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The Perfect Model: Exploring Gender Differences Within Commercial Graphic Design Preferences

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The Perfect Model:

Exploring Gender Differences Within Commercial Graphic Design Preferences

Introduction

What does a stylish shirt look like? What makes one brand of body wash look more "attractive" than the other? For most people, their idea of good design reflects their personal preferences, which are shaped by their background. Every person's life is made up of a massive collection of events, making their visual preferences unique.

However, some of these experiences are often shared among a large group of people and can affect them similarly, such as growing up in Brazil vs Vietnam or living in a certain era. Different demographics of people often share collective experiences, shaping their personalities as a group. This is the foremost reason why most cultural differences exist. The history of Vietnam, for example, is incredibly different from the history of Brazil, therefore the culture, behavior, and opinion of their citizens will be distinct as well. Cultural differences shape everyone's personal preferences and play a part in deciding someone's taste in design.

Cultures can be formed from a variety of factors other than nationality, such as demographics within a community. Gender, for example, is a common demographic that has influenced the culture of almost every civilization throughout history. Men and women are the most common genders on Earth, with nearly everyone identifying as one or the other. While other genders are becoming increasingly more common - as of this project, there are over 1.2 million Americans who identify as nonbinary - most people identify as either a man or a woman (Wilson & Meyer). Nonbinary people are also typically born identifying as either boys or girls and choose to transition later in life - after most people's opinions tend to form.

Life as a man or a woman comes with its own set of unique collective experiences. Most cultures existing today have established traditions specific to men or women, creating cultural gender dichotomies that shape the lives of both groups. These gender dichotomies, after decades of shaping cultural perceptions, have created distinct cultural ideas of what traits, passions, and concepts are associated with either gender. For this study, these cultural "personas" of men and women are referred to as "masculinity" and "femininity" - "man" and "woman" refer to individuals or groups of people living as either gender, while "male" and "female" will refer to individuals/groups born as either biological sex.

The focus of this thesis is to explore the impact of gender on a person's graphic design preferences. Most cultures have a long history of practices and beliefs, which have shaped the way commercial designs have been created. As a result, people growing up exposed to cultural media may associate certain design elements with their own experiences and form a bias towards these elements. For example, a company may use an image of a bald eagle, or the colors red, white, and blue, to appeal to American consumers. Similarly, commercial designs are also often made to reference gender-related cultural experiences, creating similar associations and biases between men and women. The images, shapes, and words used to promote products to specific genders can reflect and reinforce the cultural attitudes attributed to a specific gender, suggesting that men and women "should" desire gendered products. The visual preferences of men and women have undoubtedly been shaped by both their general experiences with gender, as well as their experiences interacting with targeted media.

By understanding how their background impacts their preferences, readers and consumers can reflect on how their preferences may encourage gender-based behaviors and beliefs within their cultures. In recent decades, through social movements related to women's, racial, and queer equality, it has been found that gendered marketing and design practices encourage discrimination between demographics. Showing people how their preferences may promote certain practices can help prevent their behavior from encouraging and reinforcing harmful beliefs. By becoming more aware of how their behavior can maintain cultural prejudices, consumers can evaluate how they might be inadvertently promoting harmful ideas.

The goal of my project is to identify how gender impacts what people prefer when viewing graphic designs, and to create my own visual design pieces geared towards educating future viewers about this topic. To accomplish this, I have researched men's and women's preferences for five common graphic design elements and created two interactive digital designs to represent my findings. Additionally, I have made a digital website for these designs, so that future viewers can easily access them. Through creating both these designs and this website, I aim to give viewers a chance to analyze how their history with gender may have influenced their personal design preferences. A person's background plays a massive role in molding their identity and can influence many different aspects of their everyday behavior. By allowing readers to learn more about how their gender may impact their habits, I intend to give them a better understanding of themselves and their actions.

