Syracuse University

SURFACE

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The Design of Compelling Narratives

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COMPELLING NARRATIVES

How can designers leverage the educational, entertaining, and empathic
nature of storytelling to change behavior and prompt meaningful interactions?

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"People don't buy what you do, they buy why you do it, and if you talk about what you believe, you will attract people who believe what you believe."

PREFACE

On, yet another, cold rainy night in my sophomore year at Syracuse University, I sat at the College Place bus stop, waiting to be taken down-town to the school's design facility called the Warehouse, or "Hau5" to those of us who lived on the 5th floor which was designated for Industrial and Interactions Design. Feeling cold, soggy, and grumpy that I had forgotten headphones, of all things, on the way to pulling an "all-nighter", I was not very excited when a woman who looked to be about 80 with giant magnifying-glass spectacles, and excessive amount of layered clothing, and giant bags, nearly sat on top of me on the bench. Though I was praying she wouldn't, in an instant she had turned to me with a huge smile and asked what I was studying.

"Oh brother," I thought to myself. Yet another opportunity to helplessly flounder over my confusing notion of what Industrial and Interactions Design actually was, and what I had any business studying it for. To be fair, this was only a few weeks into my IID classes, yet to be honest, it is a fairly ambiguous and rapidly changing field, and I have only become more apt at telling stories to explain why it's important. After babbling through some design principles and giving some examples of jobs Industrial Designers are usually hired to do, I quickly followed with my usual, "but that's not really what I want to do."

She looked at me quizzically and asked, "So what do you want to do?"

Now that I'd warmed up to the conversation, I felt excited to explain what I was truly passionate about, "Theme parks! Everyone in my major seems to think its pretty corny, like the designers' dream everyone grows out of when they decide to make 'important innovations' instead, but I don't really see them as separate. There's something about being in a space where you become part of a story. I want to design those places where you can leave everything outside of that place behind, be the simplest and most honest version of yourself, and be so immersed in the experience that you have these powerful emotional memories forever. I think that is really the most interesting part, how can we design the moments where everything feels full of wonder and possibility."

Her eyes lit up when I said that, "Oh that's not silly, you know when I was a girl the best place in the world was Coney Island. My brothers and I went and there were so many people and rides and it was so busy, but usually I always remember seeing the wooden slide," and she let out a childish giggle.

"Slide?" I implored.

"It this long curved wooden slide. I'd never seen any slide like that, I don't know how they made the wood curve, it was so beautiful and shiny. I think that's like what you will do, you must learn how to make wood do that because I had just never seen it, no one had and now I always remember standing right in front of it and wondering how they did it! That was a great place, Coney Island, that was my favorite place."

In a moment the bus was there and I had to leave, but that encounter was pivotal in my own life story. Whether it was the resolution to overcoming insecurity, or the inciting incident of a quest for knowledge, I was irrevocably changed and since then I have been on a journey of discovery to understand how to design those moments of awe, wonder, honesty, and fulfillment.

The IID program at SU teaches not only core design tenants, but innovative design research methods. In many ways our education has been focused on learning how to learn more, which in a rapidly changing world is extremely practical. This can be attributed to the reason students in the program, myself included, have an insatiable sense of curiosity and desire to know the "how" and "why" of everything related to humans. In my own research, I have always been transfixed with communication, namely storytelling. My superficial understanding was that "stories" were like pieces of artwork that only writers knew how to make, which, of course, made me want to learn how they did it. I decided that there must be some way to learn what writers are able to do directly through assessing their process and principles, and interpret them into process and principles that designer's are familiar with. This was the starting point for writing this handbook for storytelling through design.

Since my education did not have a direct connection to the industry I hoped to work in, I decided to go through a SU semester in Los Angeles program, where students who want careers in the entertainment industry take classes from various industry professionals while working at an internship. This semester was truly invaluable in shaping my understanding of storytelling and the innovations that are being made in the industry. In my courses taught by network executives, directors, producers, and digital media entrepreneurs, I learned the principles of narrative and how technology is rapidly changing the ways we can tell stories and connect to a narrative brand.

I was fortunate enough to intern at Cinnabar California, a company that specializes in the design through construction and installation of narrative environments such as museum exhibits, cultural institutions, retail spaces, sets, attractions, and specialized interactive elements that are so different and fresh there is no simple way to categorize them. While working at Cinnabar under designers, artisans, fabricators, and project managers, I learned how stories are designed into a physical narrative form, and the factors in the success of the narrative environment in creating an entertaining, educational, and emotionally evocative experience. My greatest takeaway from the semester was an excited outlook on the possibilities to use both traditional and innovative storytelling and technology in physical spaces to create resonant experiences.

View from Yad Vashem Holocaust Memorial and Museum, one of the most inspiring designed experiences I have ever encountered.

Defining Opportunity

When I began thinking about design opportunities to explore through my senior thesis and capstone project, I knew I wanted to combine the study of storytelling and design, but the outcome of what that combination was, was not immediately apparent. Through research and personal experience, I narrowed my focus on the function of designed narrative forms. Stories are shared to convey experience and the designed form facilitates the interaction with the audience.

The opportunity I found for innovation in design and storytelling is leveraging the evocative power of story and providing an immediate opportunity for the audience to interact with the narrative and deepen their connection to the content and experience. **Throughout this book I use the term compelling narrative to describe designed narrative forms that share powerful stories and provide context and opportunity for active audience investment, rather than passive internalization of the experience.** The book can be used as a handbook for designing such experiences.

The content of this book will:

1. Describe the scope and potential for compelling narratives

2. Explore how the human brain responds to stories

3. Provide context of the functions of storytelling

4. Explain elements of engaging narratives

5. Present principles of design related to storytelling

6. Examine human responses to different narrative forms

7. Forecast technological advancements as opportunities for designed experiences.

Key:

Quotes & Citations

Examples & Case Studies

Design Considerations

"Recognizing the need is the primary condition for design"
-Charles Eames

INTRODUCTION

1. "Eames Molded Plywood
Chairs." Eames Molded Plywood.
Herman Miller, Inc., 2013. Web. 14
Nov. 2013.

"Your design is developing well, but don't forget that the design has to tell a story," echoes nearly every design professor at Syracuse University.

"Tell a story? How can a chair tell a story?" I wondered to myself while nodding and scratching my chin.

The answer to that question is that everything made by humans is part of a story. Our tools, weapons, clothes, education systems, religions, institutions, art, and culture have come into existence to solve a problem, share knowledge, prompt communication, or enable a vision of a better future. How we express the story of why these things have come to be gives them value and meaning. Storytelling as a form of communication has the power to introduce us to new ideas and experiences, which culturally connect us and change our behavior.

As Herman Miller describes in a short biography, in the early 40's, Charles and Ray Eames, unknown designers in Los Angeles, spent their spare time experimenting with bending plywood. Their initial experiments did not make the iconic chairs they are know for, rather, they were commissioned by the US Navy to design plywood splints and stretchers that could be manufactured quickly and inexpensively during World War II. When the war ended, the need for these products ended. Charles Eames is often quoted by designers for saying, "Recognizing the need is the primary condition for design," which was the couple's next step.

Charles and Ray thought that everyone deserved the ability to afford highly functional and beautiful design. Thus, the Lounge Chair Wood was designed out of curved plywood, which made it comfortable, cheap, and easy to mass-produce. Plywood was not used in furniture at the time, and "comfortable, cheap, and mass-produced" do not equate to iconic design.[1]

