

Design, Gamification, and Usability Affecting Social Change for LGBTQIA People

A Thesis Submitted to the Faculty of the Graphic Design Department
in Partial Fulfillment of the Requirements for the
Degree of Master of Fine Arts in Graphic Design
at
Savannah College of Art and Design

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eLearning

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Dedication

To my grandparents, Russell and Marguerite Broadwater.

Thank you for your belief in me and your continuous support. I am truly grateful for all that you have done, and I miss you every day.

To Ruth Kershner.

You are a kindred spirit and colleague who is truly missed by a great many people, and the impact of your life is too great to be measured.

Acknowledgements

This thesis would not have been possible without the help and support of some very special people.

A special thanks to Florence Bryant for three years of support as an Academic/Program Adviser. You answered every single question I had, you helped me troubleshoot financial aid problems, and you were always courteous, friendly, and professional.

I would like to thank Professor Sharokin Betgevargiz for serving as my thesis committee chair, and Professor Trudy Abadie-Mendia and Professor David Meyers for your insights, recommendations, and suggestions regarding my thesis and thesis project.

Also, I would like to thank Patrick Jones for his friendship and support throughout pursuing this degree. Having never pursued an MFA before, I wasn't exactly sure what to expect, and I really appreciated your guidance.

Lastly, I owe a great deal of gratitude to my partner for supporting me while I pursued a degree that some say I didn't need, and that I couldn't afford. Thank you for all of the nights you went to bed alone while I stayed up working. Thank you for tolerating all of the things we couldn't do because I had homework. Thank you for your endless friendship, support, love, and understanding.

Thank you all.

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Abstract

Design and Gamification Affecting Social Change for LGBTQIA People

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November 2015

Media overgeneralization fosters a lack of connectedness, socialization, and understanding of the lesbian, gay, bisexual, transgender, questioning, intersex, and asexual (LGBTQIA) community. Persons of the LGBTQIA community are very much impacted by design campaigns, and by examining the communication strategies that occur within specific campaigns, potential solutions can be discovered to positively impact the community's perception. Visual communicators are well equipped with design skillsets to develop and prototype experiences to benefit the LGBTQIA community; likewise, visual communicators possess comparable skillsets to gamification practitioners, which use game mechanics and game thinking to engage users to solve problems. Furthermore, it's possible to utilize design, gamification, and usability principles in the context of a group participatory medium, rather than sole-interactive medium, to develop an effective model to affect social change. A group participatory medium, such as a cooperative tabletop game, can be designed to facilitate learning opportunities – through a combination of European user interface (UI) and American user experience (UX) design principles – to advance acceptance, connectedness, and understanding. Therefore, by employing design, gamification, and usability principles through an iterative design process – one that encompasses usability testing or 'play testing' – it's possible to develop a cooperative experience that facilitates understanding of LGBTQIA people.

Keywords: Design, Gamification, Human Rights, LGBT, LGBTQIA, UI, Usability, UX

Introduction

Design – be it graphic, hypermedia, and multimedia in nature – can have a negative or positive impact on a community or an idea, and thereby potentially affect the perception, communication, and interaction of a community or an idea for social good. Examples of the negative and positive effects of design and media should be examined to identify significant cultural artifacts, and design's potential impact to stimulate social change.

Using design research, design strategy, and usability skillsets can change perceptions and foster acceptance of a community through participatory mediums, such as co-op, serious games, and niche tabletop games. By utilizing heuristic and phenomenological design aspects from both traditional board games and dedicated 'pen and paper' role-playing games (RPG), it is possible to alter player perceptions of a specific community — the LGBTQIA community for example.

Utilizing the philosophic works of Shaun Gallagher as they pertain to design — considering that cognition can enact and extend to environmental processes — combined with Lewis Errol Pulsipher's iterative design process of game development, tabletop games can be catalysts for social interaction and require the participation of multiple people. Complementary to Pulsipher's work is that of Patrick Allan, who speaks to tabletop games having a social aspect, and that participatory games exist in such a way that get players out of their comfort zones for creative interaction.

Additionally, Stephen Bell's work is similar to Pulsipher in the way that games enable creative social interaction, while adding Susana Tosca's work establishes that board games can have a 'transformative power' that teaches players not only to question, but how to deal with social norms. More so, the works of Tom Vander Ark are also should be considered in regards to

gamification's capacity of critical thinking and strategic problem solving, both being used to accomplish challenging and meaningful goals.

By combining design, gamification, and usability principles it is possible to develop an interaction that attempts to affect social change. Furthermore, by examining the strategies of specific LGBTQIA design campaigns, it is possible to have players discover that attraction, gender, and sex vary in different combinations within every individual. Game mechanics will be explored, tested, and implemented iteratively to alter player generalizations and preconceived notions. This is accomplished by designing a participatory tabletop game that forces the players into a situation that requires them to work together cooperatively.

This game interaction is developed and refined over multiple play/usability test sessions — from paper prototype, to rough composition to final design — before a final play session and fabrication of the final design occurs.

The final design is constructed with rules, pieces, cards, and a game board to be utilized in a play session, be observed, and facilitated by pre and post-assessment devices. The assessment devices are given anonymously to gauge the success of the final design to alter, challenge, or enhance the perceptions of attraction, gender, and sex — and by extension generate understanding of LGBTQIA persons.

A website is constructed to host all of the assets - assessment materials, data visualization, dynamic links to 3D printing, game board, rules, card printing, written thesis in interactive format, video, and design brief – and to make available the game for download, implementation, and feedback.

Attraction, Gender Identification, and Sex

Lesbian, gay, bisexual, transgender, questioning, intersex, and asexual people are more popularly known through the initialism LGBTQIA¹, which is derived from the LGB (lesbian, gay, and bisexual) acronym that was first culturally coined in the 1990s. Although the initialism is constantly expanding and changing – the longest version being LGBTTTQQAAP (lesbian, gay, bisexual, transgender, transsexual, queer, questioning, intersex, asexual, ally, pansexual)² coined in the spring of 2015 – people with an alternative sex, attraction, and/or gender identification are often categorized by being in the same community.

This initialism which acts as a categorization or ‘grouping’ is incorrect, and often misleads people into assuming that there are similarities and parallels between gays and lesbians, transgenders and intersex, or even bisexuals and asexuals. Writer, feminist, and co-founder of the group *Justice for Women* Julie Bindel states that, “since the late 1980s, lesbians and gay men have been treated almost as one generic group,” and that over the last thirty-five years, “other sexual minorities and preferences have joined them.”³ Today the initialism has grown to a point of even being LGBTTIQQ2SA (lesbian, gay, bisexual, transsexual, transgender, intersex, queer, questioning, two-spirited, and allies), FABGLITTER (fetish, allies, bisexuals, gay, lesbians, intersex, transgender, transsexual engendering revolution), or even the insanely long and ridiculous LGBTTTQQFAGPBDSM (lesbian, gay, bisexual, transgender, transsexual, queer, questioning, flexual, asexual, gender-fuck, polyamorous, bondage/discipline, dominance/submission, and sadism/masochism).

¹ “LGBTQIA,” *Urban Dictionary*, January 20, 2010, <http://www.urbandictionary.com/define.php?term=LGBTQIA>.

² “LGBT.” *Wiki 2*. April 24, 2015. <https://en.wiki2.org/wiki/LGBT>.

³ Julie Bindel, “Viewpoint: Should gay men and lesbians be bracketed together,” *BBC News*, July 2, 2014. <http://www.bbc.com/news/magazine-28130472>.

Ultimately this categorization, grouping, or “bracketing” as Bindel refers to the predisposition to lump-together all of the alternate attraction, gender identification, and sexes leads to confusion in both the global and LGBTQIA communities; however, that is the problem that LGBTQIA persons are faced with – acceptance and awareness – and to date there is no clear way to communicate to cisgender and heterosexual people alike that alternate attractions, gender identification, and sex exist (let alone can exist separate, or in combination with one another).

What parallels this problem is that current demographics of sexual orientation are very difficult to establish on a global or international level, the primary issue of complexity being is accurate reporting against all of the human rights violations that LGBTQIA persons face. The western perception of homosexuality versus the rest of the world may also be very different, and even though LGBTQIA culture is becoming more public and discussed, the international community consists of a very culturally and ethnically diverse population, which may or may not respond to labels and surveying in such ways that communications in clinical settings are framed.

Ergo, when one considers the known history of the human race, it is completely astonishing that it wasn’t until the 1940s CE when Dr. Alfred Kinsey conducted the first ever studies of the demographics of human sexual orientation. When Dr. Kinsey first published the *Sexual Behavior in the Human Male* in 1948 CE, and subsequently the *Sexual Behavior in the Human Female* in 1953, he presented survey results that utilized a seven-point scale to define sexual behavior, wherein the ‘0’ end of the spectrum represented complete heterosexuality and the ‘6’ represented complete homosexuality. When combined, both books concluded that 37% of men in the United States of America (USA) had achieved orgasm through contact with another male after adolescence, and that 13% of women had achieved orgasm through contact with

another woman after adolescence. Even though the study was disputed by John Tukey, Frederick Mosteller, and William G. Cochran for not having a random enough sampling concerning bisexuality, it stated that 11.6% of white males aged 20–35, 7% of single females aged 20–35, and 4% of previously married females aged 20–35 were given a rating of 3 (bisexual: both heterosexual and homosexual) for this period of their lives.⁴

Jumping forward to the 21st century, according to the 2010 USA Census Bureau's *American Community Survey* – an annual national survey which provides communities with reliable and timely demographic, housing, social, and economic data collected monthly every year – there were a total of 581,300 same-sex USA households; 253,576 of them being male-male, and 300,890 being female-female.⁵ More recently and internationally, a 2014 study in Australia was conducted through telephone interview with more than 19,307 participants, wherein the results indicated that 9% of men and 19% of women had some history of same-sex attraction and/or experience.⁶ Hence it is apparent that there are gay, lesbian, and bisexual people in the world-at-large. Even so, all of the previously mentioned studies from the United States, Australia, and even the USA Census Bureau; all focus only and specifically on attraction – or the type of sexual, romantic, and/or physical attraction someone feels toward others – but what is even more difficult to measure are intersex and gender identification statistics.

For example, if one were to look at the statistics of intersex births, you would first need to define what it is you're surveying as intersex. Since intersex as a term refers to a variety of conditions – being born appearing to be female on the outside but having mostly male-typical anatomy on the inside, being born with genitals that seem to be in-between the usual male and

⁴ Alfred Kinsey, *Sexual Behavior in the Human Male* (Michigan: Free Press, 1982) Appendix.

⁵ "Data on Same Sex Couples," *United States Census*, April 19, 2014, <http://www.census.gov/hhes/samesex/data/>.

⁶ Richters J, Altman D, Badcock PB, Smith AM, de Visser RO, Grulich AE, Rissel C, Simpson JM, "Sexual identity, sexual attraction and sexual experience: the Second Australian Study of Health and Relationships," *Sex Health*. 11 (5): 451–60.

female types (large clitoris, lacking a vaginal opening, small penis, or with a scrotum that is divided like a labia), or a person may be born with mosaic genetics with XX chromosomes and XY chromosomes – the Intersex Society of North America (ISNA) have many statistics that relate to the varying types of intersex diversification. According to ISNA, how often a child is born intersex in the terms that a specialist in sex differentiation is contacted “comes out to about 1 in 1500... (but) a lot more people than that are born with subtler forms of sex anatomy variations, some of which won’t show up until later in life.”⁷ Indeed, if one looks at the *United Nations Population Fund* which estimated that on October 31, 2011 global population exceeded seven billion people, roughly over four and one-half million people on the planet Earth were born intersex in the fall of 2011; that is equal to the entire population of both Connecticut and Maine reported by the United States Census Bureau in 2014.

Indeed intersex is grouped into the LGBTQIA initialism, but a lot of members in the medical community see intersex more as a birth defect; however, ISNA states that only Congenital Adrenal Hyperplasia (CAH) represents a real medical emergency, and that is just within the newborn period. Ultimately intersexuality is primary a problem due to stigma and trauma. ISNA also states that parental distress should never be a reason for surgical procedures, but rather acceptance, open communication, and eventually mental health care is essential. Furthermore, intersex people have various gender identities, some identify as either a woman or man, or may not identify as either exclusively a woman or a man. Also, some intersex individuals may be raised as a woman or man but then identify with another gender identity later in life, all of which is normal and exists in at least four and one-half million people. What

⁷ “How Common Is Intersex,” *Intersex Society of North America*, April 19, 2014.
<http://www.isna.org/faq/frequency>.

complicates the matter of attraction, with birth sex, is the addition of gender identification and how the three can vary in one person to the next.

Concerning gender identification, it's something that is almost impossible to measure, but refers to a person's "private sense and subjective experience of their own gender... of being a man or a woman, consisting primarily of the acceptance of membership into a category of people: male or female."⁸ Hence it is entirely possible for a man to identify as a man, or a man to identify as a woman trapped in a man's body. Also, gender identification is changing from even what it was loosely defined as in the 1960s CE of the Stonewall Riots, to what LGBTQIA youths consider gender identification today. According to Michael Schulman, a writer for the New York Times who recently did an introspective piece titled *Generation LGBTQIA* with Sarah Lawrence College students, youths today are not so much concerned with the questions that older individuals, or even older individuals in the LGBTQIA community would think. Schulman states that the core question isn't who "they love, but who they are – that is, identity as distinct from sexual orientation."⁹

Indeed the term 'transgender' is an ever-changing umbrella term for people whose gender identity and/or gender expression differs from what is typically associated with their sex, which could be male, female, or intersex. And so, it is impossible to even get a number on how many transgender people are in a specific location, and even the U.S. Census allows for only two responses: male or female. The most frequently cited estimates of the country's transgender population is 700,000, or about 0.3% of adults, and comes from two surveys conducted by the Massachusetts Department of Health and Human Services from 2007–2009, and the California Department of Public Health in 2003. These estimates are now over eight years old, and if

⁸ "LGBT." *Wiki 2*. April 24, 2015. <https://en.wiki2.org/wiki/LGBT>.

⁹ Michael Schulman, "Generation LGBTQIA," *The New York Times*, January 9, 2013, <http://www.nytimes.com/2013/01/10/fashion/generation-lgbtqia.html?pagewanted=all>.

Facebook's move from more than fifty custom gender options in 2014 to an open text field in 2015 is any indicator, then gender identification is almost unquantifiable and exists outside of quantitative capture.

Therefore, perceiving the varying states of attraction, gender identification, and sex as three different and distinct attributes that every human being has in whatever combination, is much more appropriate and realistic than any initialism that is constructed to encompass all the variables of attraction, gender identification, and sex. However, this is very difficult to do based on the historic perspectives of gender and sex, as well as the cultural and popular mediums' portrayal of attraction, gender identification, and sex of the LGBTQIA people.

LGBTQIA Human Rights

When one considers gender versus sex, and sexual attraction versus sexual identity in regards to population statistics, 'normality' seems to be defined as men and women that are heterosexual and cisgender. Indeed, alternative sex, sexual attraction, and gender identification constitute a very small percentage compared to the entire world's population. Nevertheless, hate groups, anti-LGBTQIA legislation, and bigotry exist in almost every country of the world, and according to Amnesty International, "the range of abuse is limitless and it contravenes the fundamental tenets of international human rights law."¹⁰

Discrimination, economic injustices, human rights violations, and citizenship violations are all issues that LGBTQIA people have to endure throughout the world. For example, in regards to LGBTQIA youths, perceived discrimination, regular subjection to verbal abuse, threats of rape, and emotional torture in detention causes emotional distress, self-harm, and even

¹⁰ "About LGBT Human Rights: 2015," *Amnesty International*, April 3, 2015, <http://www.amnestyusa.org/our-work/issues/lgbt-rights/about-lgbt-human-rights>.

suicidal tendencies. According to a USA study of 9th—12th grade students that were lesbian, gay, bisexual, and/or transgendered published in the *Journal of Youth and Adolescence*:

LGBT youth scored significantly higher on the scale of depressive symptomatology. They were also more likely than heterosexual, non-transgendered youth to report suicidal ideation and self-harm. Mediation analyses showed that perceived discrimination accounted for increased depressive symptomatology among LGBT males and females, and accounted for an elevated risk of self-harm and suicidal ideation among LGBT males. Perceived discrimination is a likely contributor to emotional distress among LGBT youth.¹¹

Furthermore, many schools across the country lack policies that protect LGBTQIA students from bullying and discrimination, but rather have ‘no promo homo’ laws which forbid teachers in public schools from even mentioning homosexuality. This can create a culture and environment of discrimination wherein no students or teachers can mention alternate sex, attraction, and gender identification from male and female cisgender heterosexuals.