Design Elements, and Connection to Gender

Within every piece of visual media - or any kind of creative imagery, such as a billboard, a cereal box, an Instagram advertisement, or a Renaissance painting - there are common design traits, or "elements," that have been deliberately added in order to convey a message to the viewer. Many of these elements, such as color, fonts, and shapes, are found in different kinds of media, and can be used to represent various ideas within a design - literally, or figuratively. For example, large, bold text, and shapes with hard angles, can be used to excite the viewer and encourage strong emotions - making these elements perfect for advertising a box of fireworks, or a children's toy. Pastel colors and curved lines can be used to promote something with less energy, such as a box of decaffeinated tea bags.

Throughout history, design elements have been used to subtly represent complex ideas in simplified formats. The concepts of "men" and "women" are no exception - within most modern retailers, products such as clothes, soaps, and vitamins have used design to attract one group or the other, by presenting themselves as "masculine" or "feminine." However, gender stereotypes have historically been influenced by cultural practices and beliefs, due to every group's unique belief regarding gender and its role in society (Bonnardel et al.). Modern graphic designers often use cultural stereotypes as inspiration for marketing to a specific gender. As a result, some modern-day men and women may prefer certain elements due to constant exposure to gendered design, which may reinforce preferences for particular visual elements.

By comparing the average preferences of men and women to gendered design trends, we can see how modern marketing has influenced the average person's experience with gender. Within this project, I have analyzed five common design elements - color, font, shape, organization, and image. My goal in studying men's and women's preferences for each element is to determine which elements are influenced by gendered design, and which are shaped by other kinds of gender experiences.

Color

Men on average seem to prefer blues and greens the most, while also favoring neutral colors, such as tan and brown (Bonnardel et al.). They also have a stronger preference than women for darker and desaturated shades of color (Fortmann-Roe). Additionally, men are also drawn to designs that use black and gray as neutral colors, rather than white (Ritnamkam and Sahachaisaeree).

Women typically like warmer hues, with studies showing that they prefer reds, yellows, and purples more than men do (Fortmann-Roe). Women have also been noted to prefer brighter, more saturated hues, and lighter tints of various colors such as pink and turquoise (Bonnardel et al.). Additionally, women tend to favor designs that feature white as a neutral color over black and gray (Ritnamkam and Sahachaisaeree).

Overall, women seem to prefer warm hues and lighter tints, while men are more partial to cooler, darker shades. Most of these preferences align with the cultural stereotypes associated with men and women in many societies, especially within the Global West. An incredibly common example of this connection comes from the masculine preference for the color blue, and the feminine preference for pink. Current research suggests that the connection between men with blue, and women with pink is relatively modern, with the trend starting among infant clothing catalogs during the 1920s, which promoted pink and blue as a more "fitting" color for baby girls and boys (Chiu et al.). As the mothers who read these magazines took their advice, people began to grow up associating either color as inherently masculine or feminine, to the

point of using them in designs to identify objects and concepts as something made "for men" or "for women."

Likewise, many of the other gender-based color preferences can be linked back to various cultural practices. For example, Researcher Valérie Bonnardel found that women in India and the United Kingdom preferred similar colors but had a stronger preference for saturated colors or lighter tints depending on their nationality. Bonnardel and her associates theorized that this split may stem from both nations' fashion trends and average skin tone. Colors favored more by women in the UK, such as lavender and light blue, are typically considered flattering on Caucasian skin tones, while saturated oranges and reds complement darker South Asian skin well (Bonnardel et al.). Fashion is often considered a feminine topic within many modern societies, which explains why flattering colors are favored by both groups (Kozlowski et al.).

Through these studies, we can determine that masculine and feminine color preferences stem from global and regional cultural practices and their effect on men's and women's experiences. However, Bonnardel also found that some preliminary studies suggested a possible biological source for men's and women's color preferences. She noted that some of her earlier research could be "...interpreted in favor of a universal origin of gender difference in color preference, rooted in biological color-opponent mechanisms shaped by the evolution of genderspecific uses of color vision." (Bonnardel et al.).