The success of the chair in American culture and modern design history is not merely aesthetics, but the story of how it came to be, that changed how people thought about design and value. The chair epitomized the success of recognizing a need and designing a solution that changes how we think and what we desire. The ability of the story to challenge our preconceptions and elicit behavioral changes makes it a compelling narrative.
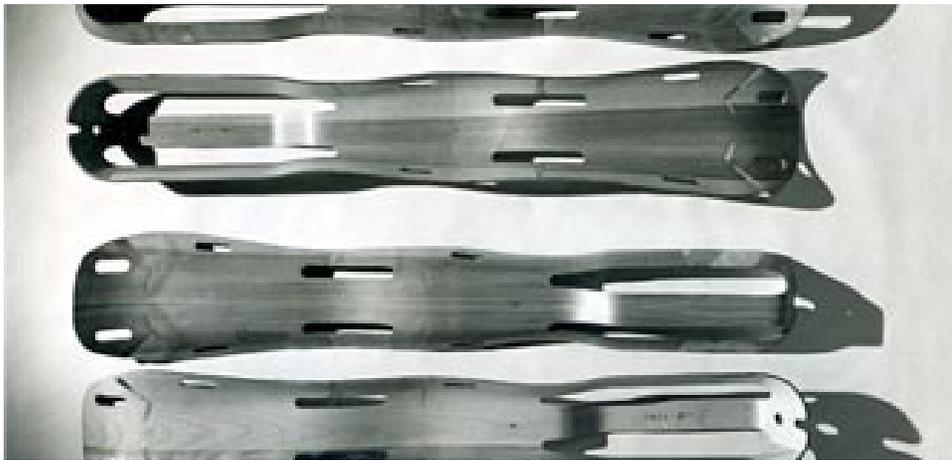
"Eames Molded Plywood Chairs." Eames Molded Plywood. Herman Miller, Inc., 2013. Web. 14 Nov. 2013.
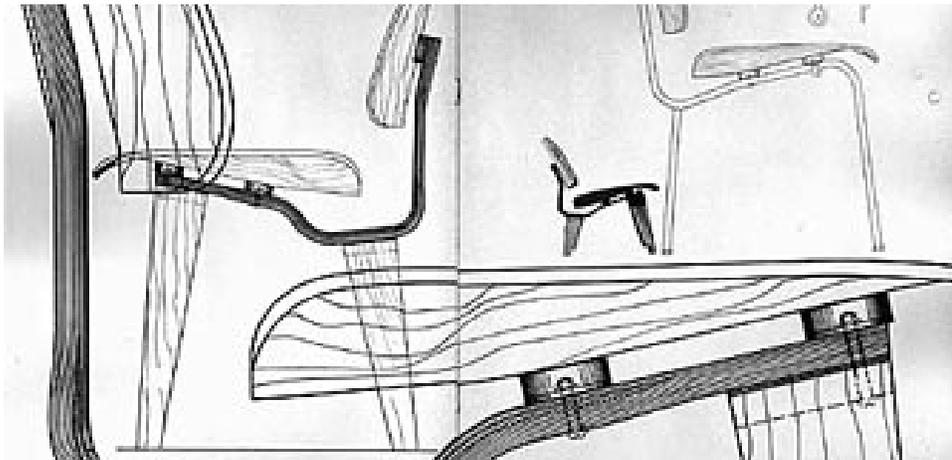
"Eames Molded Plywood Chairs." Eames Molded Plywood. Herman Miller, Inc., 2013. Web. 14 Nov. 2013.

www.loc.gov The Work of Charles and Ray Eames: A Legacy of Invention

2. "com pelling, adj.". OED Online. September 2013. Oxford University Press. 25 November 2013 <http://www.oed.com.libezproxy2.syr.edu/view/Entry/37525>.

Compelling Narratives

The difference between telling an evocative story and creating a compelling narrative is comparable to the differences and similarities between art and design. Art and design are both forms of expression that evoke an emotional response, explain a concept, ask a question, or prompt an interaction from the audience. The principle difference between are and design, is utility. While art, like storytelling, often provokes different reactions from the audience, design, like creating compelling narratives, is conjured for a specific function. While the primary aim of storytelling is to promote an emotional response, the aim of designing compelling narratives is to incite an intended response or interaction.

Compelling is defined as something that is "irresistible; demanding attention, respect"[2]. Thus, a story that evokes an emotional response and prompts an intended investment back into that narrative is compelling. **While storytelling is used to help us make sense of the world, compelling narratives are designed to encourage the audience to make a change in the world.** They have to both speak to us as individuals and provide a call to action that empowers us. It is important to note that a narrative will not be compelling unless it tells an evocative story. This is why it can be argued that creating compelling narratives is not exclusively an art form, design process, nor a rigid science, however using these three lenses will give a designer greater insights into how and why storytelling is such an effective form of communication.

Evocative Story

Compelling Narrative

Story: What is being told

Characters, setting, plot, events, imagery, fiction/history/memory

Narrative Form: How it's told

Performed, art, image, video, music, writen, spoken, exhibit, game, place

Good Story:

Empathy for characters, archetypal plot, detailed world with a defined set of rules (for content and conduct), Immersive

Compelling Narrative:

Requires interaction between the story and the audience, evokes compassionate empathy, follows rules of the story's world, consistent details

3. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 68-69. Print.

Another significant aspect of compelling narratives is that they are not resolute. While stories have definite endings, the end of a compelling narrative should be a "call to action", an opportunity to engage further and invest time, effort, or aid back into the narrative's cause. While a compelling narrative may offer an answer or solution to the problem it has been designed to solve, the goal will need to change and grow depending on how much people continue to invest into the cause. For the audience to want to interact, they must feel they have some power to actually affect the narrative, so representing the effects of their investment in a visible way is important.

Providing immediate gratification will make audiences more likely to invest more, and more frequently. Cost-Benefit is a term applied to analysis of successful design that seeks investment from an audience based on whether the audience finds the experience rewarding enough to interact with the design. Universal Principles of Design notes that if the audience perceives a cost, or investment, of their time, energy, money or emotion will not be rewarded in a fulfilling way, the design will fail.[3] If the compelling design prompts a donation, the audience needs to see where their donation goes to feel fulfilled. If the design prompts the audience to record a personal narrative, they should be able to experience how it will be displayed. If the design prompts upgrading to energy efficient light bulbs, they should see how much energy that has actually saved.