Economic factors that characterize human right issue of LGBTQIA people are the denial of employment, housing, or health services to peoples. As of 2015 CE the majority of states in the USA “do not have nondiscrimination protections for LGBT people in the workplace, public accommodations, or housing.”¹² In 2001 CE the Williams Institute on Sexual Orientation and Gender Identity Law and Public Policy estimated that there were 7 million private sector, 1 million state and local, and 200,000 federal government LGBTQIA employees.

In 1994 CE a legislation titled the Employment Non-Discrimination Act (ENDA) was proposed in the USA Congress, which would prohibit discrimination in hiring and employment on the basis of sexual orientation and gender identity; however, as of December 3, 2014 CE the House Rules Committee voted 7 to 3 against adding ENDA as an amendment.

¹¹ Joanna Almeida, "Emotional Distress among LGBT Youth: The Influence of Perceived Discrimination Based on Sexual Orientation," *Journal of Youth and Adolescence* 38.7 (2009): 1001-14.

¹² Estelle Caswell and German Lopez, "Watch: How most states discriminate against LGBT people," *Vox*, March 26, 2015. <http://www.vox.com/2015/3/26/8293077/lgbt-bullying-discrimination>.

Indeed, LGBTQIA people face the fear and realistic possibility of being denied or losing their health services, rented home, or employment, but a further escalation of this economic situation is into the area of national citizenship, wherein same-sex partnership/marriage equality, the loss of child custody, issues of inheritance, or even tax equality are all problematic for LGBTQIA people. One might think the previous is not the case with the media's portrayal of LGBTQIA culture on television and in popular culture, but communication research analyst Carole Bell has found that "the proliferation of reality programs may have contributed to the ongoing stereotyping... rather than diversified the range of representation."¹³ In fact, despite the portrayal of LGBTQIA people on shows like *Ellen*, *Will and Grace*, *Glee*, and *Modern Family*, gay men as of 2015 are still unable to donate blood, LGBTQIA couples still have difficulty with adoption, and employment and housing laws don't include LGBTQIA persons.

Currently homosexuality is illegal in 77 countries, and nine of those countries - Afghanistan, Brunei, Iran, Mauritania, Nigeria, Qatar, Saudi Arabia, Sudan, and Yemen - punish it by death. In the USA alone same-sex sexual activity wasn't legalized until 2003 CE, same-sex marriages or unions vary from state to state, adoption laws vary by state, federal hate crimes added as a LGBT class in 2009, and LGBTQIA people couldn't serve in the military until 2011. In stark contrast to this, in Nigeria same-sex sexuality activity results whipping and/or imprisonment for women, and in Brunei or Yemen it results in death by stoning for men.

¹³ Carole Bell, "Gay rights and popular culture," *Northeastern University*, January 18, 2012, <http://www.northeastern.edu/camd/blog/2012/01/gay-rights-and-popular-culture/>.

LGBTQIA's Effect on Design

Design – be it graphic, hypermedia, and multimedia in nature – can have a negative or positive impact on a community or an idea, and thereby potentially affect the perception, communication, and interaction of a community or an idea for social good. For example, if one takes a look at logo and symbol design, response-based design, anti-violence design, and perception and social change through design as it affects the LGBTQIA community, one can see even more so how design can have a negative or positive impact on a community or an idea.

Logo/Symbol Design

When looking at one of the oldest symbols that define the LGBTQIA community, one must look between the years of 1939 to 1945 CE, during the World War II. World War II was the most widespread war in history, with more than 100 million people serving in military units from over thirty different countries. In Germany, the *Nazi Party* led by Adolf Hitler created a totalitarian single-party state led by the Nazis. The first symbol that impacted the LGBTQIA community and embodied an idea of that community's perception was the pink triangle, which was one of the Nazi concentration camp badges used to identify male prisoners who were sent there because of their homosexuality (fig. 3.1). Every prisoner had to wear a downward-pointing triangle on his or her jacket, the color of which was to categorize him or her by 'kind', and the gay or lesbian prisoners were assigned a pink triangle. After the horrible atrocities of the Nazi concentration camps and World War II, this pink triangle symbol would later over the years transform from a negative symbol of persecution, into a positive symbol of identification, and be reclaimed as a symbol of LGBTQIA pride leading into the 1960s.

Moving forward in time to 1968 CE, the Stonewall Riots (fig. 3.2) were a series of spontaneous, violent demonstrations by members of the gay community against a police raid that

took place in the early morning hours, at the Stonewall Inn, in the Greenwich Village neighborhood of New York City. These riots are widely considered to constitute the single most important event leading to the gay liberation movement and the modern fight for gay and lesbian rights in the USA. Not being permitted to meet in public places, LGBTQIA persons were criminally persecuted in the USA for gathering at night clubs or in social groups. After the Stonewall Riots LGBTQIA citizens were allowed to meet in public, and the entire country acknowledged their existence for the first time. This gave way to the modern logo or symbol that would replace the pink triangle, the rainbow flag, which was appropriated from the 1939 film *The Wizard of Oz*. A symbol of how better things could be ‘over the rainbow’, within ten years of the Stonewall Riots, the use of the rainbow flags became a long and accepted LGBTQIA tradition. Eventually in the 1980s the San Francisco artist Gilbert Baker designed a flag as a symbol for gay pride (fig. 3.3). “The internationally recognized banner is usually flown during gay and lesbian marches and is displayed outside gay-friendly bars and clubs, most commonly with the red stripe on top, as the colors appear in a natural rainbow”.¹⁴ Rainbow flags are now displayed in many cultures around the world as a sign of diversity and inclusiveness, of hope and of yearning for human rights equality.

Another symbol apart from the pink triangle and the rainbow flag that identifies the LGBTQIA community is the Human Rights Campaign’s (HRC) logo (fig. 3.4). The HRC is the largest LGBTQIA equality-rights advocacy group and political lobbying organization in the USA, and the HRC logo is one of the most recognizable symbols of the lesbian, gay, bisexual and transgender community; it has become synonymous with the fight for equal rights for LGBTQIA Americans, and in addition to the pink triangle and rainbow flag, it is the first logo

¹⁴ “Peace Symbols: The Origins and the Ideas Behind the Symbols,” *Design Boom*, April 4, 2013, <http://www.designboom.com/contemporary/peace.html>.

and symbol that combined all of the previous symbols into one, to represent what humanity should strive for.

Each one of the previously mentioned logos or symbols – the pink triangle, the rainbow flag, and the HRC logo – show how the LGBTQIA community has exerted the need for change, influence, understanding, and a voice... and the design followed accordingly with the appropriation, creation, or rebranding of symbols for the LGBTQIA cause.

Response-Based Design

When looking at amendments, laws, and policies that affect the LGBTQIA community, design and design campaign responses factor into a huge part of how this community is perceived and understood, and how the field of design has been affected by the LGBTQIA community. If one looks at ‘Don't Ask, Don't Tell’ (DADT), the ‘Defense of Marriage Act’ (DOMA), and ‘Proposition 8’ (*Prop8*), one can then see the myriad of response-based designs.

DADT was the official USA policy on gays serving in the military from December 21, 1993, to September 20, 2011; DOMA, which was enacted in September 21, 1996, is a USA federal law that restricts federal marriage benefits and required inter-state marriage recognition to only opposite-sex marriages in the USA; and *Prop8* is a state constitutional amendment passed in the November 2008 state elections, which provides that only marriage between a man and a woman is valid or recognized in California.

These three specific amendments and policies have spawned design responses on both sides of the issues – which affected the LGBTQIA community in the positive and the negative – encompassing everything from ‘Dignity and Respect’ (fig. 3.5), the USA Army’s training guide on conduct, to the *DOMA Project* to fight for equality; however, the largest design response to these amendments, laws, and policies first and foremost is the *NOH8 Campaign* (fig. 3.6), which

is a “photographic silent protest created by celebrity photographer Adam Bouska and partner Jeff Parshley in direct response to the passage of Proposition 8”.¹⁵

Prop8 constitutes one of the largest response-based design campaigns in history to affect public policy, wherein the people for and against the LGBTQIA community, raised over \$80 million from over 64,000 people in all fifty states and more than twenty foreign countries. Design reflected the LGBTQIA influence by setting a new record nationally for a social policy initiative, and on June 28, 2013 CE, the USA Ninth Circuit lifted its stay enabling same-sex marriages to resume after two years of being blocked by political and religious groups.

Anti-Violence Design

When looking at the violence that affects the LGBTQIA community, one can see many examples from the Family Policy Council to the Westboro Baptist Church (WBC), the most famous of which being the WBC who cause a lot of pain and frustration due to their extreme actions; however, if one looks at the design opportunities that have developed from anti-violence situations like the WBC, we can see even more examples of the positive impact the LGBTQIA community has had on design. The house, which is across the street from the WBC was bought by Aaron Jackson and his non-profit organization Planting Peace (fig. 3.7). Planting Peace states the following about the *Equality House*, “the house, which is painted the colors of the Pride flag, will serve as the resource center for all Planting Peace equality and anti-bullying initiatives and will stand as a visual reminder of our commitment, as global citizens, to equality for all”.¹⁶ Furthermore, Planting Peace is a progressive nonprofit organization founded in 2004 CE for the purpose of spreading peace in a hurting world.

¹⁵ Adam Bouska and Jeff Parshley, “About,” *NOH8 Campaign*, June 30, 2009. <http://www.noh8campaign.com/>.

¹⁶ Shawn Saleme, “The LGBT Equality House Across from the Westboro Baptist,” *Visual News*, March 20, 2013, <http://www.visualnews.com/2013/03/20/the-lgbt-equality-house-across-from-westboro-baptist/>.

Another example of anti-violence design for the betterment of the LGBTQIA community is the *It Gets Better Project*. The *It Gets Better Project* has become a worldwide movement, inspiring more than 50,000 user-created videos viewed more than 50 million times. To date, the project has received submissions from celebrities, organizations, activists, politicians and media personalities, including President Barack Obama, Anne Hathaway, Ellen DeGeneres, and the staffs of Pixar, the Broadway community, and many more.

Also, the *Trevor Project* is the leading national organization providing crisis intervention and suicide prevention services to lesbian, gay, bisexual, transgender, and questioning youth, and is yet another example of anti-violence design having a positive impact on this community. Planting Peace, the *It Gets Better Project*, and the *Trevor Project* are all design initiatives that developed out of a direct response to the violence that the LGBTQIA community faced.

Perception & Social Change through Design

An example of design enacting social change to affect this community can be seen in *Ahwaa*, an ambitious new portal for LGBTQIA issues, resources and advocacy in the Middle East (fig. 3.8). *Ahwaa* “provides a safe haven for a community consistently censored and frequently threatened in a culture with some of the world's most rigid gender norms”.¹⁷

Another example of perception being changed through design is when *Amendment One* – a constitutional amendment to provide that marriage between one man and one woman is the only domestic legal union that shall be valid or recognized in North Carolina – was challenged by a design partnership between ‘New Kind’ and the Coalition to Protect All North Carolina

¹⁷ Maria Popova, “A Voice for LGBTQ in the Middle East,” *The Design Observer Group*, June 1, 2011. <http://changeobserver.designobserver.com/feature/a-voice-for-lgbtq-in-the-middle-east/27518/>.

Families (fig. 3.9). Together they waged “a five-month campaign against the Amendment, which was inspired by open source principles and community-focused design”.¹⁸

Also, ‘Column Five’ in collaboration with ‘GOOD’, took a look at how attitudes toward marriage are changing across the nation. Their infographic details the current position of each state on the issue as well as the stance of the public and political parties (fig. 3.10). Probably the best example of perception and social change occurred before the U.S. Supreme Court began the debate about same-sex marriage in the USA, when the HRC started urging people to change their Facebook profile pictures on Monday, March 25 2013 to a pink-on-red equal sign, to show support for marriage equality (fig. 3.11). According to Facebook’s own statistics, “120% more (or about 2.7 million) people changed their avatars to support same-sex marriage”.¹⁹

Indeed, it is apparent that the LGBTQIA community has and still is, exerting its need for change, influence, understanding, and their voices to be heard, and how design has been affected by LGBTQIA people and has responded with logo/symbol, response-based, anti-violence, and perception/social change design and design initiatives. What occurs if one looks at how design affects the LGBTQIA culture in return?

¹⁸ “Case Study: Protect All North Carolina Families: Campaign to Defeat Amendment One,” *American Institute of Graphic Arts*, March 25, 2013. <http://www.aiga.org/case-study-protect-all-nc-families/>.

¹⁹ Eytan Bakshy, “Showing Support for Marriage Equality on Facebook,” *Facebook*, March 29, 2013. <https://www.facebook.com/notes/facebook-data-science/showing-support-for-marriage-equality-on-facebook/10151430548593859>.

Design's Effect on LGBTQIA

It is fundamentally true that the design of visual language, visual media, and social design in campaigns, foundations, initiatives, and projects have a positive and successful impact on LGBTQIA youths in regards to reducing violence, preventing bullying, reducing suicide rates, and affecting the perception of same-sex domestic partnership in the USA. Design is doing this for the LGBTQIA community by providing hope, access to information, and opportunities for education and understanding.

Design Campaigns

Looking first at visual language, media and social design in campaigns, one of the best examples of positive impact on LGBTQIA youth is with the HRC. The HRC is the largest equality-rights advocacy group and political lobbying organization in the USA. According to the HRC, it has more than one million members and supporters. An example of how the HRC uses design to positively affect the perception of same-sex domestic partnership occurred during the week when the USA Supreme Court heard testimony regarding same-sex marriage. The HRC launched a campaign to urge Facebook users to replace their profile pictures with red HRC logos, and since the human eye is naturally drawn to red, a lot of them were swapped out and noticeable. According to Facebook's own research (fig. 4.1), "120% more (or about 2.7 million) people changed their avatars to support same-sex marriage."²⁰

Another example of design use in campaigns to affect the perception of same-sex domestic partnership, and its censorship, is the *NOH8 Campaign*. The *NOH8 Campaign* is a photographic silent protest created in direct response to the passage of *Prop8*. Photos feature

²⁰ Mark Wilson, "How Facebook Measured Gay Marriage Support With An Equals Sign," *Fast Company*, April 8, 2013, <http://www.fastcodesign.com/1672246/how-facebook-measured-gay-marriage-support-with-an-equals-sign>.

subjects with duct tape over their mouths, symbolizing their voices being silenced by *Prop8* and similar legislation around the world, with "NOH8" painted on one cheek in protest (fig. 4.2). As of May 26, 2013 there are more than 31,452 photos of celebrity, sport, and political figures added to the campaign's website.

A final example is the *ThinkB4YouSpeak.com Campaign*, which aims to raise awareness about the prevalence and consequences of anti-LGBT bias and behavior in America's schools. The campaign's goal is to reduce and prevent the use of homophobic language in an effort to create a more positive environment for LGBTQIA teens by reaching adults, school personnel, and parents (fig. 4.3). The HRC, *NOH8*, and *ThinkB4YouSpeak.com* campaigns are all excellent examples of how design can campaign to raise awareness about political issues, disseminate information about legislation inequality, and reduce hostility and bullying in the general population and public school systems.

Design in Foundations

Foundations also contribute a lot of design resources and visual media to reducing violence and providing opportunities to LGBTQIA youths. For example, the *Gill Foundation* is one of the nation's largest funders and organizers of lesbian, gay, bisexual, and transgender civil rights work, and the foundation's goal is to create an America in which all people are treated equally and respectfully. According to their advocacy for equality, the foundation focuses most of their efforts in "bringing about change within the following areas of public policy: nondiscrimination, relationship recognition, family recognition, safe schools, and violence

reduction,”²¹ and to date have provided over \$106,000,000.00 to nonprofits that share their vision for a fully equal and inclusive America.