Another interesting observation is that both men and women seem to favor the color blue, with women on average preferring turquoise and men leaning towards darker tones, such as navy. This might suggest that blue can function as a unisex color, and that including certain shades of blue within a design would be appealing to all audiences.

Font

Fonts are often seen as masculine and feminine, among other traits, due to consumer preferences and gendered marketing. The main factors that determine a font's gender are its weight and angles. For example, the font used within a company's logo may be perceived as feminine if it includes the use of thin, rounded shapes. On the other hand, a font could be seen as masculine if it incorporates sharp angles and thick lines (Lieven et al.).

In a study focused on politicians and the fonts they use when creating campaign materials, women were found to use script fonts - or fonts that mimic traditional handwriting more often than men; likewise, men were more prone to using slab serif fonts - or bold fonts, with small accent strokes called "serifs" - more than women (Haenschen et al.). In a similar study, researcher Bianca Grohmann assessed the masculinity and femininity of certain fonts within commercial branding and found that "... brands represented by script type fonts were perceived as significantly more feminine...whereas brands represented by display fonts (thick bold fonts, created to be used as titles) were considered significantly more masculine..." (Grohmann).

Grohman also concluded that serif fonts like "Century Schoolbook" and "Jason Text," which include hard lines and soft edges, are generally gender-neutral (Grohmann). These fonts can theoretically be used for designs that are intended to attract all audiences, regardless of the viewer's gender.

7

Shape

Shape can refer to the physical shape of a design, or illustrated elements within a design, such as the shapes used in a logo. Additionally, the organization of other elements can be used to create shapes inside of a design. Similarly to fonts, shapes are also frequently perceived as masculine or feminine due to their density and angularity. Swiss researcher Theo Lieven and his associates, who conducted a study on "brand gender" in commercial graphic design, concluded that the leading factor in determining a brand's gender is the weight and angles used within their logos, stating that "…heavier and angular logos increased brand masculinity, whereas slender and round logos enhanced brand femininity" (Lieven et al.).

Other studies found similar results. Another product design study concluded that, on average, men prefer angular and geometric product packaging, while women prefer curved and rounded containers (Ritnamkam and Sahachaisaeree). As expected, the brand gender of a commercial product has been found to directly correlate with preference for said product. Products with masculine branding, for example, will be more appealing to men than women, and vice versa (Hughes). While the reasoning behind this is not definitively clear, some possible theories suggest that people are naturally drawn to designs that mirror their gender, as a way to reinforce their connection to their identity (Grohmann).

Most people tend to favor designs that feel familiar and reflect their gender, race, nationality, or any other kind of experience. The correlation between men and strong angles, and women with thin curves, likely originates from both groups' cultural backgrounds. Throughout history, and today, many traits are typically associated with the concept of "masculinity" and "femininity." Feminine brands, for example, may be associated with ideas such as "sensitivity," or "gracefulness," while masculine brands may be connected with ideas like "aggressiveness" or "dominance," as a result of their branding choices and use of visual designs (Grohmann). The use of thin and thick, or curvy and angular shapes are commonly used to evoke the idea of strength and fragility, or power and grace. By associating these traits with masculinity and femininity, the shapes that embody these traits can then be used to represent men and women in a connotative manner.

Organization

Gender can play a role in determining how viewers prefer to ingest visual data, which in turn can shape how they prefer certain designs to be organized. A common trend among men is that, on average, they prefer to analyze visual data quickly, often analyzing elements one at a time. Men are particular when interpreting designs, opting to selectively analyze the most obvious pieces of information, or the most "highly available cues" within a piece first, before investigating secondary details (Simon and Peppas). Masculine readers typically favor designs that include these available cues, which focus on a specific topic and use visual elements that directly relate to the subject (Tsichla et al.).

Women, on the other hand, typically favor a comprehensive approach to analyzing information and favor designs that offer a wide range of rich information that goes into substantial detail about the piece's subject (Tsichla et al.). In a study conducted by Steven J. Simon and Spero C. Peppas, it was found that when interacting with multimedia designs such as websites, "...women usually attempt to engage in a comprehensive and detailed analysis of all available information" (Simon and Peppas).