Narrative
Immersion

Narrative
Expansion

Interactions
Cue Empathy

Call to Action
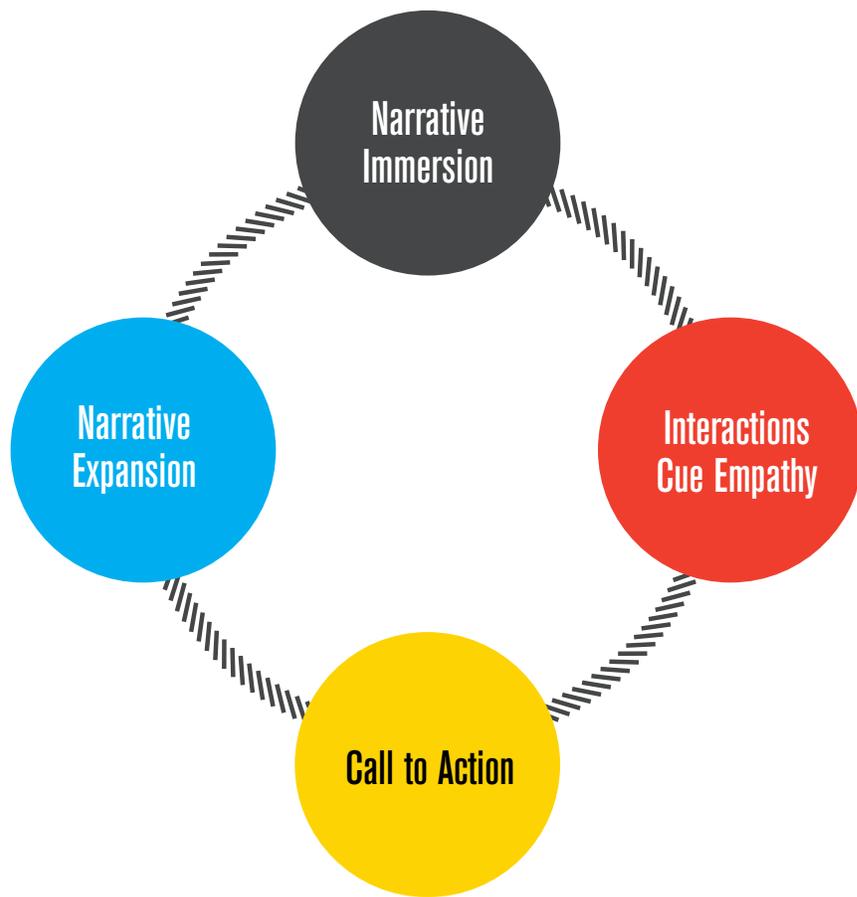
Origin Coffee & Tea in Rocklin, CA
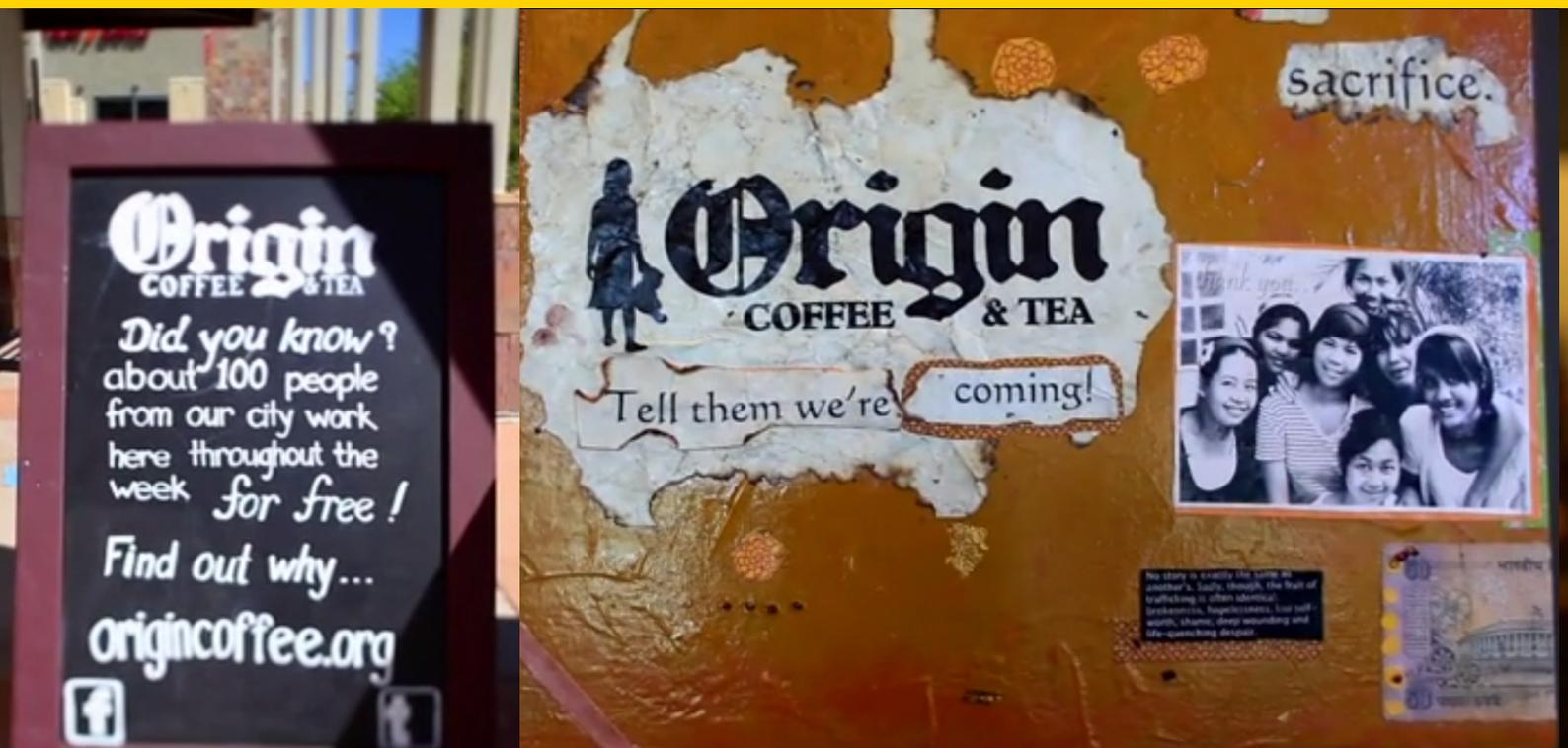
Origin Coffee & Tea in California is a coffe shop that was designed to spread awareness of human sex trafficking in the area and provide support in order to stop the expansion of sex trafficking in local communities. The narrative of the business is told through traditional forms such as information throughout the shop, a video on their web site, promotional items and advertisements, and written information.

The business is especially sucessful as a compelling narrative because the story of human sex trafficking and their mission to end it is also expressed through the function of the business itself. **The coffee shop is run largely by unpaid workers (people who are willing to invest large amounts of time) because part of their narrative is "work for free to give freedom to those who are enslaved."**

2168 SUNSET BLVD, ROCKLIN, CALIFORNIA, 95765

(916) 787-5676

Become an Abolitionist

HOME   THEIR STORY   OUR STORY ▾   YOU ▾   HEAR MORE ▾   SHOP DETAILS ▾

STAY CONNECTED

DONATE

THEIR STORY

Free—Safe—These are the inherent qualities of being human. Living in abundance, it's hard to imagine life without these fundamental human attributes we so easily assume. Enslaved—Raped—The humiliation of being dehumanized—intolerable is an understatement. This is the nightmarish reality that an estimated 2 million people endure every day, a staggering proportion of which are young girls. In an era almost 150 years after the abolition of the trans-Atlantic slave trade, it's shocking to know that the dark and hidden slavery of human sex trafficking not only exists, but also thrives. This thief of childhood innocence is now the third largest and fastest growing criminal industry in the world.

At Origin Coffee and Tea, we simply won't go another day without responding to their cries for rescue. We must fight for those who cannot fight for themselves. This is not just another cause – this is an emergency. Tell them we're coming.......

Find some of the most thorough and up to date statistics here: http://www.state.gov/g/tip/rls/tiprpt/2011/.

Also read more here Initiative Against Sex Trafficking

Share

location

Origin Coffee & Tea is also effective as a compelling narrative because they offer numerous calls to action and ways to interact with the story. From simple cues such as "sharing" the story through social media, to signing petitions, to donating money, and donating time and energy. These calls to action allow a wider range of people to participate based on their means and how much they are willing to invest.

Finally, the significance of their brand language to telling the story cannot be understated. The menu on their web site reads "their story", "our story", and "you", which immediately creates a sense of togetherness and social accountability. **Rather than asking for "help" they prompt the audience to "become an abolitionist", which brings up meaningful associations that are inspiring and empowering.**

4. Baldick, Chris (1990). "narrative" in The concise Oxford dictionary of literary terms. (0-19-811733-7, 978-0-19-811733-9). Electronic , 22. Nov. 2013

5. Baldick, Chris (1990). "frame narrative" in The concise Oxford dictionary of literary terms. (0-19-811733-7, 978-0-19-811733-9). Electronic , 22. Nov. 2013

# *Narrative and Frame Narratives*

A story or narrative is an account of events that use imagery to describe cause an effect, told for the purpose of providing education, entertainment, or to promote empathy.[4]   Stories are used to explain why something happened. The human mind is hard wired to understand the world through cause an effect relationships, as this is how we gain knowledge, which are insights that prepare us for future experiences we encounter and may not know how to navigate.

In a compelling narrative, stories are the building blocks of information. While they function independently, together they serve as pieces of an equation that lead the audience to a greater understanding or concept. In a compelling narrative, personal stories and non-fiction narratives are usually responsible for creating empathy.

A frame narrative is a story structure that connects multiple otherwise unrelated stories within a larger structure.[5]   Frame narratives provide the context for understanding the similarities between different stories, between different perspectives, or different themes and meaning. A famous example of frame story is Chaucer's Canterbury Tales, in which each of the tales are related through the frame of Pilgrims having a story telling contest as they travel together.

Frame narratives are used in compelling narratives not only to connect multiple stories, but to provide a context of the significance of the story. The frame of a compelling narrative is the lens that shows the spectrum of people that are involved while creating new insight and opportunities to relate to the narrative. An well designed example of this is the United States Holocaust Memorial Museum in Washington D.C., in which visitors are given identification cards of Holocaust victims and they follow the story of that person through the museum under the "frame" of the larger story of the Holocaust.

Story
"A" existed.
"B" happened,
it resulted in "C"
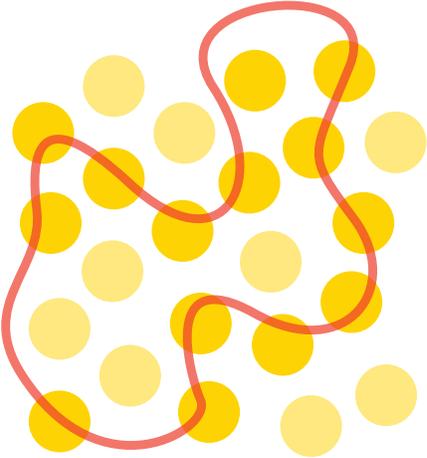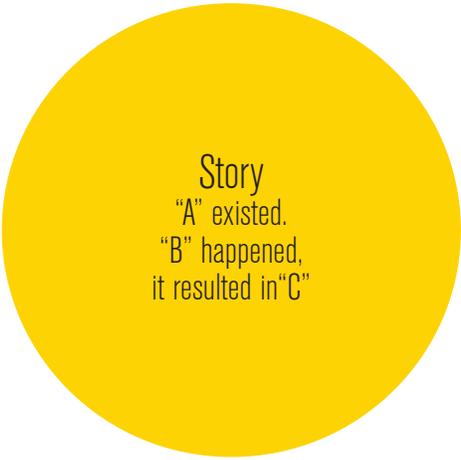
Frame Narrative
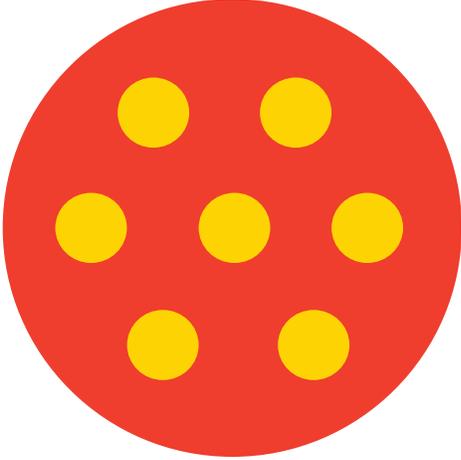
United States Holocaust Memorial Museum Washington DC

