as we move through our daily lives (e.g., swipes, taps, pick-ups, selfie and photo techniques) (Mauss 1973:6,3).

I take some of my observations, as listed previously, and explore what I mean about this choreographed relationship to smartphones that exists in the interplay between body and place. Recall my statements earlier about the short-circuiting of a wandering, nomadic instinct and my observation about compulsions to search Google. What I want to draw attention to here is a repeated pattern in which compulsions to pick up mobile devices interrupt moments in place that stimulate or trigger contemplative instincts or tendencies. In this way, place experience is intervened on, interrupted, or otherwise disrupted. But, what exactly is interrupted or short-circuited? The answer to this question requires an understanding of how places affect us, or in other words, an understanding of the affective forces imbued within place.

Disrupted Place Experience

Places exude the meaning ascribed to them over time. They call upon us and move us. They stoke feelings, inspirations, and anxieties we might not otherwise confront. No one sits blankly on a canyon overhang as the sun drops below the horizon and then wills a sense of captivation. No one looks across soulless subdivisions or seas of barren parking and by their own volition casts desolation over themselves. No, wonder and terror befall the captivated (Duany et al. 2000:24). So, the use of the word captivate is crucial here. The prefix captive

reveals precisely the notion of falling into place, the powerlessness in moments where the affective forces of place hold our attention captive. We fall into places, and in these moments, intimate experiences that "lie buried in our innermost being…flash to the surface of our consciousness [and] evince a poignancy that the more deliberative acts--the actively sought experiences--cannot match" (Tuan 1977:136).

Compulsions into screen-space disrupt the flash to the surface and replace a non-deliberative fall into place with an actively sought experience of screen-place. Here, the actively sought experience is one where we use our phones to informatize ourselves and our places. There are many different ways we do this, but the two I want to discuss here are compulsions to take photos and search Google.

Think back to the transposition story. Think about what it was like to be in a place that stokes intrigue before camera technology was mundane. If something in that environment stood out, say, a flower the observer can not identify, one might get a closer look, sit with it, take it in, and question others about it. They might draw a picture, go to the library, and search the shelves for a book with a matching image. In this scenario, there is an interval where curiosity remains without the resolution of an authoritative answer (Han 2017a).

However, Google provides an immediate satisfaction. Today, there is no need to endure not knowing the answer when there is a residual abundance of answers in the palm (Virilio 1997:25; Narayanan and Cremer 2022). A vast archive of information always ready at our fingertips collapses the interval between sparks of curiosity and inquiry and the arrival of insight, wisdom, expertise, and authority (Han 2017a). The reach for the screen becomes muscle memory, and the gravity of screen-space locks the body in orbit.

The interval collapses, and a panoply of techniques, conversations, moments of duration, interval, struggle and contemplation, across multiple social contexts in different places, become transposed to an individuated relationship between the body and its pocket companion. Now the walk feels different. The flower is viewed through a screen and promptly identified by an application or a Google search, and the walk continues. But, the flower is simply a stand-in here, a metaphor for any experience that is cut short, immediately recorded and uploaded to memory archives.

There appears to be a tendency to bury experiences in digital archives before living them (Halstead 2021:564), coupled with a tendency to short-circuit instinctual cognitions evoked by place experience. As a result, meaningful interval between contemplation and resolution is eliminated, and a diverse range of places and techniques of the body that were contextualized by that interval are transposed to the body proximity of smartphone companionships. No journey necessary. Just reach into your pocket. But hey, at least you got a hundred likes on your selfie with the flower! ☺

So, the problem here is not merely the disruption of subjective experience, it is that these choreographed response patterns (e.g., short-circuits and photo impulses) make people who experience moments of curiosity or intrigue less likely to seek resolution from the place context that engenders the moment. They are less likely to fall into the place of the body. Instead, they fall into the place of the screen, where the content is modulated by capital flows and algorithmic weaponizations of their own desires and immediately satisfy themselves by producing (taking a photo) or consuming (Google search) information.[4] In each case, place experience is disrupted for the purpose of informatization.