Compared to most of the visual elements I analyzed for this project, organizational preferences do not seem to be directly connected to any social event or cultural behavior. It may

be possible, rather, that these preferences are linked to biological differences. Thomas R. Baird, Russell G. Wahlers & Crystal K. Cooper conducted a study looking into the connections between gender and analytical styles when interpreting print advertisements, writing that "Whereas males are more objective and focus on individual parts, females interpret stimuli broadly but pay more attention to detail (Cafferata and Tybout, 1989). This attention to detail promotes narrower, more differentiated memory organization and creation of categories used in message retrieval" (Baird et al.). The connection between biological influences and media analysis preferences still remains to be fully understood, leaving the source of these preferences up for debate.

Image

For the purpose of this thesis project, images are photographs and illustrations of people, objects, or landscapes. Images are used to communicate ideas to a wide audience through visual structures that every viewer can understand.

When analyzing specific images within a piece, both men and women tend to use similar mental processes as they do when analyzing an entire design. For example, when conducting a study on science teachers and what type of images they found the most informative in PowerPoint presentations, scholar Leonard Annetta and his associates found that male teachers were more drawn to images that were "obviously relevant" to the topic of the presentation. Female teachers, on the other hand, had a stronger preference for colorful, detailed images, and were less concerned with the relevance of the images to the presentation's topic (Annetta et al.).

Several studies have also noted that women are generally more perceptive to the images in a design than men and are more likely to form their opinion of a design based on its use of photographs and illustrations. In a study focusing on how photographs of various

materials, when used to package chocolate bars, can appeal differently to men and women, it was found that women tended to form stronger opinions on the images used for the packaging than men (Maleki et al.). This suggests that designs oriented toward women should generally pay close attention to the quality and color of their images, as they seem to be more sensitive to image choices than men.

Overall, there seems to be a parallel between men's and women's organization and image preferences. This could hint at a relationship between favored images, and male and female visual analysis patterns. Following this assumption suggests that gender-based image preferences stem from an unknown biological source as well, one which remains to be discovered.

Visual Representation of Gendered Design

To make my research easier to visualize, I created two interactive digital designs based on the average visual elements preferred by men and women. I believe that this information could be beneficial to anyone interested in learning more about how personal demographics such as gender - can influence the way people form opinions and develop personalities. Informational visual designs can serve as a more effective means of communicating to a wide audience, as they can quickly be distributed to a large group of people regardless of their location. Sharing my research this way would help it reach a wider audience than a traditional thesis. Additionally, I have been working for the past four years to earn a degree focused on graphic design, learning how to create effective digital media such as websites, smartphone applications, and social media assets. Through creating these designs, I believe that I can distribute the information I have collected in a widely accessible and engaging manner, while developing my own creative and technical skills for future projects and careers. Each design has been created to reflect masculine or feminine preferences within graphic design. Both designs have been developed to emulate magazine covers, because of magazines' connection to both the use of design and gendered experiences.

Throughout the past century, magazines have acted as the most popular medium for graphic designers to communicate with a wide audience. These publications have used all five of the aforementioned elements to educate, inform, entertain, and spread gossip to their audiences. In 2013, when Angelina Jolie had two mastectomies to protect herself from breast cancer, magazines throughout the world featured her on the cover and published articles discussing her decision. As a result, many readers began to sympathize with her struggle, and women throughout the world began to test themselves for breast cancer - in the United Kingdom, test rates were more than double what they were in 2012 (Wasike). Magazine covers can quickly inform a wide audience about important topics within society, which made them an ideal way for me to represent the data from my research.