Another foundation that has a positive impact on LGBTQIA youths through social design is the Matthew Shepard Foundation. This foundation seeks to replace hate with understanding, compassion, and acceptance through its varied educational, outreach, and advocacy programs, and by continuing to tell Matthew Shepard’s story. This is done through the foundation’s Speakers Bureau, which visits schools, universities, colleges, companies, and community groups around the nation to talk about the devastating impact hate has on communities and youths. Another example is the foundation’s design, spreading, and contributions to the #time4marriage social media awareness campaign (fig. 4.4).

A final example of a foundation’s efforts to improve the perception and provide opportunities to LGBTQIA youths is the Point Foundation, which empowers promising LGBTQIA students to achieve their full academic and leadership potential – despite the obstacles often put before them – to make a significant impact on society. Examples of this can be seen in their YouTube public service announcements that discuss the family, network, and college opportunities that were made available to LGBTQIA youths (fig. 4.5). Each of these foundations previously mentioned are examples of design applied to LGBTQIA issues to achieve positive results, be it for educational opportunities for LGBTQIA people, educational awareness, or even advocacy proms.

Design Initiatives

When looking at initiatives that reduce violence, prevent bullying, reduce suicide rates, and affect the perception of same-sex domestic partnership for LGBTQIA youths through their

²¹ “Advocate for Equality,” *Gill Foundation*, May 26, 2013, <http://gillfoundation.org/what-we-do/advocate-for-equality/>.

use of visual media, visual language and social design, one of the best examples is the *FCKH8.com Initiative*. The *FCKH8.com Initiative* is a private t-shirt company with a directly charitable mission of ‘fighting homo-H8 everywhere’. *FCKH8.com* raised over \$250,000.00 through t-shirt and swag sales for gay rights, which is a great design example by taking a good cause and applying savvy marketing on products like iPods, soft drinks and designer jeans. Their products consist of hoodies, t-shirts, tank tops, bands, gear, and more that feature phrases such as ‘FCK H8’, ‘Legalize Love’, ‘Some Chicks Marry Chicks – Get Over It’, and ‘STR8 Against H8’. Also, the *FCKH8.com Initiative* has a successful media campaign you can see on their *YouTube* channel, which has videos catered to specific target audiences (the elderly, it doesn’t get better, etc.).

Another initiative is the *Gay, Lesbian and Straight Education Network* (GLSEN), which is the leading national education organization focused on ensuring safe schools for all students. GLSEN envisions a world in which every child learns to respect and accept all people, regardless of sexual orientation or gender identity/expression. This initiative has designed the *Respect Awards*, the *Courage Awards*, the *Commitment to Diversity and Inclusion Award*, *Hero Award*, etc. to highlight positive influences on LGBTQIA youths through dedication and service. GLSEN also features a custom designed reader which sniffs a live feed of the uses of ‘fag’, ‘dyke’, and ‘so gay’ on Twitter, and outputs it for public viewing to raise awareness (fig. 4.6). This can be seen live and in action on the homepage of the Thinkb4youspeak website.

A final initiative that helps dramatically reduce violence, prevent bullying, and reduce suicide rates is the StopBullying.gov Initiative, which provides information to various government agencies on what bullying is, what cyberbullying is, who is at risk, and how one can prevent and respond to bullying. The initiative has a really successful Tumblr feed that

disseminates visual media and design that raises awareness to the initiative's goals and mission (fig. 4.7), which also aligns with their communication missions of preventing cyberbullying and being more than a bystander. These design initiatives are a fantastic example how design – through design merchandising, design management of events and social media integration, and through a website – can change cultural attitudes, reward LGBTQIA positive behavior, and design government programs to battle youth bullying.

Design Projects

When looking at various projects that have a positive and successful impact on LGBTQIA youths, the *It Gets Better Project* inspires hope for young people facing harassment. The project's mission is to “communicate to lesbian, gay, bisexual and transgender youth around the world that ‘it gets better’, and to create and inspire the changes needed to make it better for them.”²² The most influential design that comes from this project is streaming media designed for social change, and examples of this can be seen on the project's *YouTube* channel; however, the real social design comes into play by the project allowing viewers to submit their own videos. This is the very definition of the fourth order design, allowing systemic changes and growth by designing a mechanism and outlet for networking and participation.

Another project that has a positive and successful impact is the *Laramie Project*, which is a play by Moisés Kaufman and members of the *Tectonic Theater Project*, about the reaction to the 1998 murder of University of Wyoming gay student Matthew Shepard in Laramie, Wyoming. The play, *The Laramie Project* (fig. 4.8), “has become one of the most-produced

²² “About the It Gets Better Project,” *It Gets Better Project*, May 26, 2013, <http://www.itgetsbetter.org/pages/about-it-gets-better-project/>.

plays in the U.S. (especially in schools and colleges) but is still controversial. An attempt to stop a 2009 high school production in Las Vegas was struck down by a judge.”²³

Finally, the last design project that has the most apparent positive effect on LGBTQIA youths is the *Trevor Project*. The *Trevor Project* is the leading national organization providing crisis intervention and suicide prevention services to lesbian, gay, bisexual, transgender, and questioning youth. According to the project LGBTQIA “youth are four times more likely, and questioning youth are 3 times more likely to attempt suicide as their straight peers.”²⁴ Apart from all of the project’s many program design efforts – the *Trevor Line*, *Trevor Chat*, *Trevor Text*, and *Ask Trevor* – the ‘I’m Glad I Failed’ design card and poster design campaign is probably the most influential inside of public schools and on college campuses (fig. 4.9).

Therefore, the design campaigns, foundations, initiatives, and projects are successfully designing visual language and visual media – and in effect creating ‘social design’ change – that is positively impacting LGBTQIA youths every day. The impact of this design is effectively reducing violence, preventing bullying, reducing suicide rates, and affecting the perception of same-sex domestic partnership in the USA with hope, information, and understanding. One can see how design has had a positive impact on the LGBTQIA community – and the perception or ‘idea’ of that community – and all of the aforementioned instances of design’s effects on LGBTQIA show the potential and power of design to shape an idea, cultivate perception, and influence communication.

²³ Lowerison, Jean, “Chance Theater’s ‘The Laramie Project’ plays,” *San Diego Gay & Lesbian News*, May 1, 2013, <http://sdgln.com/entertainment/2013/05/01/theater-review-chance-theater-laramie-project-plays>.

²⁴ “Facts About Suicide and LGBTQ Youths,” *The Trevor Project*, April 17, 2015, <http://www.thetrevorproject.org/pages/facts-about-suicide>.

How Can Designers Help?

Graphic designers and visual communicators now, even more so than before, have the opportunity to use design to foster communication and sociability. Graphic designers and visual communicators are well equipped with design research, heuristic design, and phenomenological design skillsets to design, develop, and prototype experiences, while benefiting society through designing communication and socialization. To some degree these skillsets are already being employed in many different fields through Gamification, or the use of game thinking and game mechanics in non-game contexts to engage users to solve problems.

For example, the term ‘heuristic’ refers to experience-based techniques for problem solving, learning, and discovery, and heuristic design is something that has long been used by designers in the creation of design objects. Design critic Don Norman states in his ‘3 Ways Good Design Makes You Happy’ *TedTalk* that there are three processing levels for users of design: the visceral, the behavioral, and the reflective processing levels. The visceral level of processing is the 'built-in' or physical processing the humans have; the middle level of processing is the behavioral level of processing which is the human process of control or functionality, and the third level of processing is reflective processing or the meaning or image and its perception. And so, an excellent design object – a tabletop game for example, that uses pieces, tokens, cards and a board – has to be designed in such a way to help solve gaming problems, allow visual and object-orientated learning, and appeal to the player at the visceral, behavioral, and reflective processing levels.

An example of heuristics and processing levels working in an existing design object for a participatory medium can be seen in the pieces composing the tabletop game *Betrayal at House on the Hill* (fig. 5.1). The character relating to the avatar game pieces as a visceral process really

works well with the player's hand, and speaks to a well-designed German UI element. Also, the game floor or 'room tiles' and their behavioral placement references the flow of time, co-authored space, and story advancement in the UX within the game. Finally, the design of the character markers and cards reflectively processes each individual character's inventory and personal statistics, speaking of their status in the game. All of these designed objects and their attributes in how they relate to the player, create and constitute a harmonious and well-designed UI and UX with *Betrayal at House on the Hill*, making it a popular game.

Graphic designers and visual communicators are also better aware of utilizing principles of phenomenology in their designs, which could be extended to participatory mediums. The American philosopher Shaun Gallagher posits that phenomenological research has a direct relevance to design, because the tools and technologies that people make can affect the way that people experience their surroundings, and design can either support or hinder cognitive activity, which Gallagher proposes is exactly what phenomenology studies. Gallagher discusses how cognition can enact and extend to environmental processes, and utilizes a *GPS*, *SpellCheck*, and a *PDA*'s memory as examples of how technical instruments can "support our cognitive activities."²⁵ Gallagher proposes that the way we design our environment – a cockpit, a classroom, a surgery – also can either enhance or thwart our cognitive tasks.

Likewise, graphic designers and visual communicators can apply phenomenology principles to participatory interaction development to extend the player's cognition, promote player-to-player human interaction, and to design a gaming atmosphere or environment. An example of this can be seen in the tabletop game board for *Munchkin* (fig. 5.2), wherein the game board actually functions to explain the turn-by-turn process for each player. The *Munchkin* game

²⁵ Shaun Gallagher, "Phenomenology." In *The Encyclopedia of Human-Computer Interaction*, 2nd Edition (Interaction Design Foundation, 2006), January 19, 2014, <http://www.interaction-design.org/encyclopedia/phenomenology.html>

board additionally serves as a visual marker to track each player's advancement through levels one to ten (ten being the winning level), as well as functions as a spatial point of departure for discussing collaboration, communication, and conflict resolution between players (which must occur in the game).

Also, the design process is very similar, or parallels, the already existing process of game design. According to Lewis Errol Pulsipher – a teacher, game designer, creator of role playing games, board games, card games, and videogames, and the first person in the North Carolina to teach game design classes – the steps or processes involved in designing games is conceiving the “framework for a series of interesting challenges in the form of a ‘game’, devises mechanics (Rules), creates (or communicates with others to help create) a working prototype, and repetitively and incrementally modifies the design (and prototype) in light of playtesting;”²⁶ these steps and components of game design (fig. 5.3) are very similar to what Richard Buchanan refers to as the four areas of design in *Wicked Problems in Design Thinking*.

As described by Richard Buchannan, the ‘orders’ of design thinking are: First Order Design, which is design as communication, and can refer to signs, symbols and visual communication; Second Order of Design, which is concerned with the design of a material object, or ‘things’; Third Order Design, which is design as instruction or more so as strategic planning, and can refer to action, activities or organized services; and Fourth Order Design, which is design as systemic integration, and is concerned with complex systems or environments for learning. In addition, all of these components – designing communication, objects, instruction, and systemic design/redesign – are all involved in design and gamification to

²⁶ Lewis Pulsipher, *Game Design: How to Create Video and Tabletop Games, Start to Finish*, North Carolina: McFarland & Company Inc., 2012.

develop the potential for creativity, sociability, teamwork, and conflict resolution in a successful participatory experience.

And so, designer, front-end developers, and visual communicators can affect social change through the skillsets they employ every day; however, utilizing static mediums alone such as print are not enough. But rather, applying those design principles to participatory mediums which enable multiple people to interact with each other is essential, and parallels the type of interaction that gamification employs for different results in other fields. Looking at sole-interaction participatory mediums – such as an app, software, or website – versus interaction-based participatory mediums is necessary.

Participatory Mediums

Videogames

When one considers design and gamification being used together to produce a participatory medium, videogames are probably the first things that come to mind due to their popularity. Videogames are primarily electronic games in which players control images on a television or computer screen, and at times can incorporate or involve more than one player. The Entertainment Software Association (ESA) compiles and releases sales, demographics, and usage data of videogames in their annual report titled the *Essential Facts about the Computer and Video Game Industry*. The ESA data from 2013 shows that just in the United States of America alone 58% of Americans play videogames, that 51% of American households own at least one dedicated *Microsoft, Nintendo, or Sony* game console, and that the average age of videogame players is 30 years old; apart from the ESA's report, there are similar studies conducted for the United Kingdom and Asia that yield similar data.

Videogames have achieved a level of cultural acceptance in society; they are available on dedicated game platforms, personal computers and laptops, and even on hand-held gaming consoles, cellular phones, smartphones, tablets, and all other types of mobile devices. It is common for videogame players to play games with others – friends, family, or people they don't know - and for parents to play videogames with their children. Apart from just playing videogames, dedicated consoles can also be used for other forms of entertainment like watching movies, listening to music, and to surf the Internet.

When one looks at videogames in regards to players that play games with other people, only 62% of videogame players play with others in person or online, and only 77% of those

videogame players do so for at least an hour per week - which is about 3 out of 10 players.²⁷ This is very different when compared to the statistics concerning players of tabletop games with other people, because 100% of the tabletop games are played with others, and 100% of that playing is done face-to-face, or in person. Additionally, the ESA 2013 statistics show that not only are players playing more videogames than they did three years ago, but they are specifically spending 58% less time playing board games.²⁸

If you ask a videogame player about playing online videogames with other people, they commonly state that there are definitely games that have social interaction, and they will cite Massive Multiplayer Online RPGS (MMORPGS) as being one of the types of games that are predominately about playing with other people; however, even within those types of games players still tend to play a single player orientation, and “they (the video game manufactures) usually almost always make it able for you to do it by yourself, or you can completely ignore that content in general if you don't want to have/if you don't need a party to do it.”²⁹ This means that most videogames don't even require interaction with other players, even though the videogame may be advertised as such.

Since videogames as a medium don't embrace or facilitate social interaction, and more people of increasingly younger and younger ages are embracing videogames as a solution to creativity, entertainment, and socialization, this is not an ideal participatory design medium. Furthermore, videogames are popularly scrutinized for doing the exact opposite of providing creativity, communication, socialization, and teamwork: not being able to reflect national

²⁷ “Essential Facts about the Computer and Video Game Industry: 2013,” *Entertainment Software Association*, January 29, 2014, http://www.theesa.com/facts/pdfs/esa_ef_2013.pdf.

²⁸ Ibid, http://www.theesa.com/facts/pdfs/esa_ef_2013.pdf.

²⁹ Tim Broadwater, “Interview with Arnold Triplett,” YouTube, February 17, 2014, http://www.youtube.com/watch?v=wc0W4_E4tuo&feature=share&cc=1.

culture, promoting racism and violence in videogames, and ultimately causing videogame addiction.³⁰

Game journalist Quintin Smith also writes many articles and delivers presentations on the lack of community, conflict resolution, and cooperation as being the reason why niche tabletop games are becoming, in so many ways, better than videogames. Smith attributes this to couch cooperation “we all remember, that (videogame) gaming has been dropping the ball on recently;” he states that as human beings we are hard-coded to sit down with our friends and enjoy one another’s company, and that niche board games “are there for us if we want to sit down with people, and the fact that videogames can’t do that at the moment, means that board games are picking up the slack.”³¹

Traditional Board Games vs. Roleplaying Games

Indeed front-end developers, graphic designers, and visual communicators can change perceptions and foster acceptance of a community through participatory mediums. Some of the best examples of well-designed participatory mediums are co-op, serious games, and interactive edutainment... all of which are derivative of gamification principles found in traditional board games. Almost everyone is familiar with traditional board games (fig. 6.1) and has played them at one point or another in their lifetime. Board games are traditionally defined in the Merriam-Webster Dictionary as simply a game of strategy (as checkers, chess, or backgammon) played by moving pieces on a board. The rules and setup for traditional board games are usually very simple, allowing quick gameplay. The online retailer *Amazon* maintains a list of ‘best sellers’ in

³⁰ Ross Herbin, Blair Inglis, Greg McDonald, and Graeme Watt, “Four short essays which focus on contentious issues affecting the videogames industry,” *The Computer Games Journal Ltd.*, (2013), January 22, 2014, http://tcjg.weebly.com/uploads/9/3/8/5/9385844/uws_students_shortessays.pdf

³¹ Quintin Smith, “Boardgame Bootcamp: Board Gaming’s Golden Age,” Presentation at Game City 8 Festival in the Theatre Royal Concert Hall, Nottingham, UK., October 22, 2013.

the traditional board game market. Among *Amazon's* list *Candy Land*, *Trouble*, and *Sorry* are also included.³²

In contrast, dedicated RPGs or 'pen and paper' games are different all together. The most well-known and popular versions of dedicated RPGs are *Dungeons & Dragons*, *Pathfinder*, and *World of Darkness* (*Vampire the Masquerade*, *Werewolf the Apocalypse*, etc.). In conjunction with the creation of *Dungeons and Dragons* (D&D) in 1974, the term 'role-playing game' was adopted and utilized by gamers to mean a game that involves face-to-face interaction between players, with the intention of creating or co-authoring a narrative (fig. 6.2). These types of games are very popular and require a lot of involvement: it takes a long time to play over many gaming sessions, it requires a lot of rule books, figurines, dice, pencils, and paper. It further requires the player to create and develop a complex character, usually with a race, class, and abilities (fig. 6.3). Unlike children's games of make-believe, "RPGs remain popular among adults, whose imaginative and narrative capabilities make their games far more complex than childhood fantasies."³³ In addition, 'pen and paper' RPGs require a lot more effort on the part of the players, more creativity in working with each other, and utilization of teamwork skills.

