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invisible hand

ARTIST STATEMENT

With a background in art direction in advertising, a degree in journalism, minor in business and multicultural studies, I like to sum up my mode of thinking as design + words + strategy + people. I tend to view things from an analytical, borderline over-thought perspective. I parse my words and my imagery carefully. With almost all my experience in advertising and visual communications, my design goal, professionally, at least, was to achieve the client's goal effectively.

Upon entering the M.F.A. Design + Technology program, I was finally able to cut ties with any client, and create for myself. I moved away from advertising, commercialization and products in general and found myself questioning those things.

INTRODUCTION

American culture is to love America, and to love something, *truly*, is to also be critical of it. It is my personal belief that not enough of Americans practice this kind of critical, reflective love – to their country and to themselves. America's brand of patriotism does not allow room for this kind of criticism and can be perceived as being anti-American ("if you don't like it, leave!"). My goal with this project is to spark a conversation with each other and ourselves about our (conscious and unconscious) impact in American society.

CONTEXT
AMERICA'S UNIQUE PATRIOTISM

Patriotism, at its simplest definition, is the pride and devotion to one's homeland – and America's cup runneth over. To be American is to be patriotic; this is something that tends to generally run true among genders and generations, with more than half the population owning an American flag and nearly the same amount owning patriotic apparel. [1]

In fact, 81 percent of American adults describe themselves as "very patriotic" or "extremely patriotic" (27 percent and 54 percent, respectively) [2]
Rooted in American patriotism is honor, loyalty and bravery, so enlisting in the military and risking death for one's country is regarded as one of the most patriotic acts. [3]

This extreme pride in one's country is uniquely American. In a survey asking citizens if they agree with the statement, "My country is the best in the world," Americans topped the list with 41 percent of Americans in agreement. Trailing America is India at 36 percent, Australia at 34 percent and the United Arab Emirates at 27 percent.[4]

This statement actually crosses the bridge of "patriotism" to a concept called American Exceptionalism. American Exceptionalism is exactly what it sounds like – that America is an "exception" compared to the rest of the world. It's not simply just that America is "different" or "special;" it's a belief that U.S. history follows a different path from the norms of other countries. It is morally superior, the bearer of freedom of liberty to the world.[5]

Furthermore, American exceptionalism presumes that its values, political systems and history are worthy of universal admiration. It also implies that the U.S. is entitled to play an unequivocal role on the world stage.[6]

HISTORY OF AMERICA THE BEAUTIFUL
Katherine Lee Bates, a young English professor, embarked on a cross-country trip to Colorado Springs – quite the feat for a young woman at that time – and the scenery she saw on the way inspired her to write what we know now as "America the Beautiful."[7]

 It was first published in 1845 in *The Congregationalist* to celebrate the Fourth of July, several years after she had written it. The fact it was initially published to celebrate to celebrate the Fourth of July further solidifies its position as America's "unofficial anthem."[8]

There is an interesting argument to replace "The Star-Spangled Banner" with "America The Beautiful." Some prefer America the Beautiful because they find it more melodic, easier to sing and prefer its lack of war-imagery, while others prefer "The Star-Spangled Banner" for the same reasons.

AMERICA THE BEAUTIFUL VS THE STAR-SPANGLED BANNER
I chose "America the Beautiful" over a more recognizably patriotic song such as the national anthem for those reasons as well. In addition to that, this song is less polarizing in today's current events re: Collin Kaepernick and kneeling during the anthem.

I felt that if I chose The Star-Spangled Banner, participants would be automatically averse to it or associate it with Kaepernick's (and other's) protests, and while I do agree with their message, that was not my intent with this installation. "America the Beautiful" provides a more neutral context from which the participants can draw their own conclusions.

MUSIC THEORY + AFFECT OF MUSIC ON MOOD
KEY CHANGES / MODULATION

Key changes, or modulations, is simply the transition from one key or tonal center to another. As simple as it may seem, these modulations can trigger a variety of responses – from emotional and physiological – from the listener.

The key of a piece sets the general mood for the song, so, of course, a modulation changes the mood. Generally speaking, major keys produce a "happy, joyful" mood.[9] Tempo and rhythm also affect a song's "mood."

In addition to eliciting certain emotions, music can also be a powerful cue in memory recall and bringing back emotional experiences. This is because it is a pervasive part of social life and typically accompanies significant life events (weddings, religious ceremonies, etc.). There are many associations between music and emotionally charged memories.[10]

Witnessing someone else being affected by an event can also cause someone mirror that same emotion. This phenomenon is known as *emotional contagion*, or less clinically speaking, a form of empathy. This occurs when we watch a sad scene in a movie, or feel our friend's excitement. By having multiple participants involved to have a more complete experience, insvisible hand hopes to tap into this emotional contagion

THE PROJECT: INVISIBLE HAND
invisible hand is an interactive sound installation that initially plays the traditional American folk song "America the Beautiful" but gets more complex, warped and discordant as more people participate. This was designed with the intent of compelling participants to reflect on their role, and the role of their fellow Americans in society, and their hand in an ever-changing and warping sociopolitical sphere.

The title "invisible hand" is a direct reference to the phrase coined by Adam Smith, an American philosopher. This metaphor is used to describe phenomenon of the unintended social and economic benefits that occur when individuals act in their own self-interest in the context of the free market. [11]

I chose this name because it works on a multitude of layers that apply to American society in ways Smith did not consider. When we remove the definition of the invisible hand from the context of the free market, we find that the logic is counterintuitive. Generally speaking, we don't believe that only thinking of ourselves benefits others around us or society at larger.