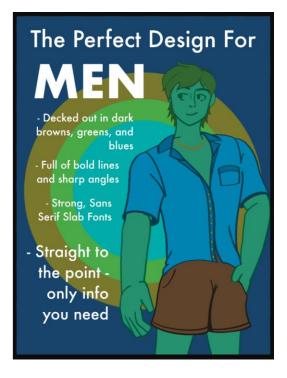
However, it is also due to their efficiency that magazines have historically perpetrated many societal stereotypes surrounding gender communities. Articles and covers have been used to quickly share information with a wide audience - including information rooted in culture and cultural biases. Within both men's and women's health magazines, it has been found that most of the covers feature headlines that promote weight loss and increasing attractiveness, rather than improving health. Men's publications also promote muscle growth more than healthy living, while women's magazines frequently focus on dieting (Bazzini et al.).

Magazines have also played important roles within specific eras of gender history, especially with women. Depictions of women in all magazines frequently use thin and sexualized imagery. Among women, the perpetuation of these unrealistic (and often digitally altered) models in media encouraged the rise of eating disorders and body dysmorphia within the late 20th century and throughout the early 2000s (Bazzini et al.).

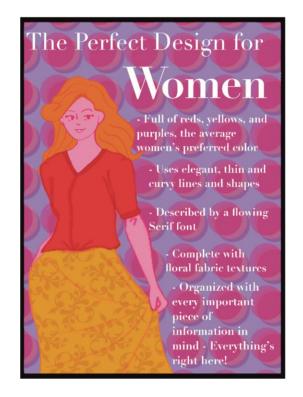
To ensure that my project can be accessed by anyone who wishes to view it, I created an interactive website that hosts my designs as well as a summary of each design element's relationship to masculinity or femininity. Both of my magazine designs contain subheadings representing one of the five visual elements that I have researched for my project. Once on the website, viewers can click on the "subheadings" of each cover and view an overlay screen with text and images that summarize the element's presence within the poster, and its related research. Through this interactivity, I aim to make the information on the website more memorable for viewers, allowing my thesis pieces to connect with a wider audience.

Illustration Creation Process.

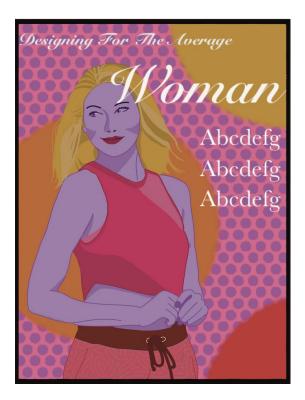
I began my thesis work by researching the different elements and origins of gender-based design preferences. I was still collecting and analyzing new sources up until my designs and website were finished. After my initial research, I began producing multiple rounds of design drafts, each one created as a result of continuous editing. My early drafts of the magazine covers used illustrations rather than photography to depict the models, in hopes of providing greater creative control over their appearance.



(Draft 1 of the Men's Poster)



(Draft 1 of the Women's Poster)



(Draft 2 of the Women's Poster)

After consulting with my peers and advisors, I eventually decided that a photorealistic approach would be more effective. While many periodical magazines feature illustrations on their covers, I felt that photographs were more effective at representing contemporary design aesthetics. Viewers would likely have an easier time resonating with a more contemporary cover, as they were the types of designs that they would encounter most often in their lives.

As a part of my design research, I began documenting the styles and trends of actual publications. I focused on photographing magazines sold within frequently visited areas, such as local libraries and grocery stores. When selecting specific magazines as references for my designs, I prioritized covers that featured elements that align with either masculine or feminine preferences, such as women's magazines that feature an abundance of information, or men's magazines with bold titles.



(Woman's World - Feminine Examples)



(People - Feminine Examples)

After analyzing the trends and styles of both specific publications and magazines in general, I was able to begin working on the next series of drafts. With the next drafts, I worked on multiple rounds of designs using copyright-free photographs as the models within the covers. (Unsplash). Rather than an illustrated background, I opted to use different shades of blue, due to the color's perceived gender neutrality.