When one considers both traditional board games, as well as dedicated 'pen and paper' RPGs, niche tabletop games are positioned in the middle of the two. One of the best definitions of niche tabletop games has been provided by celebrity Will Wheaton in his weekly web series *Tabletop*. As Wheaton best describes wanting to play something quicker than a dedicated RPG, but still wanting the same 'feel', he states that "when I was ten years old I explored my first dungeon, and I slew my first dragon... but sometimes you don't care about someone's rich

³² "Amazon Best Sellers," *Amazon*, February 21, 2014, <http://www.amazon.com/Best-Sellers-Toys-Games-Board/zgbs/toys-and-games/16622501>.

³³ Jennifer Ann Grouling, *Tabletop Role-Playing Games: Perspectives from Narrative, Game, and Rhetorical Theory*, North Carolina: NCSU Institutional Repository, 2005.

personal back story, you don't care about a character's precious little hopes and dreams... sometimes you want to kick in the door, kill the monster, and take its treasure... without any of that pesky role playing."³⁴ What Wheaton is expressing is a desire to setup, play, enjoy, and complete a dedicated 'pen and paper' RPG within a quicker timeframe, and with greater ease.

What are Niche Tabletop Games?

Niche tabletop games aren't exactly traditional board games like *Monopoly*, *Checkers*, and *Sorry*; however, they aren't dedicated 'pen and paper' RPGs like *Dungeons & Dragons* either; niche tabletop games are somewhere in between traditional board games and dedicated 'pen and paper' RPGs. Niche tabletop games borrow attributes from both genres: the quick and ease of setup and gameplay, combined with the player taking on a role in the game while coauthoring the gameplay story. Indeed, a lot of gamers may not be aware of the existence of niche tabletop RPGs, and therefore have never played a niche tabletop RPG.

Some examples of niche tabletop roleplaying games are *Munchkin*, *Ticket to Ride*, *HeroQuest*, *Galaxy Truckers*, *Catacombs*, *Betrayal at the House on the Hill*, *Settlers of Catan*, and *Lords of Waterdeep* to name a few. All of these games require communication, socialization, and role playing more than that of a traditional board game, but are accessible and less time-consuming than dedicated RPGs. Furthermore, "the skills learned during game-play, they (the players) might be better able to apply creativity to problems... and may have self-reflective tools that non-players might not possess."³⁵ Meaning that niche tabletop games allow players to carry the experiences they have about culture during gaming with them in everyday life.

³⁴ Will Wheaton, "Munchkin: Felicia Day, Steve Jackson and Sandeep Parikh join Will Wheaton on TableTop," *YouTube*, June 1, 2012, <http://youtu.be/V6oMBSiL7Zs>.

³⁵ Gretchen L. DeHart, *Out of character: issues of identity, acceptance, and creativity in tabletop role-playing games*, Indiana: Cardinal Scholar, 2008.

As a genre, niche tabletop games have been increasing in sales for the last ten years, as opposed to traditional board games whose sales have been declining. Quintin Smith a game journalist for *Eurogamer*, *Kotaku*, and *Rock Paper Shotgun*, stated in his *GameCity Unplugged* presentation ‘Board Gaming’s Golden Age’ at the 2013 *GameCity8 Festival* that “board games themselves are getting better... sales for things like *Monopoly* have flat lined, or they’re in decline... people are realizing that there are better board games out there.”³⁶ Smith also stated that he arranged a meeting with *Esdevium Games* who distributes board games in the UK, to discuss sales figures. *Esdevium Games* market research proves that ten years ago there was a ‘phoenix-like’ resurgence of sales, and going forward they are still continuing to rise.

Niche tabletop RPG sales are not only growing, but some have been doing even better than videogame sales. This is evident in Andrew Curry’s *Wired Magazine* article ‘Monopoly Killer: Perfect German Board Game Redefines Genre’. In this article, Curry looks at the niche tabletop RPG *The Settlers of Catan* (fig. 6.4), and states that since its introduction it has become a “worldwide phenomenon... it has been translated into thirty languages and sold a staggering fifteen million copies (even the megahit videogame *Halo 3* has sold only a little more than half that)... it has spawned an empire of sequels, expansion packs, scenario books, card games, etc.”³⁷ Furthermore, a new market now exists for videogame manufacturing companies in releasing ‘board game versions’ of their games, and some examples of this are *BioShock*, *Bejeweled*, and *Mega-Man*.

Why are niche tabletop games increasing in sales? Apart from the studies from *Esdevium Games*, and the sales of specific game titles like *The Settlers of Catan*, there is an

³⁶ Quintin Smith, “Boardgame Bootcamp: Board Gaming’s Golden Age,” Presentation at Game City 8 Festival in the Theatre Royal Concert Hall, Nottingham, UK., October 22, 2013.

³⁷ Andrew Curry, “Monopoly Killer: Perfect German Board Game Redefines Genre,” *Wired Magazine*, 17.04 (2009): n. pag. 1.

increase in niche RPG culture, which only contributes to the increased awareness and sales of these types of games. Websites such as *Board Game Geeks*, *Geek & Sundry*, and *BoardGames.com* all are examples of online repositories of niche tabletop RPGs, forums for game discussion, and videos concerning niche tabletop RPG gaming culture. What is also contributing to the increased sales of niche tabletop games is a ‘cultural cross-pollination’, or combining what was previously different design attributes of both eastern and western tabletop games.

For example, German tabletop games are a good illustration of design because German tabletop games embrace the physicality of the medium: they utilize cards, tokens, dice, figures, coins, boards, etc. Also with German games you can expect two or four page game manuals, so they’re quick and accessible to everybody; however, German games often have super thin themes and storylines. Take for example the popular board game *Bohnanza* (fig. 6.5), a bean trading game, whose sales skyrocket in Germany but would barely be purchased by a very young audience in the USA.

Conversely, in the USA, if you look at *Games Workshop* – a game production and retailing company that is best known as developer and publisher of the tabletop war games like *Warhammer* and *The Lord of the Rings Strategy Battle Game* – you see a lot of story-driven simulation in tabletop games, as opposed to simplicity and embracing the physicality of the medium. Players in the USA want to be barbarians, World War II soldiers, spies, etc. Furthermore, Quintin states that “this is why board games are getting better... mixing schools of thought, and taking the best from both sides.”³⁸ Indeed, western designers have realized the viability of combining European design with their storytelling.

³⁸ Quintin Smith, “Boardgame Bootcamp: Board Gaming’s Golden Age”, Presentation at Game City 8 Festival in the Theatre Royal Concert Hall, Nottingham, UK., October 22, 2013.

You can see the evolution in the context of one particular niche board game's evolution, and the combining schools of thought for tabletop game design in *Twilight Imperium*. *Twilight Imperium* was developed by *Fantasy Flight Games*, which is located in Roseville, Minnesota; they create and publish many role-playing, board, and card games. *Fantasy Flight Games*' first iteration of the *Twilight Imperium* game was heavy themed, but not really accessible (fig. 6.6). The second edition had more money and they added plastic miniatures, but *Fantasy Flight Games* still really wasn't paying attention to the ease of experience utilized by German games, or embracing the physicality of the medium (fig. 6.7). But the third edition of *Twilight Imperium* was much more successful (fig. 6.8), was one of the best board games ever made, and its developer Christian T. Petersen is credited with making a 'nice' board game object. Since 2005 *Twilight Imperium* has been rated with a 4.7 out of 5 stars on *Amazon*, a 4.6 out of 5 stars on *Funagain Games*, and a 7.86 out of 10 on *BoardGameGeek.com*.

Indeed, niche tabletop games are an ideal medium for participatory interaction between multiple people, and such a medium would be an ideal selection to implement design principles to potentially affect social change, much more than videogames as a medium. One need only look at the benefits of design and gamification working together to foster acceptance, connectedness, and understanding of LGBTQIA people.

Design & Gamification for Usability

Gamification – the use of game thinking and game mechanics in non-game contexts to engage users in solving problems and increase users' contributions – when combined with the right design research, heuristic design, and phenomenological design choices, can develop experiences that affect social change. We already know the potential of design, but gamification can cultivate creativity, increase social skills, encourage teamwork and cooperation, and teach problem solving skills. Tabletop game podcaster and writer Patrick Allan explains the social aspect of tabletop gaming in an article on *Life Hacker*:

Kids and adults alike can use role-playing games to combat shyness. Players are given a mask in the form of their character that allows them to feel less vulnerable. For those that do want to get out of their comfort zone a bit, role-playing games can offer some help. Of course, that doesn't mean that role-playing games are as serious as work. They can just help you learn the basics of working with others. You get a feel for how you handle interactions in stressful settings.³⁹

In *Creative Participatory Behavior in a Programmed World*, Stephen Bell discusses his interest in the way games could be seen as structures enabling creative social interaction. Bell states that he wants participants to be able to examine events in his game "experimentally and in apparently closer and closer detail, just as is possible when investigating events in the actual world."⁴⁰ Hence in designing games, Bell makes it possible for players to use their own ability to observe and interpret particular kinds of events in the actual world to enable them to deduce the rules governing the outcome of events in games, thereby the events in the game "could be used as carriers for meta-communication about social interaction, evoking affective responses in participants."⁴¹ What Bell means by this statement is that since participatory activities, like

³⁹ Patrick Allan, "The Surprising Benefits of Role-Playing Games (and How to Get Started)," *Lifehacker*, February 9, 2015, <http://lifehacker.com/the-surprising-benefits-of-role-playing-games-and-how-1684582789>.

⁴⁰ Stephen Bell, *Creative Participatory Behavior in a Programmed World*, Massachusetts: The MIT Press, 1995.

⁴¹ *Ibid*, Massachusetts: The MIT Press, 1995.

creative thinking, drama, and social intercourse all occur in the physical world, the actual world can be used as a paradigm and the co-authored product of a niche tabletop game can be seen as a game.

In the article *More than a Private Joke: Cross-Media Parody in Roleplaying Games* by Susana Tosca, Tosca states that "tabletop roleplaying games are a hybrid entertainment form, part games part storytelling... (and) are advocated by players, game designers, and academics as 'active' entertainment, as opposed to the 'passive' consumption of stories."⁴² Tosca also believes that roleplaying games can have "a transformative power, both on the stories and the players themselves, as it can facilitate serious social satire (which deals with social norms)," and that there exists an "emancipatory possibility as players 'question the legitimacy of established norms' and they exercise the idea that 'no normative system is absolutely stable and immutable,' neither textual nor social."⁴³ And so, niche tabletop games teach younger gamers about the world in which they live, require and prompt social interaction between players, cultivate creativity through cooperation and storytelling, and facilitate group discussion of society, norms, and commonalities.

Design and gamification work together to create what Tom Vander Ark – a prolific writer, speaker, and author of *Getting Smart: How Digital Learning is Changing the World* – refers to as the eight principles of productive gamification. These principles are: conceptual challenges, productive failure, careful calibration, boosting persistence, building confidence, enhancing intrinsic motivation, accessibility, and deeper learning.

Furthermore, where design intersects with gamification, desirable effects can be achieved by players, which in turn can be used to affect social change. This is especially true when seen

⁴² Susana Tosca, "More Than a Private Joke: Cross-Media Parody in Roleplaying Games," *Cinema Journal*, Vol. 48, No. 3. Texas: University of Texas Press, 2009.

⁴³ Ibid, Texas: University of Texas Press, 2009.

through Ark's principles of conceptual challenges and deeper learning, wherein design and gamification can "present students with new and unfamiliar situations that require them to engage in critical thinking and strategic problem solving to accomplish challenging and meaningful goals."⁴⁴ Ergo, if a design and gamification work together to structure a participatory experience for gamers to expose them to a social problem, and through the process of that game allow the players to work together to overcome that problem, this is in effect, a way of facilitating social change.

This concept is not new by any means, and instead is parallel with what serious games have been achieving for many years, especially since the game industry is linked to two industries: media/entertainment and information technologies. In her article in *Digital Arti* titled 'Serious Games', Isabella Arvers discusses the convergence of design and media. Arvers posits that serious games are used in a pedagogical way for political and social marketing, and cites examples such as *Food Force* – a game created by the United Nations wherein users play to distribute food – and *America's Army*, which is used by the USA Army to enroll future soldiers. Indeed, design and gamification have been working together and have been proven to affect individuals to change, but when design is utilized with an interactive or participatory mediums, usability becomes an additional concern.

According to the Nielsen Norman Group – a leading voice in the user experience field that conducts groundbreaking research and evaluates interfaces of all shapes and sizes – usability can be defined as a "quality attribute that assesses how easy user interfaces are to use... (and) methods for improving ease-of-use during the design process."⁴⁵ Usability or UX as field of

⁴⁴ Tom Vander Ark, "Eight Principles of Productive Gamification," *EdWeek*, February 19, 2014, http://blogs.edweek.org/edweek/on_innovation/2014/02/8_principles_of_productive_gamification.html

⁴⁵ Nielsen, Jacob. "Usability 101: Introduction to Usability." Nielsen Norman Group. January 4, 2012. <http://www.nngroup.com/articles/usability-101-introduction-to-usability/>.

study and testing developed out of the human-computer interaction field of research in the 1980s CE, and has grown in popularity with the advancement of technology in regards to interfaces between people (or users) and computers. There are two applications of usability with design, gamification, or interaction in general which are both the initial design process, and usability testing to refine decisions based on user interaction.

Designing a successful UX is based on understanding your users, understanding what they need, understanding what they value, and understanding their abilities and limitations. Similarly, information architect Peter Morville states in his User Experience Honeycomb (fig. 7.1) that usefulness, usability, desirability, findability, accessibility, credibility, and value are all factors that designers see what they do, and enable them to explore beyond conventional boundaries. A large percentage of any successful UX is going to be visual, qualitative, and quantitative research combined with content strategy; however, the second component will be maintaining a successful UX through usability testing. In general terms, usability testing is a procedure to evaluate a design by testing it on users, and is general done through feedback, electronic capturing devices, audio recording, video recording, or device recording in software, website, or application development.

Thesis Project

By examining the strategies of specific LGBTQIA design campaigns, the communication goal of this project is to have players discover through cooperation, gameplay, and interaction that attraction, gender, sex, and types of relationship vary in different combinations within every individual (and in some instances these aspects of attraction, gender, sex, and relationship can, and do, change over an individual's lifetime). The intended outcome is to have the target audience — male and female, cisgender, heterosexuals, who are United States of America citizens or foreign nationals, and of varying socioeconomic class that are ages ten and up — become aware of the diverse states of attraction, gender, sex, and relationship types. This specific communication goal and intended outcome focuses on altering the generalization that all persons (rather than a percentage of persons) are of either the female or male sex, are heterosexual, are cisgender, and exist and function in only monogamous relationships with one partner.