Compelling narratives are necessary to creating meaningful interaction with subjects that are difficult to comprehend. **The most important experience to evoke through a compelling narrative is compassionate empathy, because it means that the narrative has been expressed in a way that is not only emotional, but universally relatable and made relevant to us as humans, regardless of our culture, ethnicity, or our political views.**

To evoke compassionate empathy, the US Holocaust Memorial Museum provides every audience member with a different victim whose story they are then able to trace throughout the museum. This solution creates an empathy for the individual, and a sentiment of responsibility to their memory. The Holocaust may be difficult to fathom and relate to because we feel

We are the shoes, we are the last witnesses.
We are shoes from grandchildren and grandfathers,
from Prague, Paris, and Amsterdam,
and because we are only made of fabric and leather
and not of blood and flesh, each one of us avoided the hellfire.

MOSES SCHULSTEIN (1911-1981),
YIDDISH POET

YOU ARE MY WITNESSES
ISAIAH 43:10

SPEAK WITH A HOLOCAUST SURVIVOR
ERIKA ECKSTUT
Museum volunteer

DONATIONS

SPEAK WITH A HOLOCAUST SURVIVOR
HENRY GREENBAUM
Museum volunteer

removed, even when shown documentation. Audiences might also feel to overwhelmed or shocked to draw personal connections to the experiences of the victims. Following one individual, however, allows the audience to focus, and vividly imagine the atrocities through the perspective of the victims. Then, visually representing the sheer volumes of victims throughout the exhibit exponentially multiplies the empathetic experience.

While one of the main "calls to action" at the end of the experience is donations, the experience is unique because it connects the audience to characters in the narrative. **The empathy created through the exhibits can be met with connective interactions with survivors, as a cathartic experience and a reminder that the narrative is not resolute because it will continuously shape our future as long as the stories are retold.**

6. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

7. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. Print.

8. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 230-231. Print.

Storytelling and Narrative Form

Storytelling **is the act of conveying a narrative through language or sensory experience**.   Generally when we think of storytelling we consider written and spoken language, though stories can also be told through imagery involving any sense to describe experience.[6] **The *storyteller* is the person that uses imagery to compose the forms of communication for an audience to interact with.** The designer's role as a storyteller is to express the internal stories in a way that creates the most profound emotional effect, makes the stories feel relevant and significant, and inspires reflection.[7]

The *narrative form* is the consumable format through which a story is told. A story can be told through written language, performances, visual arts, spoken word, music, products, games, graphics, exhibits, themed spaces, etc. Advancement in technology are rapidly expanding the forms we can experience narratives such as virtual reality, responsive environments, projections, and immersive spaces.

The designer is responsible for creating the narrative form that will have the most profound affect on an audience by making the experience feel relevant and providing opportunities for interaction.[8] In the design of compelling narratives, a designer may combine multiple narrative forms to allow the audience to experience the stories in different ways. Personal stories may be best empathized with by an audience in written form, while an interaction with an object will give the audience a more personal connection to the narrative experience, and a room or space may be designated to prompt conversation to create new connections between audience members.
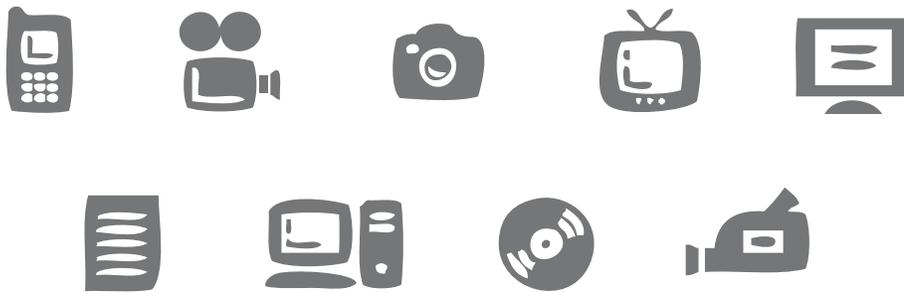
"The simple answer is this: We are wired that way. A story, if broken down into the simplest form is a connection of cause and effect. And that is exactly how we think."

Widrich, Leo. "What Listening to a Story Does to Our Brains."

YOUR BRAIN, ON STORY

9. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. 76-78. Print.

10. Widrich, Leo. "What Listening to a Story Does to Our Brains." The Buffer Blog Productivity Life Hacks Writing User Experience Customer Happiness and Business. N.p., n.d. Web. 07 Nov. 2013. <http://blog.bufferapp.com/science-of-storytelling-why-telling-a-story-is-the-most-powerful-way-to-activate-our-brains>.

11. Fuge L. From fables to Facebook: Why do we tell stories?. Australian Science. Web.: 22 Sep. 2013, from <http://www.australianscience.com.au/psychology/from-fables-to-facebook-why-do-we-tell-stories/>

Wired for Story

Before attempting to design anything, it is important to understand the stakeholders (people that will be affected by the design) you are designing for. Since compelling narratives should be designed to impact a broad spectrum of humans, the stakeholders, might be as broadly defined as the "public" or anyone using the internet. For this reason, **it is important to understand how the human brain is wired to interpret stories at the most basic levels, to leverage the effectiveness of the narrative design.**

It is no coincidence that stories are one of the most effective forms of communication. The human brain is able to cognize information better through narrative than through factual information. Imagine sitting through a powerpoint presentation that is merely comprised of facts that are categorized into groups on different slides, without accompanying imagery. This is the opposite of a narrative. The audience is likely to be bored due to the lack of imagery and action, and unengaged due to the information being presented without causality or archetypes to help the audience understand the significance.[9]

Some interesting this happen in our brain when we are being told a story. Narratives give us the ability to literally share an experience with someone who has never had such an experience. When a beautiful sunset is described to us, our vision receptors respond in our brain. When a friend is describing their anger, the synapses that control our emotion, more specifically anger, are activated. Whether we are conscious of these experiences or not, our brain is internalizing all of the information we are receiving as if we are experiencing the story first hand.[10] Thus, even the earliest humans used stories for survival because they allow us to recall information disguised as experience.[11]

Speaker-Listener Neural Coupling

left:

x = -59   x = -48   x = -38   x = -25   x = -5

Overlap of Speaker-Listener and Listener-Listener Neural Coupling

left:

x = -59   x = -48   x = -38   x = -25   x = -5
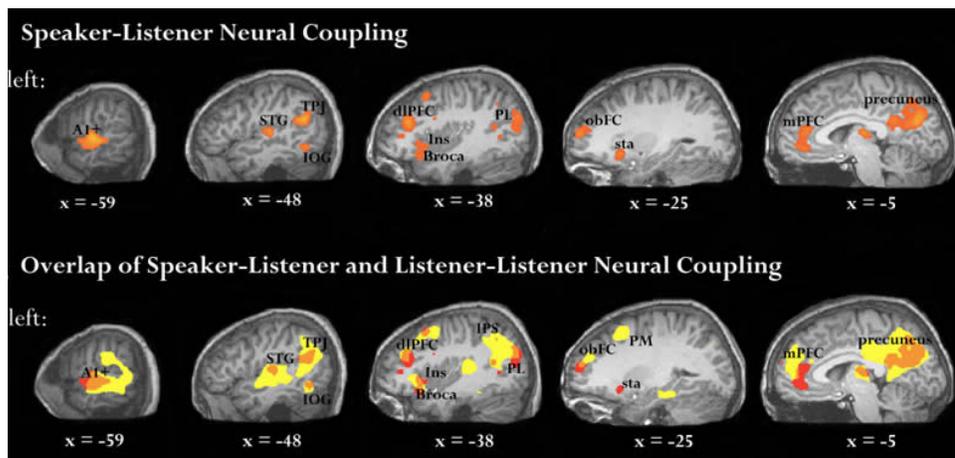
Neural Coupling

While the storyteller is explaining an experience their brain is activated. While audience hears this their brain interprets the story as an experience.

12. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

13. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 68-69. Print

14. Widrich, Leo. "What Listening to a Story Does to Our Brains." The Buffer Blog Productivity Life Hacks Writing User Experience Customer Happiness and Business. N.p., n.d. Web. 07 Nov. 2013. <http://blog.bufferapp.com/science-of-storytelling-why-telling-a-story-is-the-most-powerful-way-to-activate-our-brains>.

Sensory Experience

The audience of a story is not merely receiving the language that the story is being told through, rather they are interpreting and internalizing the associations between the words they are hearing and their own personal experience.[12] As our brains process language, the sensory receptive parts of our brain that relate to what is being told become activated.

Imagery is what creates sensory experience, however, not necessarily through visual stimuli alone. **Imagery is the use of descriptive or figurative language to impart the sensory experience of a narrative unto the audience.** A description of any affect on the senses such as sounds, smells, tastes, kinesthesia, movement, and touch can be a form of imagery.[13]

Researchers in Spain found that when we are being told a story, our brain reacts dramatically. According to the study, "Not only are the language processing parts in our brain activated, but any other area in our brain, that we would use when experiencing the events of the story are too. If someone tells us about how delicious certain foods were, our sensory cortex lights up, if it's about motion, our motor cortex gets active."[14]

Character
Goal
Object
Space
Time
Multiple
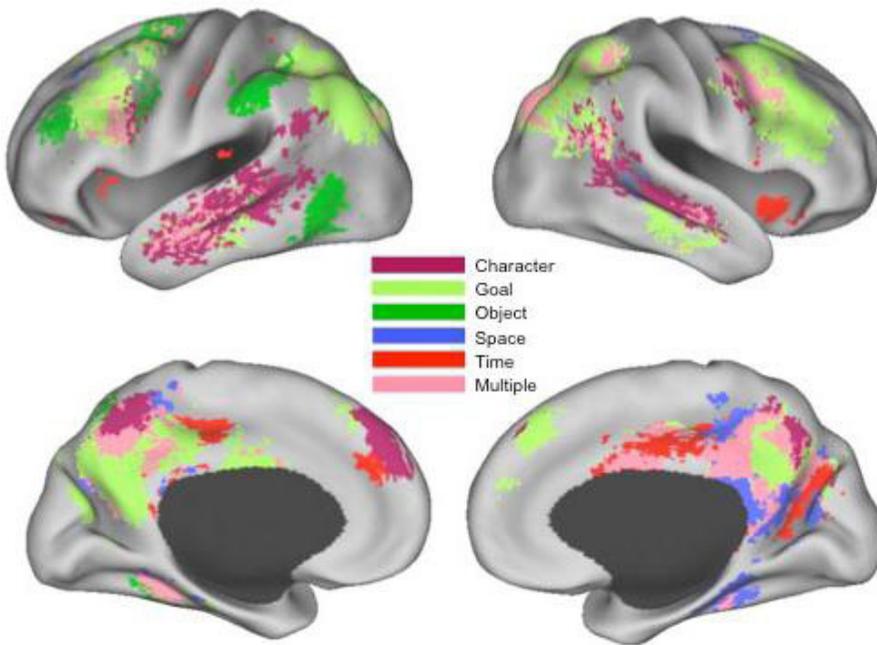
Speer, N. K., J. R. R, et al. (2009). "Reading Stories Activates Neural Representations of Visual and Motor Experiences." Psychological Science, 20(8): 989-999. 26 Nov, 2013. Web

15. Widrich, Leo. "What Listening to a Story Does to Our Brains." The Buffer Blog Productivity Life Hacks Writing User Experience Customer Happiness and Business. N.p., n.d. Web. 07 Nov. 2013. <http://blog.bufferapp.com/science-of-storytelling-why-telling-a-story-is-the-most-powerful-way-to-activate-our-brains>.

16. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

Sensation and Meaning

Our brains do not only internalize meaning from the story we are being told. **It has been proven that we subconsciously interpret meaning in stories differently based on external experiences to the narrative itself.** For designers, this knowledge holds powerful potential for creating narrative forms that combine implicit imagery through storytelling to evoke part of an experience, as well as external sensory cues such as lighting, heating, background sound, and physical comfort to evoke a more experiential understanding of the story.

In an experiment to see how sensation affects perception, John Bargh conducted a study at Yale where volunteers rated the personality of the same profile of an individual. To test whether the internalization of physical experience impacts human emotional interpretation, some of the volunteers held a cup of hot coffee. Bargh's study found that those individuals rated the same profile as halving a more appealing personality.[15]

By combining the understanding that when someone is being told a story their brain actually interprets then sensations that are being described, as well as this experiment that proves external sensations affect how we interpreter meaning, as a designer it is clear that one must be equally as conscious of the story their are telling and the physical manner in which it is experienced.[16]

"Volunteers would meet one of the experimenters, believing that they would be starting the experiment shortly. In reality, the experiment began when the experimenter, seemingly struggling with an armful of folders, asks the volunteer to briefly hold their coffee. As the key experimental manipulation, the coffee was either hot or iced. Subjects then read a description of some individual, and those who had held the warmer cup tended to rate the individual as having a warmer personality, with no change in ratings of other attributes."

15. Widrich, Leo. "What Listening to a Story Does to Our Brains." The Buffer Blog Productivity Life Hacks Writing User Experience Customer Happiness and Business. N.p., n.d. Web. 07 Nov. 2013. <http://blog.bufferapp.com/science-of-storytelling-why-telling-a-story-is-the-most-powerful-way-to-activate-our-brains>.

Yad Vashem The Holocaust History Museum, Israel

The sensory experience at Yad Vashem Holocaust History Museum is extremely emotionally evocative and relates directly to the narrative of victims of WWII. Starting with the architecture, done by Moshe Safdie, down to the smallest detains of each exhibit space, **the museum utilizes kinesthetic, visual, audio, and physical sensory cues to reflect the emotional experience of holocaust victims.**

The building is long, with a central visual cut through, and exhibit spaces off to either side. Upon entry, it looks as if you could walk straight through to the end, however as you approach the fist exhibit you see that steel cables block you, forcing patrons to go through every exhibit, much like the holocaust. **The sloping walls, minimal light, and narrowing of the central corridor create visual and kinesthetic discomfort.**

Within the exhibit spaces, the placement of artifacts and imagery appear clustered and busy. The volume of the content is overwhelming to the audience. **The sheer immensity of information and emotional accounts through photographs, personal writing, and children's artwork, mirror empathy for the individuals against the devastating magnitude of pain, fear, confusion, and uncertainty of WWII.**

The exhibit spaces make use of scale to create daunting illusions as well. Content appears much higher and lower on the walls and floor than we are used to, forcing guests to look around as if they felt paranoid. **In the most devastating exhibits, on trains and death camps, the hallways openings become hard to find and are extremely narrow, so patrons have to push past each other to move through space as the corralled victims did..**

17. Schank, Roger C. & Abelson, Robert P. (1995) Knowledge and Memory: The Real Story. In: Robert S. Wyer, Jr (ed) Knowledge and Memory: The Real Story. Hillsdale, NJ. Lawrence Erlbaum Associates. 1-85.

18. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. Print.

19. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. Print

Memory and Association

Our memories are tied to imagery and progression, which distinguish data from narrative. When you are trying to remember something, say, where you left your keys, your brain begins retracing a progression of imagery. Where did you last have them? Your brain might recall the sensation of holding the keys or looking at them. What did you do after that point? You remember turning off the TV, the rooms you walked through, running to the bathroom. Somewhere amidst that stream of imagery you are able to locate the keys, not because you remembered where they were, but because you remembered the story of losing them

Storytelling allows us to share knowledge, which is memorable contextualized information that can be applied to future experiences.[17] We are not only the product of our own experiences, but the ones we have encountered through story. Storytelling is inherently a persuasive form of communi-cation and storytellers must be aware that they are inevitably changing the permanent memory and associations of the audience.[18]

Associations are the immediate connection of meaning from our past experiences to new encounters. For example, atop the list of recommended psychological doctors covered by your insurance, is a Dr. Jekyll. Will you be making an appointment with him anytime soon? Most likely not. The Strange Case of Dr. Jekyll and Mr. Hyde uses vivid imagery and shocking detail that are nearly impossible to forget. Thus the name Dr. Jekyll alone is able to recreate the sensation of suspicion, uneasiness, and fear. No such doctor ever lived, and the doctor on your insurance is likely not a mad scientist with a murderous split personality, however it is the imagery from the story that is able to conjure immediate associations that are nearly impossible to ignore. [19]
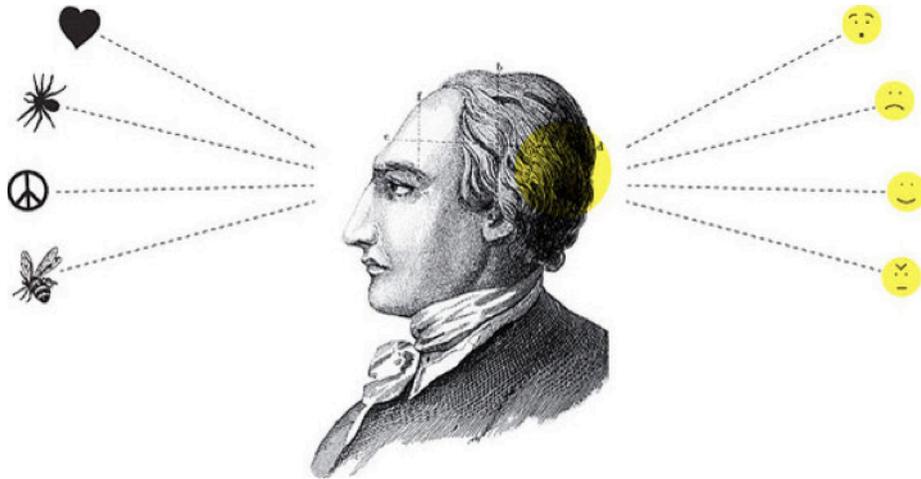
Widrich, Leo. "What Listening to a Story Does to Our Brains." The Buffer Blog Productivity Life Hacks Writing User Experience Customer Happiness and Business. N.p., Web. 07 Nov. 2013.

Screen capture from The Shining. 1979. Film. 06 Oct 2013.

Bifocal Lens: Dr Jekyll and Mr Hyde. Web . 06 Oct 2013. www.wildculture.com

20. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

21. Lukas, Scott A. The Themed Space: Locating Culture, Nation, and Self. Lanham, MD: Lexington, 2007. Print.

22. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

Social and Cultural

As a form of communication, the nature of storytelling is a social experience that it is imbued within out cultural norms and understanding. I**n many ways, storytelling is the building block of culture. It is the way people communicate what is important, right, wrong, acceptable, necessary, valuable, taboo, funny, and significant to one another.**[20] Cultures grow from a shared set of stories and narratives passed to one another to keep them connected and help guide them through the human experience.

Since the beginning of time, storytelling has been employed to teach morality and suggest actions to take in critical situations. All organized religions are developed from a set of stories, generally beginning with how humans came to exist, followed by a history of human struggles that almost anyone can relate to. The timeless nature of human struggle and conflict, with the earth, identity, relationships, health, desire, and death are what make the lessons and implications of the stories adaptable across time and around the world.

The preservation of narrative forms, such as Egyptian glyphs, might make us feel like we are getting a direct glimpse into history, however, all histories that we think we understand are still imagined ones, derived largely from our own experiences. A goal of designing compelling narratives is to create a story experience that will be nearly identical for every audience member, regardless of their personal histories or culture.[21] The Immersive Worlds Handbook urges that while stories are often responsible for shaping our political, social, personal, and cultural boundaries, the design which tells the story needs to transcend those very boundaries to effectively change preconceptions.[22]
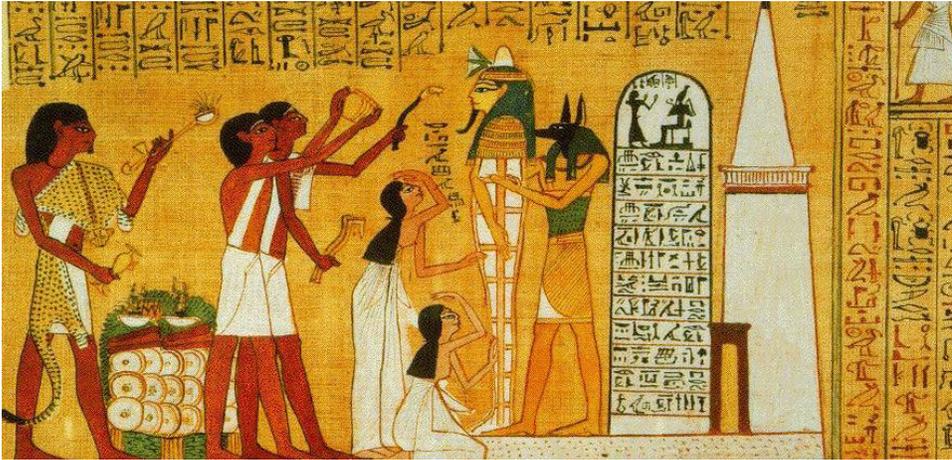
Story, in other words, continues to fulfill its ancient function of binding society by reinforcing a set of common values and strengthening the ties of common culture. Story enculturates the youth. It defines the people. It tells us what is laudable and what is contemptible. It subtly and constantly encourages us to be decent instead of decadent.

Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human (Kindle Locations 1627-1630). Houghton Mifflin Harcourt. Kindle Edition.

23. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. 76-78. Print.

24. Englander, Ferdinand. "Story 101: Why Do We Tell Stories?" Animator Island. N.p., n.d. Web. 07 Nov. 2013

25. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 68-69. Print

Patterns and Cognization

What does the following page show? Is there a story there? Literally, the only thing on the page are some shapes, however, the question "What is happening?" creates a lens for what your brain does with the information it has been given. To "understand", our brains begin to search for patterns and relationships.[23] If there are no apparent patterns or relationships, our past experiences and knowledge base will be used to fill in the gaps in order for us to make assumptions. [24]

Since the question posed was to make meaning of some piece of information, the brain does not look at the information (the shapes) as static or fact, rather the brain looks at the information as dynamic, like a problem to be solved. Thus, it is the active engagement with information that makes the difference between memorization and cognizing meaning. Even when we are only given stagnant or fragmented pieces of information, if we search for meaning, we do so by creating relationships between the pieces.

To make sense of our experiences, humans are prone to assessing information in terms of cause and effect relationships. When assigning causality of how and why something exists, we relate the information to the knowledge and patterns we are most familiar with, archetypes. Universal Principles of Design defines archetypes as, "Universal patterns of theme and form resulting from innate biases or dispositions," such as good versus evil, an underdog story, or an epic battle. [25] The story that you assigned the pattern on the previous page reflects your own bias towards archetypes.
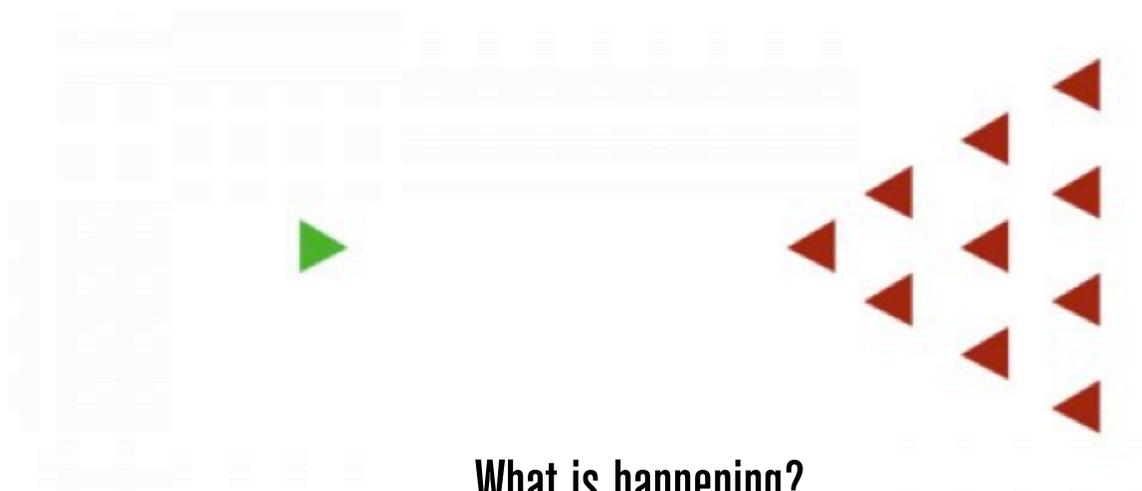
What is happening?