(Women's Design Illustration)

The women's poster is based on publications such as *Woman's World* and *Vogue*, featuring a relatable young model on the front cover surrounded by an abundance of text and shapes. The font colors consist of pink, red, yellow, and white, which all relate to women's preferences. Both feminine and masculine fonts are used within the piece's logo, nameplate, and cover lines, to accurately replicate the visual complexity found within many feminine publications. The font used for the title, *Didot*, is the font used for *Vogue's* logo, further connecting this piece to actual feminine publications. The lack of negative space and overabundance of textual information and visual shapes are a reference to women's preference for rich and comprehensive designs and images, as well as the walls of text found within *Woman's World*, and other cover designs. The space around the model, the stickers surrounding the corners of the page, and the serif fonts in the piece, create organic shapes within the designs to reflect feminine preferences toward curved and thin lines.



(Men's Design Poster)

The men's poster is based primarily on *Forbes* and *Fortune*, with some elements of *Sports Illustrated* used as well. The background features an intense shade of navy, as well as green and blue text, as a reference to both men's preference for darker colors and masculine publications' frequent use of dark backgrounds. Bold and angular display fonts are used for the title and headings, to reflect preferences for weighted fonts as well as geometric shapes. The piece is organized with the main model situated towards the left, with minimal text surrounding him, to create a piece that directly communicates with its audience. This reflects the masculine preferences for simple uncluttered organization and highly relevant imagery.

Website Creation Process

Four months into researching visual biases, and drafting out the first few posters, I began working on constructing the website. I opted to construct my site with an established content management system, rather than writing out the website's code from scratch. I eventually settled on using Wix, as it was one of the few systems that allowed me to make modifications to the site's source code.



(Introduction Page)

The website consists of a landing page, an introduction page (pictured above), a gallery page, and the pages for each of the posters. Progression through the site is intended to be linear, progressing from the landing towards the gallery, before the viewer is free to explore the posters as they please.



(Gallery Page)



(Men's Cover Page)

The men's page and the women's page are nearly identical, save for the posters themselves and the title font. When hovering over a page, as shown in the below image, the main poster becomes desaturated, and the cover lines pop out from the poster, indicating that the user should interact with them.



(Women's Cover Page)

After selecting a subheading from the poster, a pop-up page is triggered and is displayed over the main page. To the left, several paragraphs provide a quick summary of the preference of men or women relating to the selected subheading, and how it is represented within the magazine cover. To the right, an edited version of the original design will appear, with sections unrelated to the element in focus grayed out, for viewers to have a clearer understanding of where these preferences are being applied within the design. Shown below is an example of one of these popups - the feminine color preference page. The site can be found by going to

https://radelineroberts.wixsite.com/perfect-model.

Color

Color is used in every design, and plays an important role in establishing the mood of a piece. Using certain hues and shades, color can be used to attract masculine and feminine audiences.

On average, women typically prefer warmer hues, with studies showing that they prefer reds, yellows, and purples more so than men. Women have also been noted to prefer saturated colors, and lighter tints such as white, pink, and turquoise.

Within this piece, light blue has been used as a background, while pink, yellow, and red are used for text and other elements, to represent these preferences.



(Women's Color Page)

Reflection

The modern definition of gender is becoming increasingly fluid. Within the past century, advancements in women's and queer rights movements have led global society to challenge historical notions of masculinity, femininity, and the notion of gender itself. Today, roughly 1% of people worldwide - mostly under the age of 40 - identify as transgender, nonbinary, genderfluid, or somewhere outside of the bounds of traditional manhood or womanhood (Masterson). As gender becomes increasingly diverse, many scholars have begun to question historical assumptions about gender, its presence, and its effect on the human experience. If the roles, thoughts, and behavior of men and women are not as different as previously assumed, then how large of a role do gender experiences play in forming a person's opinions? How does gender identity shape the development of someone's personality?

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I believe that as global society continues to challenge the definition of gender, it must also begin to redefine what gender experiences consist of. Gender identity continues to play a large role in many people's lives, and as more genders become common within global society, research into how gender-based experiences shape personality development is worth investigating. Studies focused on gender, with a modern understanding of gender fluidity, are a relatively new field of study. However, I hope that my thesis project, as well as similar projects, can help draw attention to this subject and promote future research into this field.