As people move about their daily lives, they may encounter various little pleasures and moments of wonder. They may look through the kitchen window and see sunlight sparkling across iridescent feathers of a crow perched on a power line. They may sit in their cars on a clogged interstate and wonder about the mechanics of traffic jams. But, I see a pattern of collaborating with smartphone technology to habitually disrupt the crystallization of these precious moments. Meaning becomes displaced from the present and consolidated into virtual self-monuments, into camera rolls, notes application entries, and archives of saved posts. Spontaneous inquiry is cut short and relegated to the front page of Google. Images of ourselves merge with enunciations of our desires, our beliefs, and confessions. We call it a social media profile. It is a memory statue, a monument to the self with the bonus feature of instantaneous conversion to memorial upon death. Movement through daily life becomes a duet with a close companion, a performance with a loyal dance partner who lives in a pocket and goes to work in hands. Every moment becomes a technologized touch performance, a prayer to an electronic god-mind that exists in the signal flow between our hands, cellular towers, and satellites (Parisi 2008).

This performance can be clearly seen in social media profiles, with the selfie being a body technique used to express and perform one's identity in an online community. Sociologist Erving Goffman's dramaturgical notion of performance, "all the activity of a given participant on a given occasion which serves to *influence* in any way any of the other participants" (Goffman 1959; emphasis added). meshes well here. Social media influencers, for example, conceal the negative aspects of themselves while highlighting the positives. The systematic self-presentation of the influencer is designed to physically direct people to certain brands or places.

Any instantiation of a smartphone body technique triggered by an algorithm or by an interstice of the built environment (e.g., riding an elevator) is a performance in both the physical and digital spheres of human interaction.

What is Missing from the Literature?

A variety of authors across disciplines have written about a disruptive human experience that has emerged as a result of ubiquitous and mundane light-speed communication technologies and networks. The philosopher Byung-Chul Han, in the book *Scent of Time* (2017), calls it the loss of contemplative lingering (Han 2017a:24,28) and an "absence of the gravitation of meaning" that accompanies the fast-paced, minimal-interval rhythm of the digital quotidian. Edward Relph, a geographer, calls it digital disorientation (Relph 2021:573). Historian Huw Halstead calls it connective emplacement (Halstead 2021). Interdisciplinary researchers and memory studies scholars Andrew Hoskins and John Tulloch call it hyperconnectivity (Hoskins and Halstead 2021:680; Hoskins and Tulloch 2016:9). And, lastly, cultural theorist Paul Virilio called it a residual abundance (Virilio 1997: 25).

According to Han, the disappearance of meaningful interval in daily life--the disappearance en masse of contemplative lingering--causes us to "zap through the world" (Han 2017a:44). The disappearance of intervals entails a disappearance of a "gravitation of meaning" (Han 2017a:28). For Han, late modernity offers an over abundance of options and possible directions. This overabundance has a slowing effect on the incision process (i.e., our ability to make decisions or decisive actions) (Han 2017a:30). Mere speed or acceleration of time and history is not enough to describe this slowing effect, since the acceleration of options overflows, leading to a standstill or deceleration. What Han describes as a "massification of events and information" that "pushes into the present" Han 2017a:29) is an overwhelming abundance of potential viabilities, routes, and directions that make any choice appear daunting.

Edward Relph echoes a similar sentiment in *Digital Disorientation* (2021), "digital technologies… overwhelm us with information and images, bring into question what is real and fake, confuse real and virtual reality…" (Relph 2021:572). Relph speaks of a "digitally poisoned sense of place," where a "phantasmagoric mixing of cultural memories…can come back to invade experiences of actual places" (Relph 2021:574). Note the similarity here between a "massification" that "pushes into the present" and a "phantasmagoric mixing" that "can come back" (Han 2017:29; Relph 2021:574).

The notion of hyperconnectivity is helpful in understanding this intersection between Han and Relph:

[H]yperconnectivity is a multidimensional mechanism of late modernity in its affordance of temporal proximity (and distance) to the past and to an emergent future. [This goes] beyond using the term 'connectivity' only as signaling a new immediacy and pervasiveness of the relatedness of actors with others, with events, and with what the Glasgow economics students call "the real world" out there through increasingly mobile and digital networks (Hoskins and Tulloch 2016:20).

This "'shadow archive' of media data that might emerge into the present at any moment with unpredictable effects" (Halstead 2021:564) provides further depth and explanatory power to what Han describes as a "massification" and Relph as a "mixing" which "push" into the present or "come back" (Han 2017a:29; Relph 2021:574). What I want to draw attention to is that these authors are investigating the same phenomena. They are assessing the damage, so to speak, of what Paul Virilio described in the late 1990s as a "residual abundance of the world's expanse in the face of ultra-powerful communication and telecommunication tools" (Virilio 1997: 24):

So, after the line of the visible horizon, the original skyline of the landscape of the world, the square horizon of the screen…will emerge as a bug in the memory of the second horizon--that deep horizon of our memory of places responsible for our orientation in the world--causing confusion of near and far, of inside and outside, disorders in common perception that will gravely affect the way we think (Virilio 1997:26).