Altering the player's generalizations and preconceived notions of attraction, gender, sex, and relationship can be accomplished by designing a participatory tabletop game, wherein implementing randomization of parameters like sex, attraction, and gender is a game mechanic and in no way effects the players to function to achieve a cooperative goals. This process of forcing the players into a situation that submerges them in randomness, and requires them to work together cooperatively is a common strategy of existing cooperative games. It is best understood and described by Pulsipher when he describes a quote from Rollo May, an American existential philosopher and author, as it applies to game design: "Creativity arises out of the tension between spontaneity and limitations, the latter (like the river banks) forcing the

spontaneity into the various forms which are essential to the work of art or poem.”⁴⁶ Indeed, having parameters and freedom in a game does facilitate creative cooperation. Participation with other players is a necessary requisite of games for working together, communicating, and resolving differences and conflicts for the greater goal of completion, survival, or winning.

According to Ryan Sturm and Jeff Engelstein of *Ludology*, a podcast about the ‘why’ of gaming, to get players to ‘buy into’ or invest in the theme of a cooperative game is possible and is successfully employed under certain conditions:

“You have a lot of issues that can kill a cooperative game experience. A lot of waiting for your turn takes you out of that thematic experience you’re supposed to have; there’s too much down time, not enough working together, and the big climax wasn’t a climax; it is multiplayer solitaire. The threat of everybody loses is treated differently... players will try to avoid that at all cost. You have to contribute your resources to the greater good... and that strategy from a design stand-point, is a way of giving more challenges to the system; that’s a good way for designers to present the players with a changing threat landscape, and force them to make choices. It’s not just that were going up against this bad guy and we got to beat him to win, but I’m getting hit from over here, and there.”⁴⁷

Indeed, a game will need to be cooperative and require participation from each of the players not only to complete and win the game, but also not to lose or not work together. Being able to aid one another, trade resources, cards, dice, etc. is integral to this functionality.

Additionally, the players will need to acquire knowledge through reading the cards, interacting with one another, playing the game, and becoming familiar with the rule system. The game should be played by using heuristic design with European UI elements, and phenomenological design choices through American UX. It is more difficult to accomplish a truly cooperative game, but if done correctly, LGBTQIA persons in regards to varying attraction, gender, sex, and relationship types, will be more understandable (and appropriate) than an

⁴⁶ Lewis Pulsipher, *Game Design: How to Create Video and Tabletop Games, Start to Finish*, North Carolina: McFarland & Company Inc., 2012.

⁴⁷ J. Engelstein and R. Sturm. *Cooperative Games*. *Ludology*, Vol. 5, Ep. 16, 2011.

initialism, which is what's currently used in corporate training visual aids such as the *Genderbread Person* (fig. 8.1).

Concept & Design Prototyping

When conducting preliminary visual research for similar design solutions, more specifically solutions that employ design and gamification principles to affect social change for LGBTQIA persons, there are no shortage of gay-themed tabletop games; however, there are no LGBTQIA-inclusive games that have a similar objective. Board games like *That's So Gay*, *Gayme*, *Drag Ball*, *Gayopoly*, *Homonopolis*, *Gay Trivia*, *The Rainbow Gayme*, and *Gay Weekend* are the most popular board games, but primarily deal with popular culture, gay terminology, or frivolity as opposed to affecting social change through cooperative gameplay.

Ideation for a tabletop game with an objective to affect social change, must come from successful tabletop games that are primarily cooperative in nature. *Munchkin*, *Forbidden Island*, *Red November*, *Escape: The Curse of the Temple*, and *Jupiter Rescue* are some examples of tabletop games that are similar in genre, material, and cooperative gameplay. These games are exemplary in regards to combining European UI functionality with American UX, and have core mechanics that can be used for analysis, ideation, and implementation.

Specifically, *Munchkin* (fig. 8.2) has information being relayed through cards, an ease of gameplay, and random modification of a player character through encounters and choices – all of which are aspects of gameplay that are applicable to affecting social change through gameplay. Likewise in *Forbidden Island* (fig. 8.3), instead of winning by competing with other players like most games, players must work together to win the game. Most relevant is the cooperative mechanics that *Forbidden Island* employs such as a combined sense to win, a danger component,

and a time component that forces players to collaborate. Also, both *Munchkin* and *Forbidden Island* utilize miniatures, figures, dice, cards, and tokens which embody heuristic and European UI design.

In brainstorming and sketching ideas for gameplay, the game mechanic that players would experience first would be random assignment of a sex – intersex, female, or male – which is important to the communication goal of dissolving generalizations concerning the proliferation of a dominant percentage of one sex type (fig. 8.4). Having players then evolve from that point through the game to develop an attraction, gender, and relationship(s) through interaction with other players is also important, and so the idea should be incorporated innocuously into the game. Also in brainstorming the aesthetic of an ancient or tribal motif to thematically contextualize the players is conceived, providing individual character abilities to complement all of the players or ‘the tribe’, and designing complimentary heuristic UI totems for gameplay (fig. 8.5). Game cards (fig. 8.6) are also conceived, could also be utilized to relay information, and like a die that could be used to roll a player’s sex at the beginning of a game, so too could cards provide an element of randomization.

At this point the realization occurred that with paper and 3D printing (fig. 8.7), anyone could download, print, and play such a game. Utilizing the iterative design process, or process of game design (fig. 5.3), in conjunction with Carolyn Snyder’s book *Paper Prototyping: The Fast and Easy Way to Design and Refine User Interfaces*, development of a print template and 3D totem objects for usability/play testing was possible.

Utilizing the name *Propagayda* for a logo, website address, and imagery on the cards was established and through a website the game, thesis, and reproducing it locally could be made available for anyone to print and use to affect social change. Researching various sans serif

tabletop typography for use in the logo pointed me to the *Crom* typeface. Using *Crom* as a point of departure, which can be customized into a logo, the letters ‘a’ are altered into triangles to reference the character mechanic of varying attraction, gender, and sex (fig. 8.8). Also the following synopsis was generated for the *Propagayda* game:

In *Propagayda* players work together as members of a tribe to help one another advance and survive. Each player is on their own individual path of self-discovery by growing, surviving monster attacks, and enduring disasters, but the tribe must also advance for anybody to win; likewise, it is entirely possible that everybody will fail and the tribe will become lost.

Play/Usability Testing

A rough composition consisting of paper-prototyping, substitutionary pieces, and hand-written gameplay rules are all developed and used in the first round of play/usability testing (fig. 8.9). Having completed the first round of play/usability testing with four players, suggestions were made regarding unintended game mechanics, rule additions and changes, and design elements that were completely missing. Suggestions mainly consisted of the requisite of player pieces, cards, and a game board to keep track of progression, eliminating game mechanics that were unnecessary, developing and including more collaborative gameplay (possibly a food supply or timing factor), and writing text improvements to explain sex, attraction, and gender.

A refined composition was implemented based on feedback from the first round of play/usability testing. This composition required a game board (fig. 8.10) that accomplishes the tasks of tracking a player’s current level, visualizing the winning objective for the tribe, identifying the six goals that each player needs to achieve to win the game, and visual storage indicators for cards and tokens.

Showing promise, a second round of play/usability testing with three players was conducted with low quality prints on gloss paper (for cards and the game board), with the 3D

printed game pieces (fig. 8.11). Upon completion of the second round of play/usability testing, questions were posed to the three player group, and responses were recorded with an audio recording device. Also, notes and observations were quickly jotted down from the players on how to improve the game. Based on feedback from the second round of play/usability testing, primary changes before developing a final design were very specific in nature. Examples of these revisions are lightening design elements for print, adding clarifications in the rules system, and further refining game mechanics.

In the final iteration of *Propagayda*, players would start the game by ‘being born’ by rolling a sex die to determine if they were female, intersex, or male. They would then proceed to take turns deciding if the tribe (all of the players) is going to hunt, gather, or fortify their camp by drawing cards from corresponding decks. All of the decks yield Totem Cards, but only certain decks yield Monster, Disaster, and Item Cards.

Each player is required to work together to help every ‘tribal member’ advance and survive. To achieve this stability and a quality of life, each player has a certain set of achievements in the game of *Propagayda*, such as being born, identifying with a gender, developing an attraction, forming at least one relationship, achieving a place in the tribe, and acquiring a Spirit Totem of their very own. This is done by players collaboratively building and supportively sharing cards, and overcoming disasters and monsters together. Players win the game by helping each ‘tribe member’ into the last circle of their tribe’s development, indicating that the particular player has a Sex, Gender, Attraction, Companion, and Class Card in play with a Spirit Totem in play; losing the game occurs if at any time there are no Player Tokens on the board due to death.

Final Thesis Project

One-hundred ninety-three playing cards at 2.25” wide by 3.5” tall on 14pt Tango paper (fig. 8.12), one 11” wide by 8.5” tall game board on white *Gatorboard* (fig. 8.13), one 17” wide by 11” tall set of rules on gloss tabloid paper (fig. 8.14)., and thirteen 1” wide by 1” deep by 1.5” tall 3D *Multicolor*-printed totems makeup the game of *Propagayda* (fig. 8.15). Each of these are designed assets of the *Propagayda* game (fig. 8.16), and were commercially fabricated at *Morgantown Printing & Binding Co.*, *Office Depot*, and *Sculpteo*.

The *Propagayda* website (fig. 8.17), at <http://www.propagayda.com/> is live and represents the entirety of the thesis in presentation format. The website is designed in HTML5, with custom JavaScript and SASS, to be an accessible and responsive experience that integrates 3rd-party applications such as *Google Analytics* and *Wuforms*. The website also hosts all of the assets - assessment materials, data visualization, dynamic links to 3D printing, game board, rules, card printing, written thesis in interactive format, video, and design brief - while simultaneously exhibiting and presenting the game to the world for download, implementation, and feedback.

Both pre-assessment and post-assessment devices were developed (fig. 8.18) to be administered during an observed play session with the final version of the design. This play session and interaction was recorded and compiled in HTML5 video format (fig. 8.19) on the <http://propagayda.com/> website.

Conclusion

The research about how design and gamification can work together to affect social change is promising. Although separate applications of design or gamification alone have altered cultural perception, and intersected social issues to some degree, a collaboration of principles from these two fields has proven to be very affective. Assessment of game players, combined with recorded communication between one another about experiences, indicates that both player considerations and perceptions were affected by interacting with *Propagayda*.

During observing individuals playing the final design of *Propagayda*, pre-assessment and post-assessment surveys were given to each player. The pre-assessment (fig. 9.1) for *Propagayda* is a way to determine what players know about the topic of LGBTQIA persons before they experience the game, while suggestions from *BoardGameGeek*, *The Board Game Designers Guild*, *The Safe Zone Project*, and *TechSmith* were utilized in the post-assessment to focus responses on design, user experience, functionality, and social awareness. Both assessments were administrated anonymously before and after gameplay using randomly selected codenames, and were submitted electronically through the <http://www.propagayda.com/> website. Additionally, after gameplay and post-assessment, audio was recorded in a casual setting concerning the users' experiences and impressions with *Propagayda*.

When one looks specifically at the comments from the conversation after the gameplay and post-assessment, more than one player's perceptions of attraction, sex and gender were challenged. This is evident in the comment by one player that, "you have to think about how it all works together... I honestly don't normally think about that, until this type of game or something, which really puts it into perspective."⁴⁸ Other examples of conversation between

⁴⁸ Jacque Visyak (administrative assistant) in discussion with the author, November 7, 2015.

players signify consideration of the roles of sex and gender. When one player questioned why there weren't more traditional feminine or masculine roles included, another player responded saying, "that's what I liked about the game... it doesn't matter what your combination comes out to be, it has no effect on what you do in the game." That player went on further to state:

"It's neat that it's sort of like creating a character in *Dungeons & Dragons*. We have this polyamorous, intersex, gender fluid, bisexual with a male companion... it doesn't affect my ability to play the game, which is that I'm a hunter carrying around a pole arm, wearing armor, and beating the crap out of giraffes... trying to get my totem. And yet you have to get these things to move up each level, but there's just enough not focus on them, that it doesn't become the most important thing, but you still learn it."⁴⁹

Similarly, when one looks at the pre-assessment versus the post-assessment data on the <http://www.propagayda.com/> website, there is a noticeable difference in responses for questions asking for different types of sex, gender, and relationships. In the pre-assessment responses concerning sex, some individuals didn't include intersex at all, while others answered with genders or attractions. However, 80% of the post-assessment responses for the same sex question are better aligned to that of actual sexes – male, female, and intersex.

More prevalent of a change can be seen when one looks at the assessment responses to types of gender. The majority of the pre-assessment responses cite male, female, and 'I don't know' as responses, but are much improved in the post-assessment to include cisgender, transgender, and gender fluid. This improvement is also seen in the question asking about the different types of attraction. Only one of the pre-assessment responses state bisexual, heterosexual, and homosexual, but the post-assessment responses all contain attraction-appropriate responses, and not sexes or gender identification. This is a very noticeable

⁴⁹ Brian Moats (music teacher) in discussion with the author, November 3, 2015.

improvement, it's directly attributed to *Propagayda* gameplay (fig. 9.2), and the players interacting with the designed cards and game mechanics that facilitates this understanding.

Also, looking at the text comments in the pre-assessment one can see that a decent percentage of the players had misconceptions and negative impressions concerning LGBTQIA persons. About 60% of the impressions that the players had of LGBTQIA persons were from television and media, and not from real persons or experiences based on real interactions. Other assessment selections that players entered to describe these media portrayals of LGBTQIA persons were 'exaggerated', 'conflicted', and as 'outcast'; however, opposite to this is an overwhelming 80% of the players stating in the post-assessment (fig. 9.3), that they think other players would benefit from playing this game. This is accompanied by many similar statements such as, "gender identification is more complicated than I initially thought... I had considered sex and gender roughly the same but the initial cards helped me differentiate those choices."⁵⁰

All in all, *Propagayda* – which combines design, gamification, and usability principles in a group participatory medium – successfully identifies a way to facilitate learning opportunities, which in turn can lead to the acceptance, connectedness, and understanding of LGBTQIA people. Indeed, by employing design, gamification, and usability principles together – through an iterative design process that encompasses usability testing – development of cooperative, positive learning experience really can affect change.

⁵⁰ Anonymous, "Post-Assessment Report," *Wufooo Forms*, accessed November 9, 2015.

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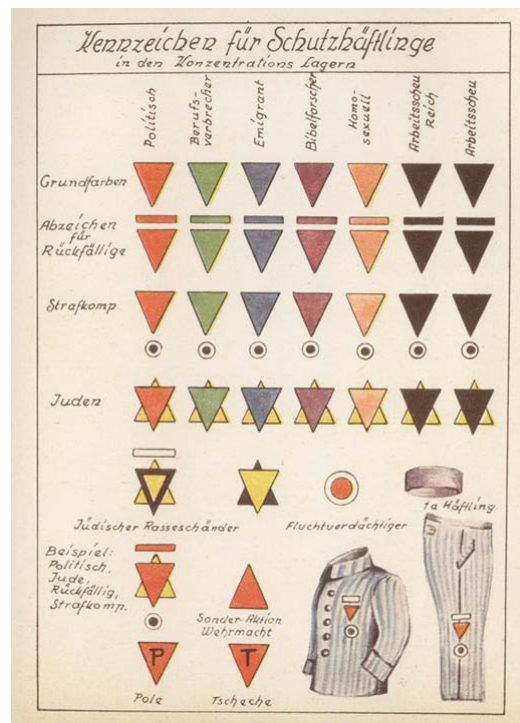


Fig 3.1-Concentration camp signage.



Fig 3.2-Pro-gay rights demonstrators at the time of the famous Stonewall riots.



Fig 3.3-Gay Pride Flag.



Fig 3.4-Human Rights Campaign Logo.