Additionally, it is also important that more research is done on the effect of transgender and nonbinary cultural experiences on personal preferences. Through studies involving transgender sources, scholars can determine which gender-based preferences stem from biological influences, and which stem from cultural experiences. For example, it's already been found that gender dysphoric children as young as 5 adopt the color preferences of their preferred gender, showing that gender-based cultural influences begin affecting color preferences at a young age (Chiu et al.). The preferences of nonbinary, and genderless individuals could also help determine which design choices could appeal to a general audience, regardless of gender influence. Future research into gender-based preferences should also focus on other common experiences, to provide more insight into gender experiences and their scope of influence.

People should also discuss visual media's role in perpetuating gender stereotypes. Throughout history, print media and illustrations have been used to communicate societal expectations for men and women. Paintings that highlight a woman's grace, or a man's strength helped perpetuate the expected traits and values of men and women throughout history. The advancement of multimedia communication and the development of social media have allowed stereotypes to spread and shape modern culture at a rapid pace. Once a week, I usually see a post from a man lamenting that he'll never find a girlfriend because he's only 5'11", and a video of an eight-year-old girl's skincare routine.

By analyzing each gender's average design preference, as well as their origins, readers can gain a better understanding of which opinions stem from benign life experiences, and which come from decades of biased media. On their own, these preferences may be harmless - a man who likes products with Impact more than Times New Roman does not automatically assume that all men should be muscular. However, making viewers more aware of how decades of sexism may shape their personality, including traits as seemingly minor as their favorite shape, can give them the ability to comprehend the vast scope of influence gender biases have within society.

When I began working on this project, I set out to discover the "true" differences between men's and women's personal preferences, without the influence of gendered marketing based on stereotypes. I wanted to create two posters that visualized an "accurate" representation of the gender dichotomy, to argue against the culturally perpetuated differences normalized within American culture. Growing up, I remember hearing from friends and family members about how girls "naturally" mature faster than boys, or that a boy harassing a girl at school "probably has a crush on her, but just does not know how to show it." These culturally perpetuated behaviors were treated as natural differences, hardwired into men and women as they grew. Through this project, I wanted to show how, at least in the realm of visual design preferences, certain behaviors came from cultural norms, rather than biological differences.

As I conducted my research for this thesis, it became apparent that many of these genderbased preferences not only stemmed from cultural behavior but originated from gender-targeted marketing trends from the past century. Separating the effect of gendered marketing from the "genuine" differences between men and women would not be possible - these differences often came from or were heavily affected by stereotypes to begin with. While my final project looks different compared to what I had originally planned, I still believe that it accomplishes my original goal. This project changed my knowledge of how biases shape and influence personal behavior - through interacting with my research, designs, and websites, I believe that I can change my viewer's understanding as well.

Bibliography

- Annetta, Leonard A., et al. "Evaluating gender differences of attitudes and perceptions toward PowerPoint for Preservice Science Teachers." *EURASIA Journal of Mathematics, Science and Technology Education*, vol. 3, no. 4, 23 Dec. 2007, https://doi.org/10.12973/ejmste/75410.
- Baird, Thomas R., et al. "Non-recognition of print advertising: Emotion arousal and gender effects." *Journal of Marketing Communications*, vol. 13, no. 1, Mar. 2007, pp. 39–57, https://doi.org/10.1080/13527260600942616.
- Bazzini, Doris G., et al. "How Healthy Are Health Magazines? A comparative content analysis of cover captions and images of women's and Men's Health Magazine." *Sex Roles*, vol. 72, no. 5–6, Mar. 2015, pp. 198–210, https://doi.org/10.1007/s11199-015-0456-2.
- Chiu, Sandy W., et al. "Sex-dimorphic color preference in children with gender identity disorder: A comparison to clinical and community controls." *Sex Roles*, vol. 55, no. 5–6, 30 Nov. 2006, pp. 385–395, https://doi.org/10.1007/s11199-006-9089-9.
- Bonnardel, Valérie, et al. "Gender difference in color preference across cultures: An archetypal pattern modulated by a female cultural stereotype." *Color Research & Application*, vol. 43, no. 2, 2017, pp. 209–223, https://doi.org/10.1002/col.22188.
- Fortmann-Roe, Scott. "Effects of hue, saturation, and brightness on color preference in social networks: Gender-based color preference on the social networking site Twitter." *Color Research & Application*, vol. 38, no. 3, 2011, pp. 196–202, https://doi.org/10.1002/col.20734.