Hyperconnected technologies--the square horizon of the screen--rooted in mundane, quotidian contexts may "gravely affect the way we think" (Virilio 1997:26; Hoskins and Tulloch 2016; Leszczynski 2019). They may slow the incision process or poison sense of place (Han 2017a; Relph 2021). All of these authors share a concern that these effects "may create a present stripped of meaning and shape, a creeping disconnect from one's surroundings and a loss of meaningful relationship to the world around us" (Halstead 2021:564).[5]

But, how precisely does the body experience this slowing incision process, creeping disconnect, or poisoned sense of place? While these authors provide useful ways to think about these social conditions changing as a result of hyperconnected technologies rooted in the mundane, their perspectives are often from a birds-eye view. In other words, it is clear that they have recognized the same habitual disruptions of place experience, but what this research aims for is a picture of what the disruptions look like on the ground, in direct observation of the interplay between the motions of human bodies

and the places they reside. The interruptive body habits at the bottom of place disruption are best seen on the ground and situated in a place-context. Halstead's central position in *Cyberplace* (2021) is that there is a tendency to dismiss digital places as placeless. Hence, the term connective emplacement which implies a "shift in focus [on digital environments] from non-location to locatedness…to put some of the shape back into the shapelessness of digital memory" (Halstead 2021:567). And, in a sense, my observations and interpretations shed light on a disrupted sense of place that emerges from the shape of body habits between the physical location of the body and the place of the screen.

The Choreography

The consolidation of these habitual associations, body patterns, hand movements, and interruptions of place experience by injunctions from the screen is the multiscalar dance of screen-space. The dance adds another face to the symbiotic mobility assemblage. Each leg of an Instagram influencer's road trip, for example, can become an informatized metric for a sponsored social media post that attracts thousands of engagements. What this means is that a single image post--data generated from the choreography--can attract numerous other pairs of tapping thumbs and wandering eyes, pulling them together into a shared place to generate and refine more data. The dance is found in this interconnection of bodies, together yet solitary and diffused across space and moving in tandem with pocket companions. From dancing together on shared ground to dancing together on separate surfaces, from feet gliding over soil and eyes glancing into eyes, to wiping hands on surfaces of backlit screens, and staring past each other in video calls.

This dance is modulated by computer programs designed to amplify and maximize engagement with hyperconnected devices. Some examples of algorithmic modulation include notifications, content curation and tracking (i.e., control over what content is seen and tracking of what content is engaged with), and targeted advertisements. And, since the dance is firmly situated in a mundane context of everyday life and mobility, what these modulations amount to is an extra-human, cybernetic agency that animates our bodies and exploits the cognitive and kinesthetic labor intrinsic to the movement through and dwelling in place. This exploitation occurs by re-routing attention away from place and to the screen, capturing molecular body movements (i.e., kinesthetics ranging from simple thumb swipes to advanced selfie techniques), and converting them into capitalized datafications (Celis Bueno 2016; Iveson and Maalsen 2019).

Even if we are not looking through the information archives we obsessively and excitedly curate,

something or someone is. Every attentional short-circuit, every interval collapse is identified, processed, and integrated into a datafication of human subjectivity as "a source of statistical and demographic data about a given population" (Celis Bueno 2016:149; Iveson and Maalsen 2019). The desire underneath the compulsion toward screen-space is not fulfilled in the moment the screen lights up and we respond. No, this is only the beginning of its journey. Spontaneous desires are recorded, captured, and fed back. The statistical and demographic data is mobilized and weaponized against us by cybernetic devices designed to "absorb the endless flow of valorization information produced along the whole social field, translate it into control information, and feed it back into the production process" (Celis Bueno 2016:65). What this means is that the choreography generates tremendous value (capital) under an attention economy. Time spent looking at brands, products, and things which generate desire for those brands and products amount to auto-exploitation. The attention economy turns doomscrollers into salespeople endlessly pursuing themselves as the ultimate sale. There is no domination necessary when "everyone is an auto-exploiting labourer in his or her own enterprise"(Han 2017b:11). Except, the choreographed auto-exploitation occurs regardless of enterprise or employment. When the battery dies or the backlight fades, the screen becomes a mirror that reflects the bare face of an unwitting salesperson.