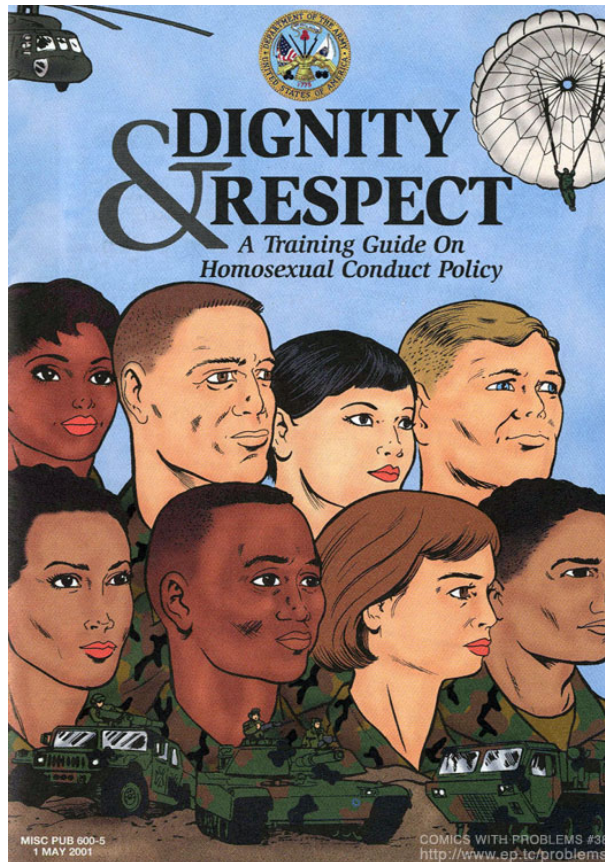


Fig 3.5-Dignity & Respect pamphlet.



Fig 3.6-NOH8 Campaign with Tabitha Sawyer.



Fig 3.7-Planting Peace website.



Fig 3.8-Ahwaa Website.



Fig 3.9-Protect All NC Families.

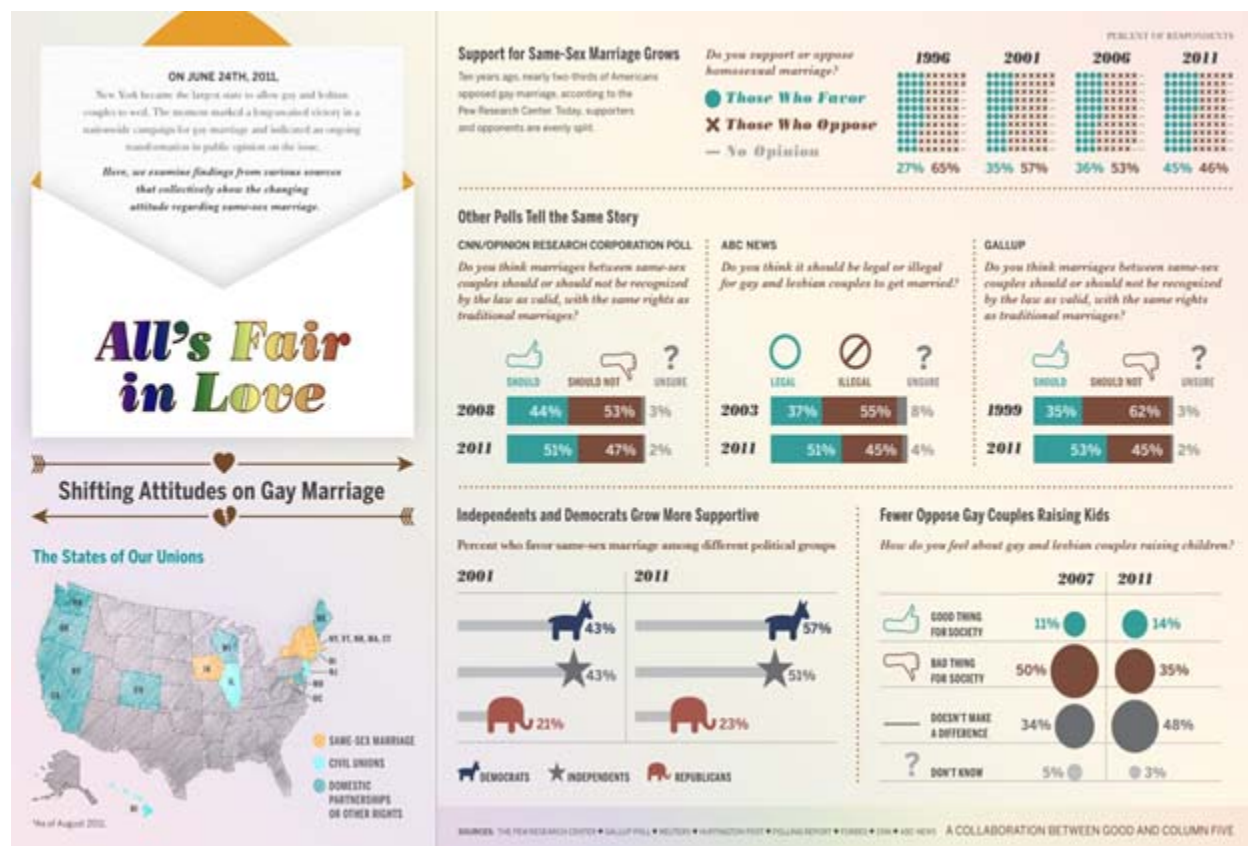


Fig 3.10-All's Fair in Love.



Fig 4.2-NO H8 campaign photo.

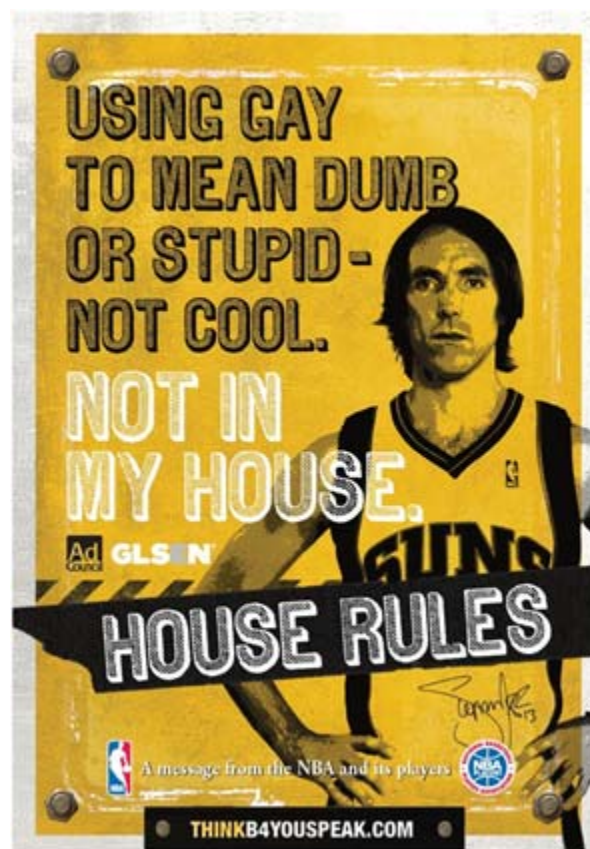


Fig 4.3-GLSEN marketing poster.



Fig 4.4-#Time4Marraige advertisement.

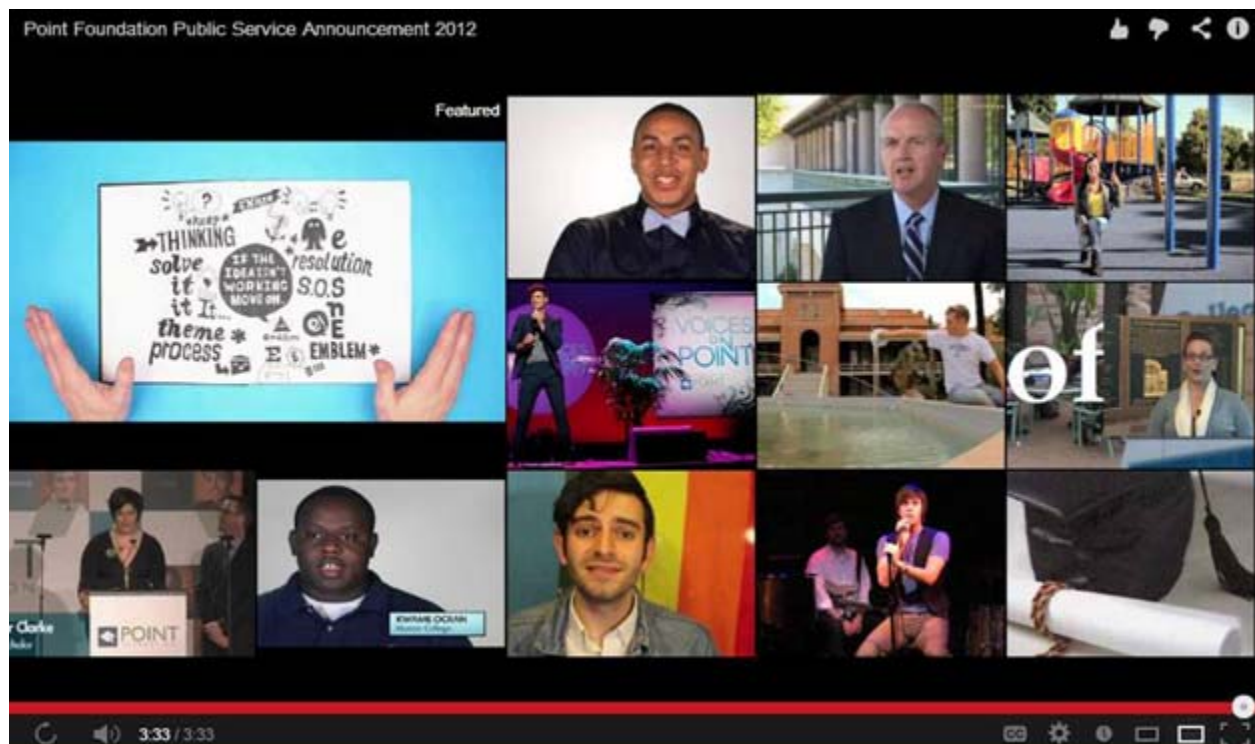


Fig 4.5-Point Foundation public service announcement.

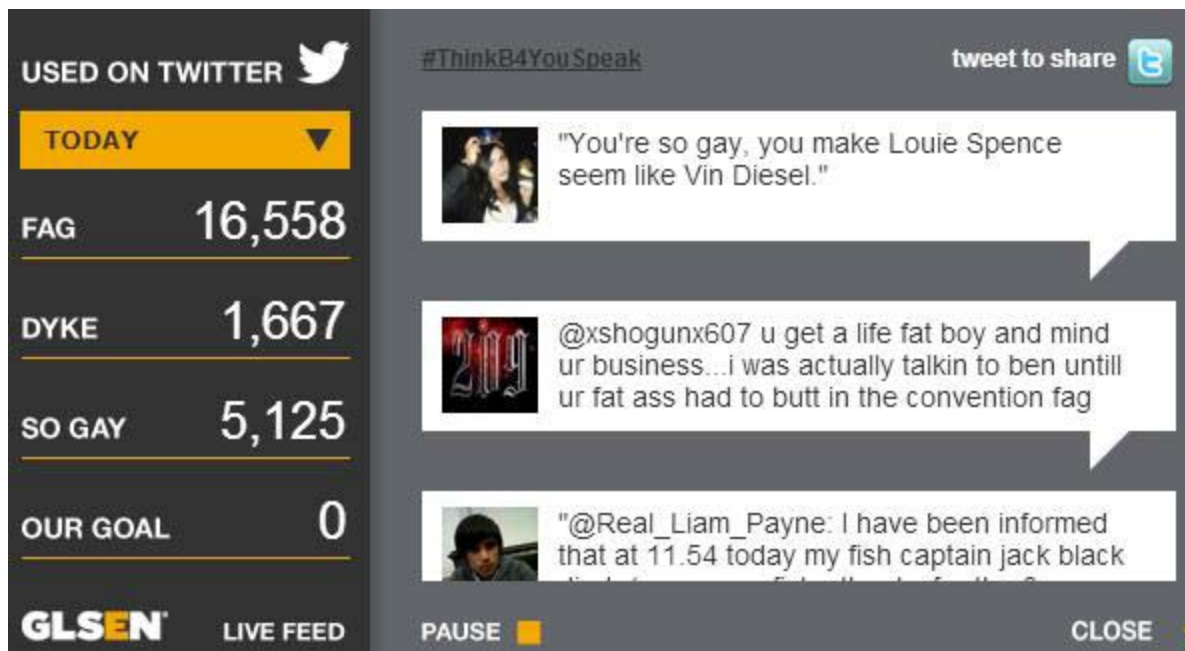


Fig 4.6-#ThinkB4YouSpeak website module.

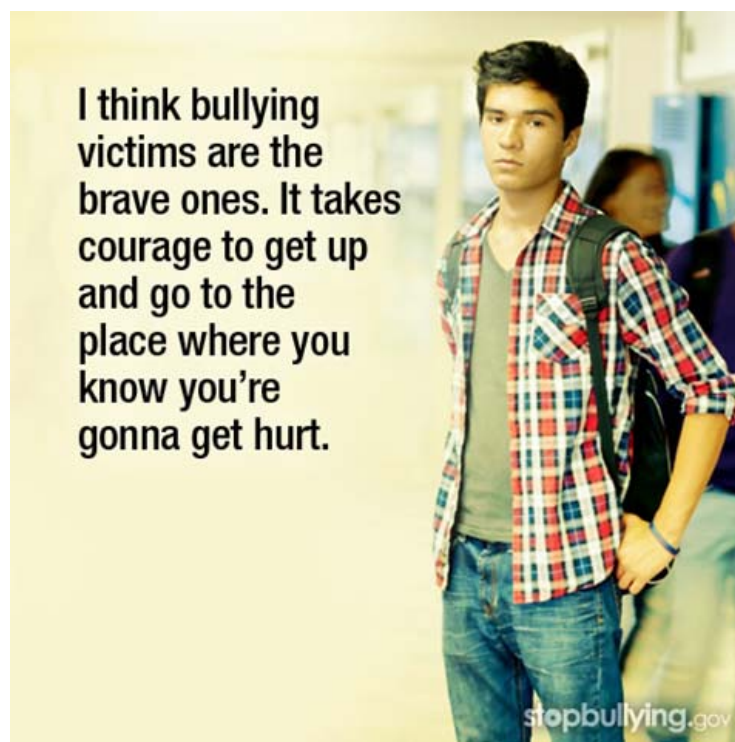


Fig 4.7-StopBullying.gov advertisement.



Fig 4.8-The Laramie Project.



Fig 4.9-The Trevor Project advertisement.



Fig. 5.1-Betrayal at House on the Hill board game.



Fig. 5.2-Munchkin game board.

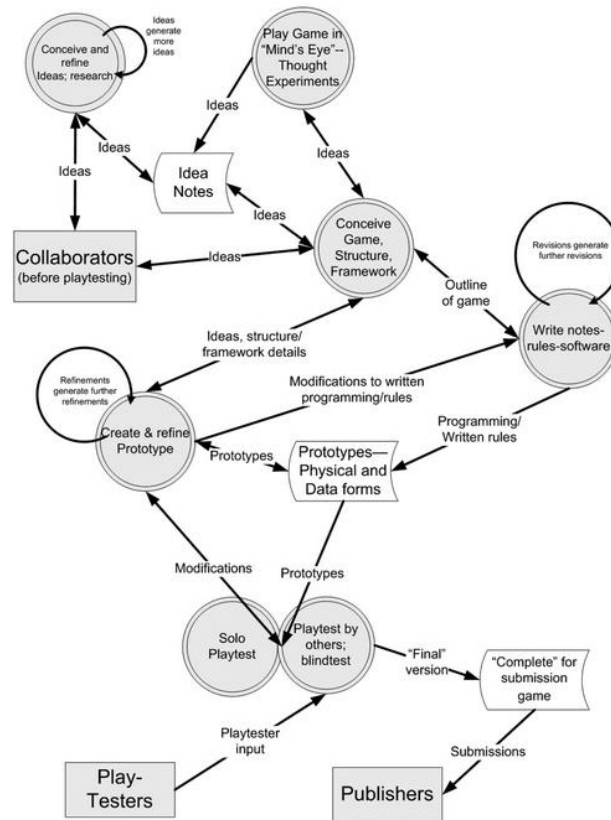


Fig. 5.3-Process of Game Design, Lewis Pulsipher.



Fig. 6.1-Board game boxes.



Fig. 6.2-Dungeons & Dragons.



Fig. 6.3-Dungeons & Dragons character sheet.



Fig. 6.4-Settlers of Catan.