- Grohmann, Bianca. "Communicating brand gender through type fonts." *Journal of Marketing Communications*, vol. 22, no. 4, 13 June 2014, pp. 403–418, https://doi.org/10.1080/13527266.2014.918050.
- Lieven, Theo, et al. "The effect of brand design on Brand Gender Perceptions and brand preference." *European Journal of Marketing*, vol. 49, no. 1/2, 9 Feb. 2015, pp. 146–169, https://doi.org/10.1108/ejm-08-2012-0456.
- Masterson, Victoria. "6 Charts That Reveal Global Attitudes to LGBT+ and Gender Identities in 2021." *World Economic Forum*, www.weforum.org/agenda/2021/06/lgbtgender-identity-ipsos-2021-survey/. Accessed 22 Mar. 2024.
- Haenschen, Katherine, et al. "Font Matters: Understanding Typeface Selection by Political Campaigns." *International Journal of Communication*, vol. 15, 2021, pp. 2894– 2914, https://doi.org/1932–8036/20210005.
- Hughes, Joel Nathanael. *Toward a Theory of Gender Communication Design*, 2020, https://doi.org/10.31274/etd-20200902-66.
- Kozlowski, Diego, et al. *Gender Bias in Magazines Oriented to Men and Women: A Computational Approach*, Nov. 2020, https://doi.org/10.1080/14680777.2022.2047090.
- Maleki, Shekoofeh, et al. "Investigating the relationship among the Kansei-based design of chocolate packaging, consumer perception, and willingness to buy." *Journal of Marketing Communications*, vol. 26, no. 8, 28 Mar. 2019, pp. 836–855, https://doi.org/10.1080/13527266.2019.1590855.
- Lieven, Theo, et al. "The effect of brand design on Brand Gender Perceptions and brand preference." *European Journal of Marketing*, vol. 49, no. 1/2, 9 Feb. 2015, pp. 146–169, https://doi.org/10.1108/ejm-08-2012-0456.

- Ritnamkam, Siripuk, and Nopadon Sahachaisaeree. "Cosmetic Packaging Design: A case study on gender distinction." *Procedia Social and Behavioral Sciences*, vol. 50, 2012, pp. 1018–1032, https://doi.org/10.1016/j.sbspro.2012.08.102.
- Simon, Steven John, and Spero C. Peppas. "Attitudes towards product website design: A study of the effects of gender." *Journal of Marketing Communications*, vol. 11, no. 2, June 2005, pp. 129–144, https://doi.org/10.1080/1352726042000286507.
- Tsichla, Eirini, et al. "Gender differences in the interpretation of web atmospherics: A selectivity hypothesis approach." *Journal of Marketing Communications*, vol. 22, no. 6, 24 Apr. 2014, pp. 563–586, https://doi.org/10.1080/13527266.2014.903507.
- Unsplash. "Beautiful Free Images & Pictures." Unsplash, unsplash.com/. Accessed 22 Mar. 2024.
- Wasike, Ben. "Jocks versus jockettes: An analysis of the visual portrayal of male and female cover models on sports magazines." Journalism, vol. 21, no. 10, 18 July 2017, pp. 1432–1449, https://doi.org/10.1177/1464884917716818.
- Wilson, Bianca D.M., and Ilan H. Meyer. "Nonbinary LGBTQ Adults in the United States." UCLA School Of Law, Williams Institute, June 2021.