This research pulls from political and cultural theorist Claudio Celis Bueno's immanent critique in *Attention Economy* (2016). Bueno focuses on the economic aspects of attention capture at large. But, here I have narrowed my focus down to what these mechanisms look like as they act on the body, in the ritualistically performed hand and body movements that we play out every day, in every place, in constant willing collaboration with a pocket-sized cybernetic companion device. And, this phenomenon is far more than attention capture. It is rather, at the very least, the appropriation of place experience itself.

Conclusion

Observations of a Library Tour

Sixteen students follow a librarian around for a class tour of the campus library. The librarian leads the students to each main location in the building, and stops to speak to them about how to utilize the space. Naturally, as the tour progresses, the students' eyes wander away from the librarian. They look to the place outside themselves, but none reaches for a phone. The students find other ways to endure. Feet begin to shuffle, and bodies sway. They scan the surroundings, and briefly watch others do the same. Only a few maintain focus, but all eventually break.

Still, none reaches for a phone. The tour ends and the professor leaves. And, the very same students, after displaying the same signs of idle attention, respond with a reflexive reach for a phone.

There are at least two coercive social codings of place in the library observation. One is from the librarian and library and the other from the professor and library (body and place). It would be rude to be on a phone while the librarian provides a service. At the same time, the professor emanates a coercive force-field that checks any compulsion toward screen-space at the door. Each code blocks the choreography and prevents the screen from consuming the students' nomadic gaze. When the tour ends and the professor leaves, both authoritative codes recede, and the same students respond to the same signs of idle attention--not with endurance or presence, but with a choreographed response instead.

Wandering eyes and shuffling feet signify an ongoing attempt to connect to place by situating the body therein. To say it plainly, finding something to do in a place means finding a way for your body to remain in that place. The choreography is one way of doing this, but it happens to extend its reflexive and habitual nature over nearly all moments of idle attention that occur in between times of activity, rest, or work. In happens in places like waiting rooms, bathrooms, airport terminals, and passenger seats (sadly driver seats too), and in cyberplaces while videos buffer, games load, and ads stream. Attention is unmoored in all of these scenarios, and a potentiality emerges for introspection, healing, reflection, contemplation, presence in place, or boredom itself. But before these potentialities can be actualized, an algorithmic reflex intervenes, and our attention voraciously consumes the feed. Endless information streams of bite-sized places. We look away from the spectacle only to be caught within its totalizing gaze. This is the appropriation of place experience at work, stoking an undying flame, infiltrating every solitary moment, and collapsing every interval.

So, the choreography does not only work to short-circuit intimate place experience. It also habituates its performers to associate places of idle attention with an imperative to avoid wasting time, down to the smallest interstitial boredom. Boredom is an investment opportunity. As discussed earlier, the space of this opportunity was built decades before the time and labor in that space could be appropriated. In this sense, smartphone sprawl was a prophecy of suburban sprawl.

The choreography extends its habitual and reflexive nature over even the smallest intervals. Every moment of pause reinforces a reflexive cyber-placeness that we carry with us, that is tied to both the spontaneous moment-to-moment improvisation of daily life and its routines. This is the emergent placeness of smartphone sprawl. In other words, an embodied, spatial relationship to the built environment drives our bodies into cyberplaces. Diving into meaningful presence in places, most of which are polluted with oppressive lighting and the constant wail of interstate traffic, seems preposterous when one can always instead fall into an infinity of places contained within the screen.

The screen exerts a gravitational pull, a residual abundance of information that re-routes an instinctual curious gaze once attuned to the great expanse of the outside. The weight of this abundance, of hyperconnectivity, with vast archives of information residing in the screen that collapse past and present, near and far, shapes the spine, pulling it down to the screen. Imagine early proto-hominins as selection pressures toward bipedalism converged. Picture their spines straightening, and their heads reaching over tall Savannah grasses. The image provokes a Promethean mythology, one where the essence of *Homo* is forethought, as in, looking over to see what comes next, to see what threats loom ahead or behind the grass (Stiegler 1998). Our attention to the outside, the abyss beyond Savannah grass, is being increasingly captured and re-routed. The choreography marks the appropriation of this primordial stature.