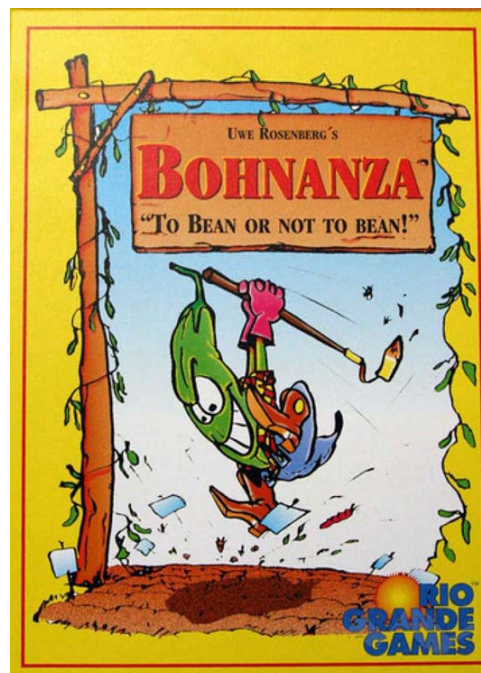


Fig. 6.5-Bohnanza.



Fig. 6.6-Twilight Imperium: First Edition.

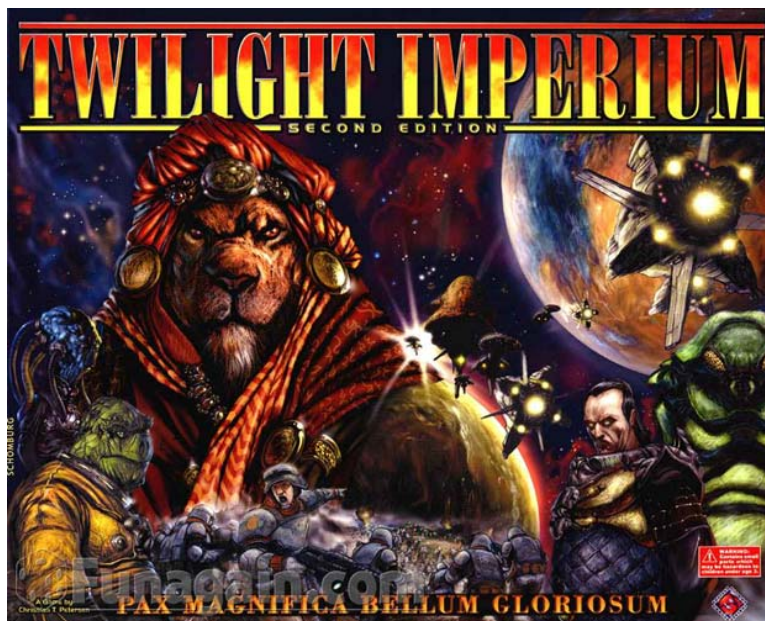


Fig. 6.7-Twilight Imperium: Second Edition.

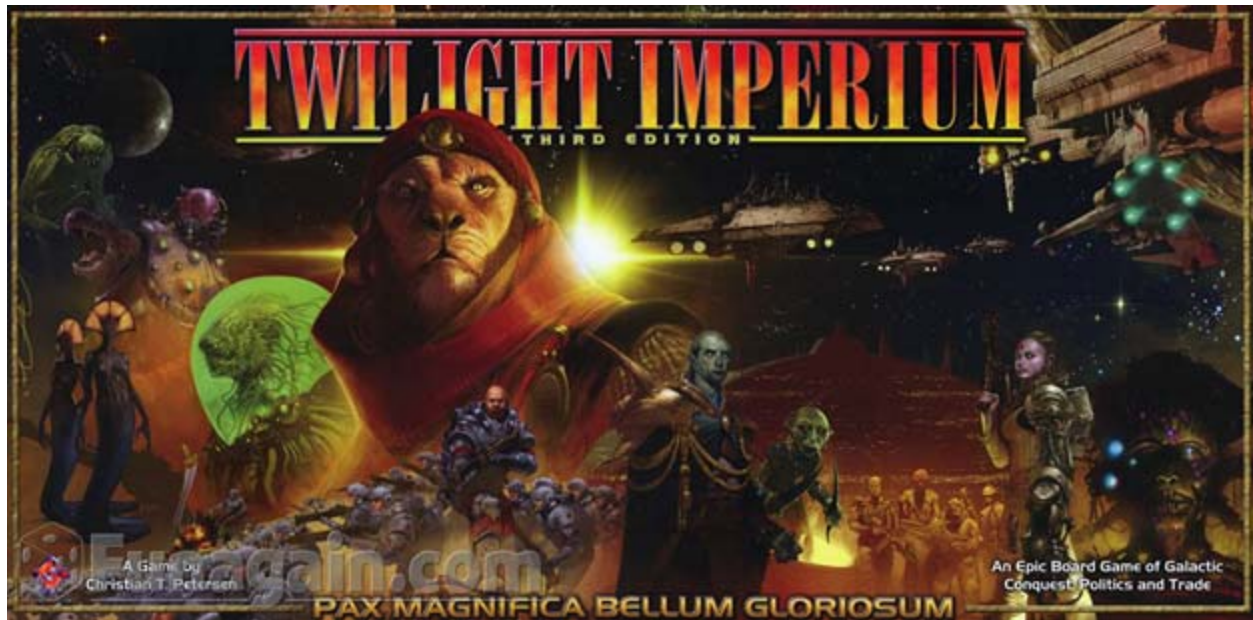


Fig. 6.8-Twilight Imperium: Third Edition.



Fig. 7.1-User Experience Honeycomb.

The Genderbread Person v3.3

Gender is one of those things everyone thinks they understand, but most people don't. Like *Inception*, Gender isn't binary. It's not either/or. In many cases it's both/and. A bit of this, a dash of that. This tasty little guide is meant to be an appetizer for gender understanding. It's okay if you're hungry for more. In fact, that's the idea.

by its pronounced **METROsexual**.com

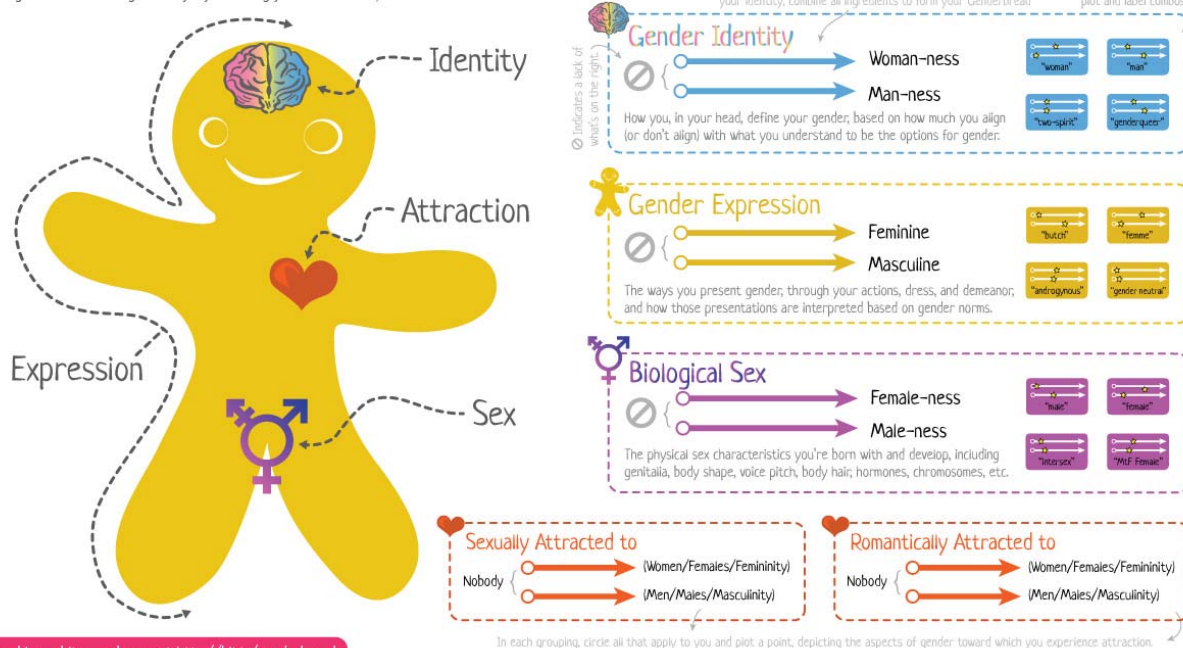


Fig. 8.1-The Genderbread Person.



Fig. 8.2-Munchkin



Fig. 8.3-Forbidden Island

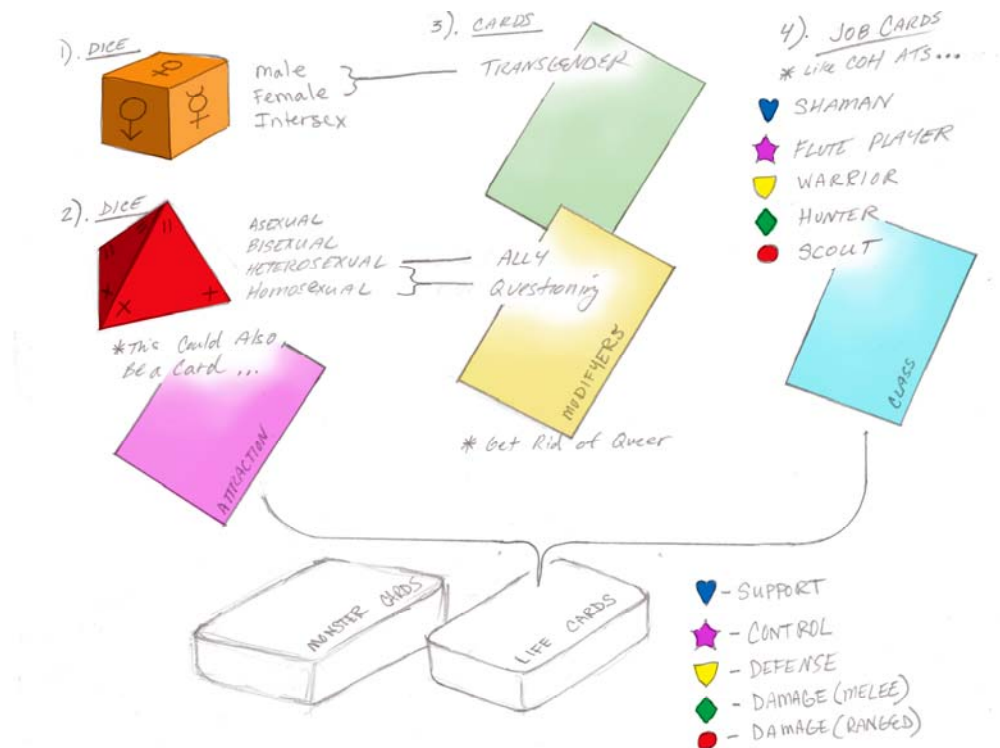


Fig. 8.4-Gameplay Brainstorming

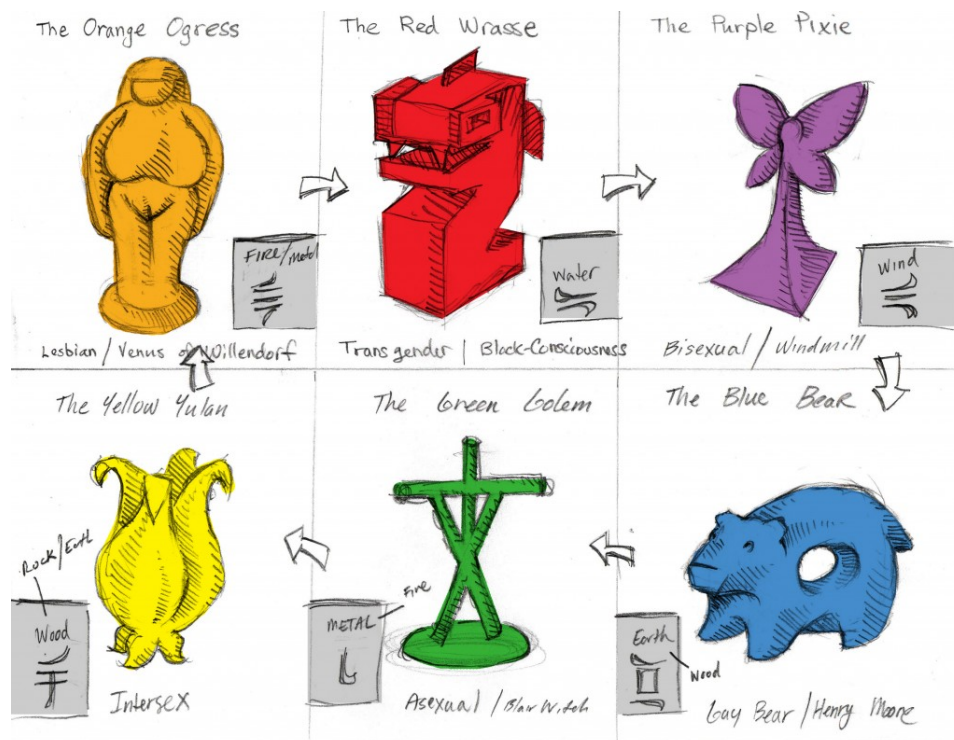


Fig. 8.5-Totem Brainstorming



Fig. 8.6-Card Ideation



Fig. 8.7-Totem and Dice 3D Models



Fig. 8.8-Propagayda Logo



Fig. 8.9-First Round of Play/Usability Testing



Fig. 8.10-Game Board Prototyping



Fig. 8.11-Second Round of Play/Usability Testing



Fig. 8.12-Propagayda Cards



Fig. 8.13-Propagayda Game Board



Fig. 8.14-Propagayda Rules



Fig. 8.15-Propagayda Pieces



Fig. 8.16-Propagayda Game



Fig. 8.17-Propagayda Website

PROPAGAYDA

FUNCTIONALITY (please rate each by circle a number)

I think that I would like to play this game frequently (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I found the game unnecessarily complex (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I thought that the game was easy to use (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I think that I would need support of another person to be able to understand this game (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I found the various functions in this game were well integrated (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I thought there was too much inconsistency in this game (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I would imagine that most people would learn to play this game very quickly (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I found the game very cumbersome to use (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I felt very confident using the game (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

I needed to learn a lot of things before I could get going with this game (1-5):

1 Strongly Disagree 2 Disagree 3 N/A 4 Agree 5 Strongly Agree

PROPAGAYDA

Pre-Assessment: Answer the following questions to the best of your ability. Your answers are anonymous.

Can you list some different types of sexes?

What are some different types of gender?

What is the difference between sex and gender?

Where did most of the influence of your initial impressions/understanding of LGBTQ people come from?

- a. Family
- b. Friends
- c. Television
- d. Books
- e. News
- f. Church
- g. Other

Can you list some different types of attraction?

Who is the first gay or lesbian character (TV, Film, Book, etc.) you experienced?

What was the first gay or lesbian character portrayal like?

- a. Healthy
- b. Accurate
- c. Exaggerated
- d. Negative
- e. Other

Fig. 8.18-Assessment Devices



Fig. 8.19-Compilation Video

Pre-Assessment Report

The following are anonymous responses from the Propaganda Play/Utility Testing Pre-Assessment.