"Is there a story?" Englander, Ferdinand. "Story 101: Why Do We Tell Stories?" Animator Island. N.p., n.d. Web. 07 Nov. 2013

The Fall of Eden

No one has lived in Eden with one other person and a forbidden fruit tree, however the story of Adam and Eve has not only endured thousands of years, but has taught the same lesson across diverse cultures. The story is effective because when we are told of the beauty and vastness of Eden, our vision receptors in our brain literally activate as if we are seeing it, and when we are told about the forbidden fruit, our brain interprets the emotional response of longing and desire. Finally when Eden falls, our brain assigns causality between the forbidden fruit and destruction. This association is now embedded in our brains like a code, so every time we associate something with being forbidden and tempting, our brains are wired to weigh the desire against imminent destruction. Finally, since we have used this story for thousands of years, it has been embedded in our social and cultural knowledge, regardless of our religion or beliefs, and the "pattern" of the cause and effect in the story has become an archetype. The archetype will be used in infinite forms to teach the same lesson using mew imagery and empathy to make it relatable to vastly different people, because our brains were made for story, and while you may not think that you have personally experienced the fall of Eden in the way I have described, your brain has.

"Storytelling is joke telling. It's knowing your punchline, your ending, knowing that everything you're saying, from the first sentence to the last, is leading to a singular goal, and ideally confirming some truth that deepens our understandings of who we are as human beings."

Andrew Stanton: The clues to a great story. TED. 2012

ELEMENTS OF NARRATIVES

26. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

27. Nudd, Tim. "7 Basic Types of Stories: Which One Is Your Brand Telling? | Adweek."AdWeek. N.p., n.d. Web. 16 Oct. 2013.

28. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 39. Print.

Archetypes

Archetypes are the themes and patterns that we subconsciously search for in narratives that let us interpret meaning in a quick way, and make the story more relatable to others that share similar archetypal elements, which may or may not be impicit in the story itself.[26] Archetypes are significant in every story that is told because even when a narrative is not directly derrived from one archetype we still try to simplify the story to make sense of it. For this reason, it can be more useful to play up an archetype than leave a story ambiguous in order to lead the audience to a specific conclusion.

Archetypes can be just as useful in the design of the narrative form as the story itself. The book Universal Principles of Design describes two brands, Harley-Davidson and Nike, which play up archetypes to create a powerful and succinct brand image. Harley-Davidson aligns their brand and their product design with the archetype of an outlaw through black and flame orange, chrome finishes, black leather, and roaring noises. Highlighting this archetype makes the user feel like they are a bad-ass character in a story of escaping societal rules for the quest for pure freedom. Likewise, Nike emphasizes the Hero archetype and use nearly god-like figures (top athletes) to promote their brand. Thus, Tiger Woods on a Harley would be less likely to sell motorcycles because the archetypes would be less pronounced. [27]

Since archetypes function on an unconscious level, they can be extremely effective in expression without using language.[28] Like the branding example, archetypal imagery is extremely powerful in conveying good versus bad, safe versus dangerous, comic versus solemn, or other recognizable dymanics.

THE MOMENT
LASTS A SECOND.
THE LEGEND
LASTS FOREVER.

WRITE
THE
FUTURE
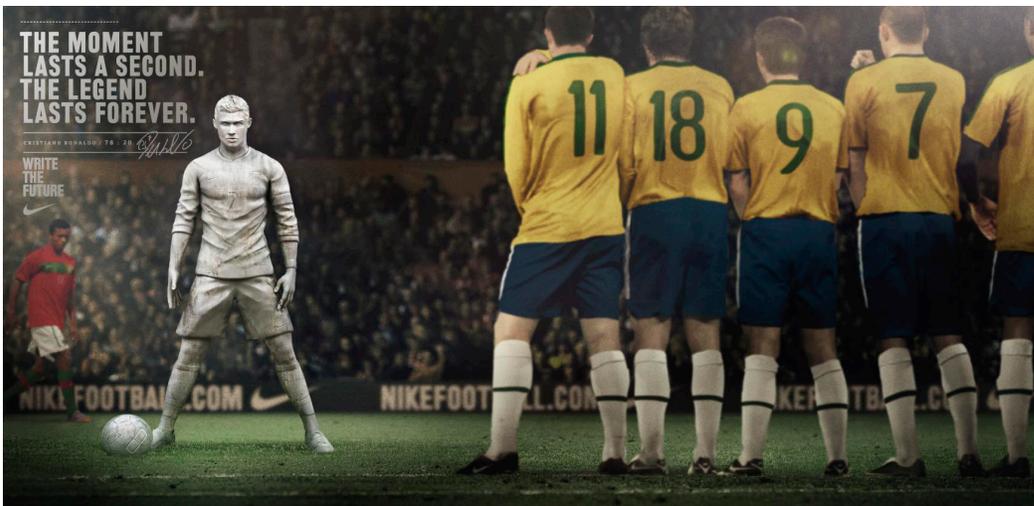
29. Jago, C. (2004). Stop pretending and think about plot. Voices from the Middle, 11(4), 50-51. Retrieved from http://search.proquest.com/docview/213931263?accountid=14214

30. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. Print.

Plot and Conflict

There are three primary elements of stories, context, which is the setting, people, or personified characters that express a range of human experiences and the characters, and a conflict which sets the action within the story into motion. Since these three elements occur in nearly every story, and because our brains make meaning by creating patterns and categories, there are archetypes to define settings, characters, and conflicts. The conflict is directly related to the arc of the plot in the story, meaning the journey the character goes on in attempts to solve the problem. The resolution occurs when the conflict is confronted and the result of the confrontation irrevocably changes the main character.[29]

In many cases, the more pronounced the conflict is, or the harder it is for the protagonist to overcome it, the more invested the audience will be. We experience this all the time, especially in live time such as sports. It is much more exciting to watch the underdogs of a game take the lead in the final moments of a game, because that follows the plot archetype of an underdog story and we relate to it emotionally.[30]

In storytelling there are several conflict archetypes, which are not rigidly defined, however most stories can be categorized by the following:

Human v.s. Human
Human v.s. Nature
Human v.s. Self
Human v.s. Society
Human v.s. Technology
Human v.s. Supernatural
Human v.s. Gods and Religion

Context + Character
Exposition

↓

Predicament (conflict)
Inciting Incodent

↓

Rising Action

↓

Attempted Extracation
Climax

↓

Faling Action

↓

Irrevocably Changed
Resolution

Gottschall, Jonathan. The Story-telling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

START!
THE LAND OF PERFECT DAY

THE CALL TO ADVENTURE
THE HERO RECEIVES A SIGNAL THAT HE HAS OUTGROWN HIS FORMER LIFE, AND IS BEING SUMMONED TO HIS OR HER *NEXT STAGE* OF EXISTENCE!

DUDE?

NEO, THIS IS *MORPHEUS*.

DUDE!!!

THE HERO'S

CROSSING OF THE RETURN THRESHOLD
THE HERO HAS BEEN UTTERLY *CHANGED* BY HIS JOURNEY, AND THINGS CAN NEVER GO *EXACTLY* BACK TO THE WAY THEY WERE... IN MANY WAYS, WALKING BACK THROUGH YOUR OWN DOORWAY IS THE HARDEST TRIP OF ALL!

ATONEMENT WITH THE FATHER
USING THE *HOPE* DERIVED FROM THE *GODDESS*, THE HERO OVERCOMES THE TERROR OF THE FATHER'S EGO-SHATTERING *INITIATION*!

LUKE, I AM YOUR *FATHE—*

I'M GAY.

OH...UH... NEVER MIND...

JESUS, WHY WON'T YOU JUST *DIE?!* THIS MOVIE HAS HAD LIKE TWELVE DIFFERENT ENDINGS ALREADY!!

THE ULTIMATE BOON
SCORRRRRRRE! HAVING PASSED THE INITIATION, THE HERO HAS UNLOCKED THE SECRETS OF THE GODS! ROLL AGAIN!

MAGIC FLIGHT
BUT AT LAST THE HERO IS COMMISSIONED TO RETURN WITH THE DISCOVERED *"ELIXIR"* FOR THE *GOOD OF SOCIETY!* MOVE 1 SPACE!

REFUSAL OF THE RETURN
AT FIRST, THE HERO WANTS TO *BASK* IN THE SUPERNAL *ECSTASY* OF THE GODS FOREVER! GO BACK TO *"ULTIMATE BOON"!*

31. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 230. Print.

32. Cornman, Steven R. "The Difference between Story and Narrative." CSC Center for Strategic Communication. N.p., n.d. Web. 16 Oct. 2013.