On the other hand (ha), we also have a tendency to believe that our individual actions don't have an impact on a large scale. The most apparent manifestation of this is low voter turnout on the national, state and city level. By international standards, the U.S.'s voter turnout trails most of that of developed nations. [12]

This project takes the participant's "invisible hand" and turns it visible to themselves and the others participants by having a real-time outcome occur right in front of them.

PHYSICAL ATTRIBUTES

invisible hand takes the form an unassuming dark, wooden podium top with a long sheet of blank parchment paper draped over it. Placed on both sides of the paper, are a set of four pens which participants will use to press onto the paper to trigger the sound. This aesthetic is supposed to be reminiscent of the early years of the U.S. government, where political documents were hand written and displayed in this way.

TECHNICAL COMPONENTS

This project was created using Java Script and an Arduino Leonardo. The music is played via web and uses keypresses to trigger a different version of the song. The key must remain pressed to play. If it is released, that version of the song is muted.

To combine this with the physicality of the podium, I use an Arduino Leonard to communicate with the computer's keyboard. On the surface of the podium and beneath the parchment paper are four patches of copper tape. When a patch from the paper and a patch from the podium is pressed, it completes the circuit, and a keypress is sent to the computer's keyboard which allows the music to play. When the pen is lifted, the circuit is complete, and therefore the music stops.

EDIT: The Leonardo I was using broke, so I had to combine an Arduino Uno and Processing to send commands to Java Script. Essentially, Processing was reading the Arduino pins and sending commands to Java Script.

SCOPE & LIMITATIONS

I had several technical limitations in executing this project. Designing sound is a difficult task that relies on the physical space in which the is going to sound exist. Achieving this in a workspace like D12 is… difficult.

Along with this, I also had a lack of resources: there wasn't an abundance of speakers for me to experiment with the directionality of the sound, I didn't have the space or time to recreate an installation-like space to capture the true essence of what I was trying to

achieve, and, the connection from the Arduino to Processing to Java Script lead to some very unappealing sounding audio.

FUTURE ITERATIONS

In the future, I would like to experiment and refine a lot of the details that had to be glazed over due to the time constraints of this project. I would love to be able to fabricate a full podium instead of just the top, and I would also love to be able to experiment with the space in which it is going to exist.

My first visualization of this installation is a simple set up: an empty room, with the podium standing alone in the middle with the scroll and pens. Maybe a desk lamp is fixed to the top. In each corner of the room, a speaker where each sound is emitted and comes from behind the participant.

I would also like to explore the different kinds of interactivity between the user and the podium and paper. If the user writes, does it alter the song in real time? Are there reductive components as well, not just additive ones? How many people can occupy the space? Do the people at the podium have an audience?

These are questions I would like to explore and experiment in future iterations of invisible hand and see which variations would strengthen the goal of my project.

FOOTNOTES

[1] Laporte, John. "Topic: Patriotism in the U.S." Www.statista.com. Accessed December 13, 2017. https://www.statista.com/topics/2482/patriotism-in-the-us/.

[2] "United States - proud to be American | Survey 2015." Statista. Accessed December 13, 2017. https://www.statista.com/statistics/261561/proud-to-be-american/.

[3] Laporte, John. "Topic: Patriotism in the U.S." Www.statista.com. Accessed December 13, 2017. https://www.statista.com/topics/2482/patriotism-in-the-us/.

[4] Colson, Thomas. "RANKED: How patriotic 19 world-leading economies are." Business Insider. November 23, 2016. Accessed December 13, 2017. http://www.businessinsider.com/yougov-19-most-patriotic-countries-in-the-world-2016-11/#1-united-states-19.

[5] Tyrrell, Ian. "What, exactly, is 'American exceptionalism'?" The Week - All you need to know about everything that matters. October 21, 2016. Accessed December 13, 2017. http://theweek.com/articles/654508/what-exactly-american-exceptionalism.

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[7] ""America the Beautiful," 1893." The Gilder Lehrman Institute of American History. July 14, 2012. Accessed December 13, 2017. https://new.gilderlehrman.org/history-by-era/art-music-and-film/resources/%E2%80%9Camerica-beautiful%E2%80%9D-1893.

[8] Collins, Ace. Songs sung red, white, and blue: the stories behind Americas best-loved patriotic songs. New York, NY: HarperResource, 2003.

[9] '76, Professor Wayne Naus, and All Sequences Were Created by Brad Hatfield '75. "Modulation." Modulation | Berklee College of Music. Accessed December 13, 2017. https://www.berklee.edu/bt/192/lesson.html.

[10] Juslin, P.N. & Sloboda, J.A. (ed.) (2001) Music and emotion: theory and research. Oxford ; New York : Oxford University Press.

[11] Heath, F. Eugene. "Invisible hand." Encyclopædia Britannica. November 02, 2016. Accessed December 13, 2017. https://www.britannica.com/topic/invisible-hand.

[12] DeSilver, Drew. "U.S. trails most developed countries in voter turnout." Pew Research Center. May 15, 2017. Accessed December 13, 2017. http://www.pewresearch.org/fact-tank/2017/05/15/u-s-voter-turnout-trails-most-developed-countries.

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* All products require an annual contract.   Prices do not include sales tax   (New York residents only). "United States - proud to be American | Survey 2015." Statista. Accessed December 13, 2017. https://www.statista.com/statistics/261561/proud-to-be-american/.

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