Some different types of sexes are:

#	Content	Date
6	Male, Female, Intersex	1:18pm - 2015-11-07
5	male female hermaphrodite	1:13pm - 2015-11-07
4	Male Female	1:11pm - 2015-11-07
3	Homosexual Bisexual Transgender Heterosexual	12:59pm - 2015-11-07
2	male and female	12:50pm - 2015-11-07
Total		5

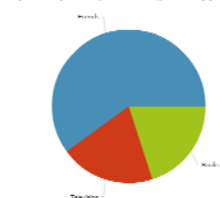
Some different types of gender are:

#	Content	Date
6	I don't know.	1:20pm - 2015-11-07
5	men women	1:13pm - 2015-11-07
4	Male Female Transgender Bisexual	1:10pm - 2015-11-07
3	Male Female	12:59pm - 2015-11-07
2	male and female	12:52pm - 2015-11-07
Total		5

The difference between sex and gender is:

#	Content	Date
6	I don't know.	1:18pm - 2015-11-07
5	Sex is biologically determined, gender is socially determined.	1:13pm - 2015-11-07
4	No that's kind of dumb, the two could be used interchangeably, to my mind when we mentioned I tend to think of how a person identifies in terms of reproductive organs and such. Gender takes into account how a person identifies such as transgender, straight, gay, or bisexual.	1:11pm - 2015-11-07
3	Gender has to deal with the separation of chromosomes in fetal growth, while sex deals with life choices.	12:59pm - 2015-11-07
2	no difference	12:52pm - 2015-11-07
Total		5

My initial impressions/understanding of LGBTQ people come from:



Some different types of attraction are:

#	Content	Date
6	Heterosexual, Homosexual, Bisexual, Asexual	1:18pm - 2015-11-07
5	sexual platonic romantic physical intellectual	1:13pm - 2015-11-07
4	Physical Intellectual Spiritual Mental	1:11pm - 2015-11-07
3	Sexual	12:59pm - 2015-11-07
2	looks, personality	12:50pm - 2015-11-07
Total		5

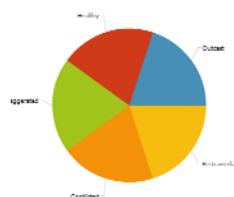
The difference between sex and attraction are:

#	Content	Date
6	Sex refers to the physical organs an individual has. Attraction refers to the type(s) of sex that an individual is attracted to.	1:24pm - 2015-11-07
5	Wanting to go through with the physical aspects of a relationship.	1:13pm - 2015-11-07
4	For me, attraction is what brings people together and is used to find a specific partner. Sex is creating a bond between people and normally acted upon from attraction.	1:10pm - 2015-11-07
3	You can be attracted to people through different types of relationships. You can be attracted to people who are like you, and you choose them to be your friends. Sex is different in the fact that you would not know sex with all of the people you are friends with.	12:59pm - 2015-11-07
2	sex is sex, attraction is a feeling	12:50pm - 2015-11-07
Total		5

The first gay or lesbian character I experienced was:

#	Content	Date
6	Ellen (Dagoberto) in her original sitcom.	1:20pm - 2015-11-07
5	Waylon Twinkles	1:13pm - 2015-11-07
4	Mon on Film from In Living Color	1:10pm - 2015-11-07
3	My cousins	12:59pm - 2015-11-07
2	cant remember	12:52pm - 2015-11-07
Total		5

The first gay or lesbian character portrayal I saw was:



Some different types of relationships are:

#	Content	Date
6	Monogamous couple, Open couple, Polyamorous open relationships, Polyfidelity (closed relationships of 3 or more individuals)	1:18pm - 2015-11-07
5	sexual friendship romantic emotional	1:13pm - 2015-11-07
4	Straight lady Monogamous Multi-couple (closest closest friends with benefits)	1:11pm - 2015-11-07
3	Friendship Family	12:59pm - 2015-11-07
2	between two people	12:50pm - 2015-11-07
Total		5

My first impressions of LGBTQ people were:



My impressions/understanding of LGBTQ people has changed or evolved throughout my life...

#	Content	Date
6	When I was young, I was taught that LGBTQ individuals were sinners who needed to be fixed by treating their mental illness. As I have grown older, I have come to realize that LGBTQ individuals are biologically driven to be attracted to a subset of social genders and they are unable to drastically change their attractions. I very person's situation is unique, no matter their sex, gender, or attractions.	1:20pm - 2015-11-07
5	It's switched from classification-first to person-first orientation. For example: A gay friend as opposed to a friend who happens to be gay.	1:13pm - 2015-11-07
4	Absolutely, I was raised in a small town with a very midwestern/conservative family structure that was very religious based. The growing witness I had did not really change until I went away to college and got to experience the real world and expand my views beyond the small corner of the world I was in. I became friends with many LGBTQ people who were like me and began to think of my personal family as very close minded.	1:10pm - 2015-11-07
3	I have always had a positive understanding about LGBTQ people, so my impressions/understanding hasn't really changed all that much. I have started to notice the change in people around me, though. Some for the better, but unfortunately some for the worse.	12:59pm - 2015-11-07
2	people are people, it shouldn't matter who they are attracted to	12:52pm - 2015-11-07
Total		5

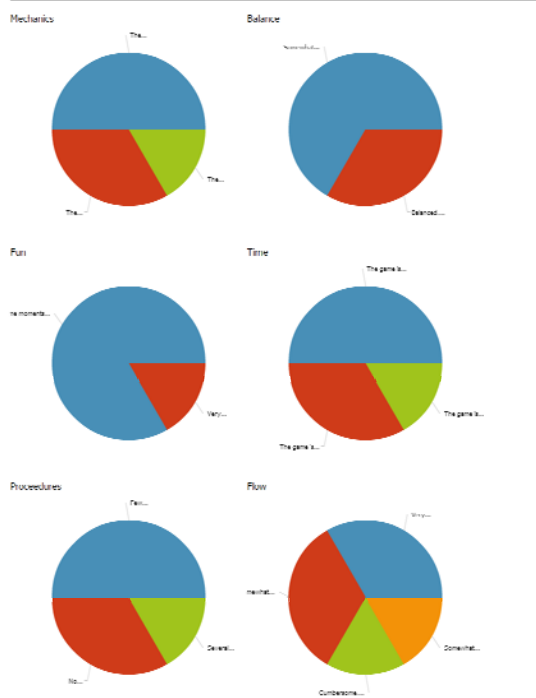
Pre-Assessment Report
Nov 8, 2015 - 1:30 PM

Fig. 9.1-Pre-Assessment Report

Gameplay Assessment Report

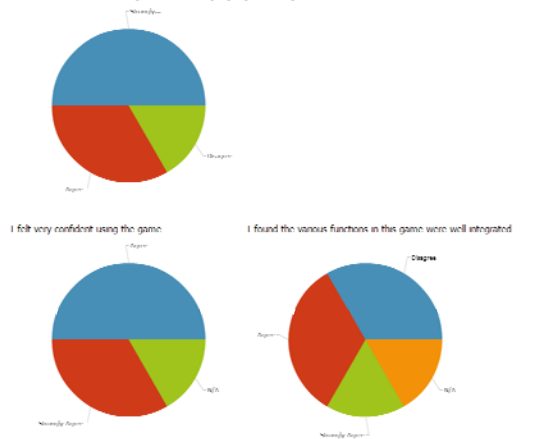
The following is visualized data from anonymous responses concerning the game of Protoplaya.

Game Design Feedback

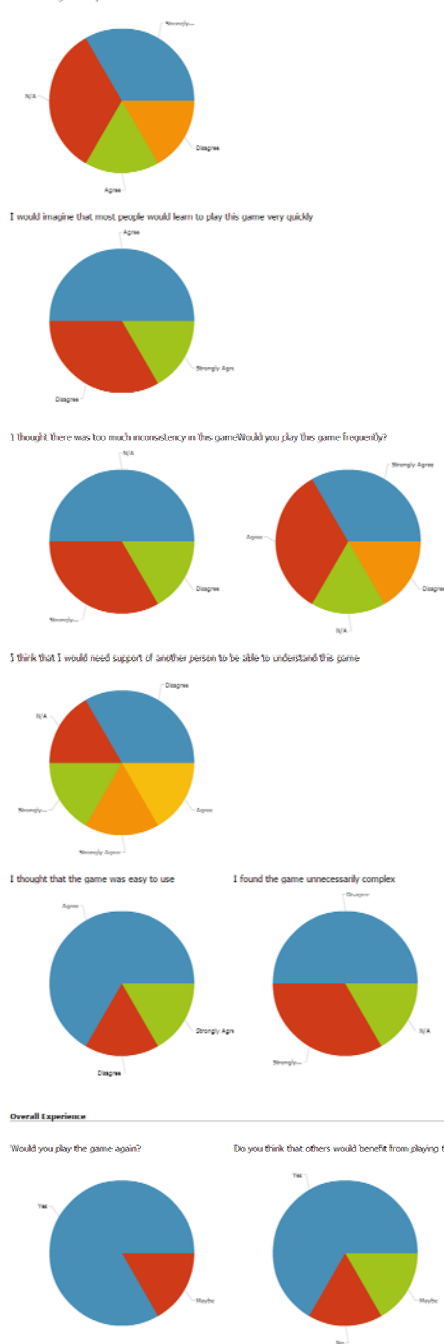


Game 1 functionality is well-look

I needed to learn a lot of things before I could get going with this game.



I found the game very cumbersome to use



Gameplay Assessment Report
Nov 8, 2015 - 4:27 PM

Fig. 9.2-Gameplay Assessment Report

Post-Assessment Report

The following are anonymous responses from the Preopayda Play/Usability Testing Post-Assessment.

The twining

Some different types of scenes are:

Choices	Count
Straight, gay, lesbian, bisexual, transsexual	1
male female	1
male, female, intersexual	1
Male, Female, Interscexed	1
male, female, forgot the third one, know the symbol though	1
Total	5

Some different types of gender are:

Choices	Count
Male, female, transgender	1
transgender fluid gender	1
cisgender, transgender, intergender	1
Cisgendered, Transgendered, Gender Fluid	1
heterosexual, fluid, homosexual, lesbian, gay, polymoria	1
Total	5

The difference between sex and gender is:

Choices	Count
Gender is comparable to body parts, while sex is comparable to life choice	1
your sexual organs vs your sexual orientation	1
sex is biological, gender is cultural	1
Sex is biological. Gender is how one lives and expresses themselves.	1
Sex refers to the sexual organs of a person and gender is the identifying orientation of the sex	1
Total	5

Some different types of attraction are:

Choices	Count
Homosexual, heterosexual	2
homo, hetero	1
heterosexual, homosexual, bisexual, pansexual	1
Heterosexual, Bisexual, Homosexual	1
Total	5

The difference between sex and attraction are:

Choices	Count
Sex is yourself, attraction is what you want	1
sexual organs vs when you are attracted to	1
sex refers to physical traits, while attraction is sexual preference	1
Sex is biological. Attraction is what so(e)s one is attracted to.	1
sex is the way a person identifies as male/female, etc and attraction is how the person experiences their sexuality	1
Total	5

Some different types of relationships are:

Choices	Count
I mostly, family	1
male to female, female to female, male to male	1
male & female companionship, polyamorous	1
Monogamous couple, Open couple, Polyamorous open relationships, Polyamorous closed relationships (Polyfidelity),	1
polymoria, monogamy	1
Total	5

Feedback

What was the game's best feature, aspect, mechanic, etc.?

#	Content	Date
6	I like the cooperative nature of the game. You can opt in the wild first and then switch roles to more of a support role. You could then turn and trade to help others get to the end.	4:40pm - 2015-11-07
5	The best feature of this game, based on it's assumed goal, is having to figure out the relationships between the players' sex, gender, and attraction cards.	4:10pm - 2015-11-07
4	The mechanics and choices seemed the best.	3:50pm - 2015-11-07
3	custom design pieces	3:10pm - 2015 11 07
2	I think that the best feature was the cards. I think they made people think about their own particular character, as well as their place within the tribe.	3:47pm - 2015-11-07
Total	5	

What was the game's weakest feature, biggest drawback, etc.?

#	Content	Date
6	I think the food situation was a bit too easy since our tribe's members only decided which would put the food supply in danger.	4:40pm - 2015-11-07
5	We figured out pretty quickly how to never have to fight a monster or suffer from a disaster.	4:04pm - 2015-11-07
4	The phase of the moon.	3:50pm - 2015-11-07
3	a lot of confusion in the beginning	3:10pm - 2015 11 07
2	I never think of sex. I think that everything was structured perfectly.	3:47pm - 2015-11-07
Total	5	

If you were to suggest that one change be made to the game to improve social awareness, what would it

#	Content	Date
6	I really couldn't think of any. maybe male monster encounters a bit more frequent to put the focus to sex.	4:40pm - 2015-11-07
5	No changes. I like that the game does not present any combinations of sex, gender, and attraction from accomplishing any of the game's goals. I would be interested to see how differently the decisions during the game would be if it were played by homosexuals or intersexed players.	4:04pm - 2015-11-07
4	Maybe have some interactions or cards that create conflict.	3:50pm - 2015-11-07
3	little less complex way to start	3:10pm - 2015 11 07
2	I think that instead of just explaining the cards while they were in play, that the cards need to tell a little more about what certain genders are (i.e., cisgender).	3:47pm - 2015-11-07
Total	5	

What were your first impressions versus your post impressions of playing the game?

#	Content	Date
6	My first impressions were that the game was probably complicated and I didn't really know which to expect until I began playing. I think the game I used you think and consider the differences in specific choices. Some of the companion matches made you think about what gender your character identified with.	4:40pm - 2015-11-07
5	My first impressions were that the game had way too many rules. As we played it, all the rules and procedures became more manageable.	4:07pm - 2015-11-07
4	I thought the game would be more competitive and have more chances for screw ups. Once we got into it, though, it seemed really easy to win.	3:50pm - 2015-11-07
3	at first I was lost and a little confused as the placement on I understood it better	3:40pm - 2015-11-07
2	I didn't really know what to expect from the game. I had a really great time, and learned from the various players.	3:12pm - 2015 11 07
Total	5	

What are your thoughts after playing the game concerning Sex, Attraction, and Gender?

#	Content	Date
6	Gender identification is more complicated than I initially thought. I had considered sex and gender roughly the same but the initial cards helped me differentiate those choices.	4:40pm - 2015-11-07
5	Each individual person has their own unique combination of sex, attraction, and gender, but none of those combinations make a person any less man or less valuable to society than any other combination.	4:04pm - 2015-11-07
4	It definitely showed me all of the variety and combinations of sex, attraction and gender.	3:50pm - 2015-11-07
3	there are a lot of different variants	3:10pm - 2015 11 07
2	I did not know about cisgender or fluid attractions.	3:47pm - 2015-11-07
Total	5	

Post-Assessment Report

Nov 10, 2015 - 4:41 PM

Fig. 9.3-Post-Assessment Report

Glossary

Ally: A non-LGBTQIA person who supports and stands up for the rights of LGBTQIA people.

American UX: A user experience design practice for tabletop gaming wherein the player is involved with a rich story-driven game, co-authors the gameplay experienced through competition/cooperation, or participates in a character, period, or theme simulation.

Asexual: A person who generally does not feel sexual attraction or desire to any group of people; asexuality is not the same as celibacy.

Attraction: The type of sexual, romantic, and/or physical attraction someone feels toward others.

Bisexual: A person who has the capacity to form enduring physical, romantic and/or emotional attractions to those of the same gender or to those of another gender.

Cisgender: A term used by some to describe people who are not transgender, and wherein their sex and gender identity are the same.

European UI: A user interface design practice for tabletop gaming wherein the game embraces the physicality of the medium (through cards, tokens, dice, figures, coins, boards, etc.), short game manuals that allow quick play and accessibility, and reduced themes and storylines.

Gamification: The use of game thinking and game mechanics in non-game contexts to engage users in solving problems and increase users' contributions.

Gay: A man whose physical, romantic and/or emotional attraction is to other men.

Gender: The internal and external manifestations of gender – expressed through one's name, pronouns, clothing, haircut, behavior, voice, or body characteristics – which society identifies as masculine or feminine.

Intersex: The non-discriminatory alternative to ‘hermaphrodite’ which signifies a variation in sex characteristics, ambiguous genitalia, or sex organs that do not allow an individual to be distinctly identified as male or female.

Lesbian: A woman whose physical, romantic and/or emotional attraction is to other women.

Niche Tabletop Games: Tabletop games in between traditional board games (Monopoly, Checkers, and Sorry) and dedicated ‘pen and paper’ roleplaying games (Dungeons & Dragons, Pathfinder, and White Wolf), which borrow attributes from both genres: the quick and ease of setup and gameplay, combined with the player taking on a role in the game while coauthoring the gameplay story.

Pansexual: A sexual attraction, romantic love, or emotional attraction toward people of any sex or gender identity.

Queer: A pejorative term that has been appropriated by some LGBTQIA people to describe themselves, but is not universally accepted even within the community.

Questioning: The process of exploring and discovering one's own sexual orientation, gender identity, or gender expression.

Sex: The classification of people as male or female at birth, usually based on the appearance of their external anatomy.

Transgender: An umbrella term for people whose gender identity and/or gender expression differs from what is typically associated with the sex they were assigned at birth.

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