The parallel story of evolving mobility assemblages and the places we design around them has unfolded so rapidly that we appear to have accepted being locked into the orbit of screen-space without a thorough examination of its consequences. The time is out of joint. Except here, we can see that the rhythms of cultural evolution are out of joint with the rhythms of technical evolution (Stiegler 1998:15). In other words, the transformations of place experience prophesied by suburban sprawl, in confluence with rapidly evolving communication technologies rooted in the every day, developed faster than language or culture could come to grips with them. This disconnect has created a new field of inquiry in the discipline of anthropology. The choreography is a musing on how to move around in this field, how to possibly define the field's contours, and methods of approach. It is a tentative step forward, a tentative metaphorical reframing which reveal aspects of human relationships to smartphone technology that have flown under the radar for too long. We need to develop methods that shed anthropological light on how smartphones transform place experience.

The first step in doing this is to explore the ordinary language that signals the disconnect. That we persist in calling them phones despite the fact we hardly use them as such is a signal of what I earlier called a deep misapprehension of the technology and the extent to which it has affected our bodies and places. The smartphone qua phone, that is, the smartphone as being phone, is an ironic misnomer that names the phone precisely for its obsolescence.

It is easy to misapprehend the smartphone as a distinct object of technological utility that is contained by its physical boundaries. We know that it has the power for global communication using digital signals, but there is something about its physicality that deceives us. It is easily portable and typically weighs only a couple hundred grams. It is responsive and haptic. And, it is precisely this immediate physicality that we feel in our hands and that vibrates against our bodies that distracts from its transcendence over physical boundaries. Every vibration against the body is a tactile reinforcement of its physical objecthood.

At the same time, there is a kind of longing intimacy between the finger and the screen, in the slow-motion arc of the fingers path, in the press of fingertips against OLED sheen, and in the haptic response that slightly nudges back or vibrates against our thighs. The majority of Americans spend several hours every day looking at the screen. We swipe, tap, slide, hold, caress. We have physically intimate companionships with them. They vie for our attention and engagement, and we willingly oblige. Even when our devices have nothing to offer us in the moment, we tap in anticipation, in want of a notification. The phone listens and listens better than most people. They know things about us that we hardly know about ourselves. They see and hear us at our worst and capture our best. Our identities tie to them as we construct our lives in real time through sequences of ritualized body habits. All of these mundane aspects of our companionships to smartphones maintain focus on an individuated relationship between the user and a technological utility, and this reinforces widely held misapprehensions of its powers.

But, as I have demonstrated throughout this article, understanding these devices as mere consolidators of ordinary objects of technological utility (e.g., phones, cameras, flashlights, planners), works against understanding how they transform place experience. We stand a better chance at studying these transformations (i.e., the appropriation of place experience, the choreography, etc.) when we steer away from thinking in terms of object-possession and individual psychology, toward contexts of place. To consider, as anthropologists interested in place, how social codings of place inform the quality and frequency of smartphone interaction, and conversely, how technology informs the codings. By situating the smartphone in an anthropological context of bodily associations to place, there is an algorithmic ritual at hand that generates and everts a portable, connected place (which has been sewn into the fabric of the modern networked social field.) We conduct an elaborate choreography with these pocket companions that, by means of a constant re-routing of attention from place to screen, transforms our places and the way we experience them. The choreography adjusts the picture. It unveils what was previously veiled by the normative objectification of the smartphone qua phone. That is, how smartphones transform place experience.

Notes

1. It was only a matter of time for the smartphone to dig itself into quotidian trenches. That there was an early symbiosis between the technologies meant that the smartphone could easily become a part of daily routine, before we could even imagine hyperconnected social media (e.g., Facebook, Instagram, YouTube, etc.). There was hardly any time for people to assess the consequences, as it had already become a necessity. It was a physical mobility tool before it was a social mobility expectation.

2. Doomscrolling is the act of persistently scrolling through social media feeds despite feeling bored, annoyed, or otherwise disturbed.

3. It is important to know that each of these data points refines the predictive capability of any other. Data capture algorithms cross-reference data points to build increasingly robust datafications of our lives. An algorithm that knows, for example, what kind of car a person drives and where they live is more likely to make accurate predictions about that persons productive and consumptive habits. The reader is left to imagine what happens when countless algorithms collect countless data points across nearly every aspect of movement through contemporary spaces.

4. It is a little of both for each case.

5. Note how this harkens back to Marc Auge's (1995) bleak characterization of non-places, and his skepticism of the placeness of non-places.

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