33. Manney, P.J. "Empathy in the Time of Technology: How Storytelling Is the Key ToEmpathy." Journal of Evolution and Technology 19.1 (n.d.): 51-61. Journal of Evolution & Technology. Institute for Ethics and Emerging Technologies, 19 Sept. 2008.

Character

The goal of using characters in compelling narratives is to create empathy and make the story relevant to the audience's own experiences, through those of the characters.[31] The audience will find a story most compelling then the characters feel real and relatable. Since we observe humans around us all the time, we are very aware of behaviors, gestures, emotions, and social interactions. When a character deviates form our expectations, the character will feel less real, resulting in the audience feeling more distanced and less likely to empathize with their situation.[32]

Designers should be comfortable with developing and analyzing characters because a common practice is creating personas to better understand the situation and stakeholders that are being designed for. The use of personas an stakeholders is to figure out how people interact with one another and their environment and asses why they are behaving in that way. This is the same function of characters in a compelling narrative. Character interactions with one another and their setting should lead the audience to a deeper understanding of how that world works.

Relatibility is the most important aspect of characters. **If characters are *believable*, then we will be able to see things from through their perspective, creating understanding. If the character is *relatable*, which means they are encountering conflict and emotions that everyone has experienced, we will be able to feel their experiences, which creates empathy.**[33]
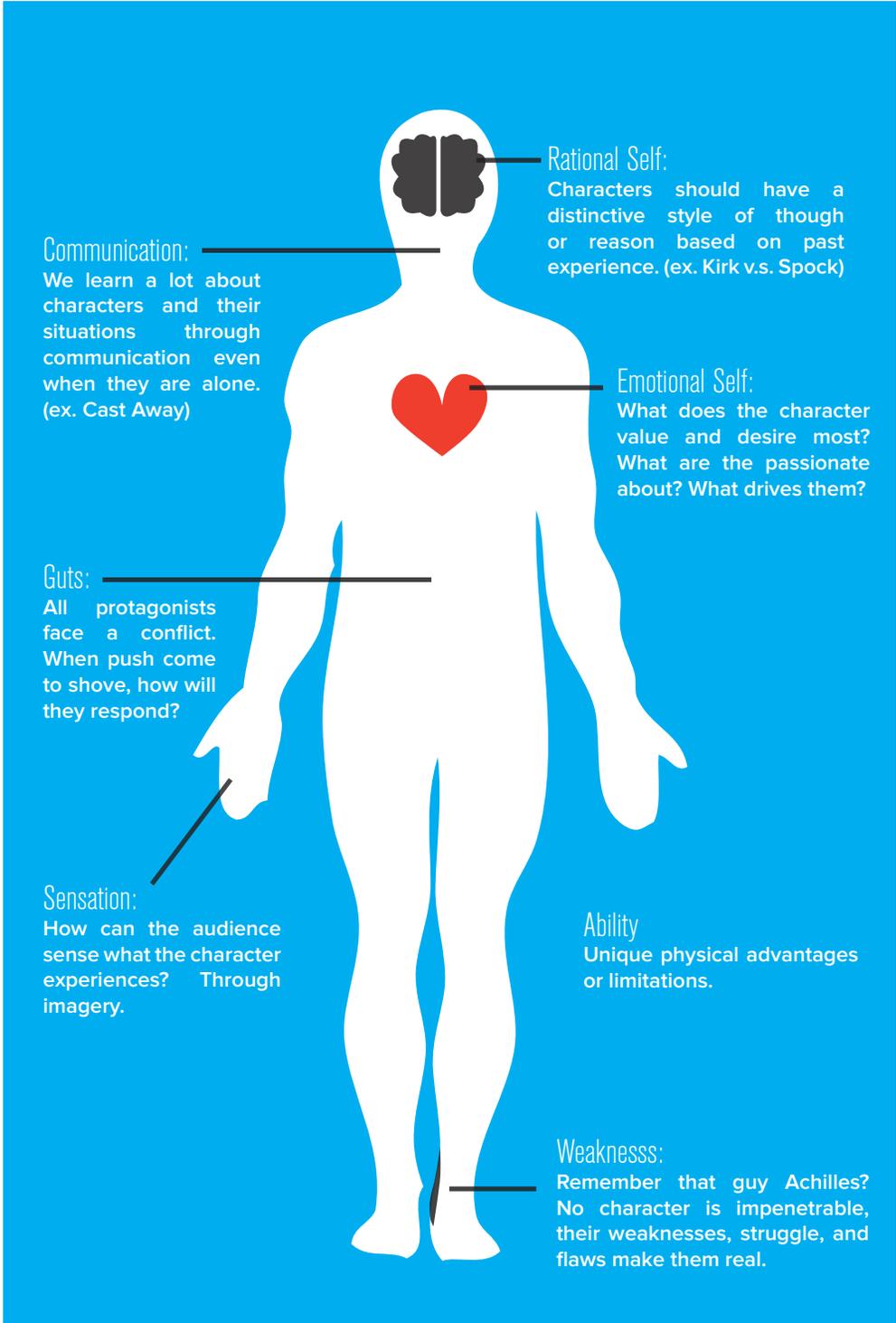
Rational Self:
Characters should have a distinctive style of though or reason based on past experience. (ex. Kirk v.s. Spock)

Communication:
We learn a lot about characters and their situations through communication even when they are alone. (ex. Cast Away)

Emotional Self:
What does the character value and desire most? What are the passionate about? What drives them?

Guts:
All protagonists face a conflict. When push come to shove, how will they respond?

Sensation:
How can the audience sense what the character experiences? Through imagery.

Ability
Unique physical advantages or limitations.

Weaknesss:
Remember that guy Achilles? No character is impenetrable, their weaknesses, struggle, and flaws make them real.

Setting

The *setting* provides context and a framework for understanding the unfolding action of a story and interactions between internal aspects such as characters and their environments. The setting of a story is the time and place where events within the story take place. The external setting to the interactions of the characters is the *world* the story takes place in.[34]

The more relatable a setting is, the more an audience might feel it is relevant to their lives. This does not mean that a setting should be representational of places we have encountered, however adapting functions of places we are familiar with to the setting within the story makes it easier for us to understand what the space is used for and changes our expectations of how characters will interact within that space. To understand the functions of a space better, designers might make maps tracing patterns of movement and behaviors within a space. When designing a setting that feels realistic, the designer should approach the space in terms of functionality as well. The setting should meet the characters needs, and if it does not, the character should react accordingly so the interaction between person and space is believable.[35]

Settings help us understand characters. Where, when, and how they live all create associations we already have about what their experiences, values, and relationships might be like. These aspects may be proved or challenged by a story. Consider the set design of sitcoms. Even without an actor in the room, we can make assumptions about the family. Do they have children? What is their income level? What are their values? What are their hobbies?

Fresh Prince Living Room.
"1990s TV Shows: Set Changes".
www.itskylepatrick.com

Friends: Central Perk Coffee
"Coffee-shop conquerors".
www.telegraph.co.uk

Seinfeld Set: Jerry's Apt.
keehnankonyha.com

36. Nudd, Tim. "7 Basic Types of Stories: Which One Is Your Brand Telling? | Adweek."AdWeek. N.p., n.d. Web. 16 Oct. 2013.

37. Stanton, Andrew. "The Clues to a Great Story." TED: Ideas worth Spreading. N.p., Feb. 2012. Web. 09 Oct. 2013.

Themes

Archetypal themes are related to the conflict of the story, however give the audience different expectations of how the conflict will unfold, and explains the central experience of the protagonist as it relates to the conflict. According to Christopher Booker, journalist and author, almost every compelling story we enjoy, even commercials can be defined by one of the following thematic archetypes:[36]

1. Overcoming a monster (Beowulf)
2. Rebirth and renewal
3. Quest or mission
4. Journey and homecoming
5. Rags to riches
6. Tragedy
7. Comedy (used a lot in advertising)

Themes and motifs is stories often relate to a central conflict within the character. In Finding Nemo a theme is perseverance. In the Pianist a theme is loneliness. In The Odyssey a theme is temptation. In a Barack Obama campaign speech the theme is hope. We can understand theme in an individual story as a lesson that ties the narrative together.

A strong theme in a frame narrative will allow the audience to understand the scope of the narrative and draw connections between the internal stories. The theme will provide the audience with a lens for understanding the character's situation and will give shape the audience's expectations of what they should be focusing on throughout the narrative. Without a theme or underlying idea in the frame story, the array of internal stories will feel superficially connected and less significant to the audience's life. [37]
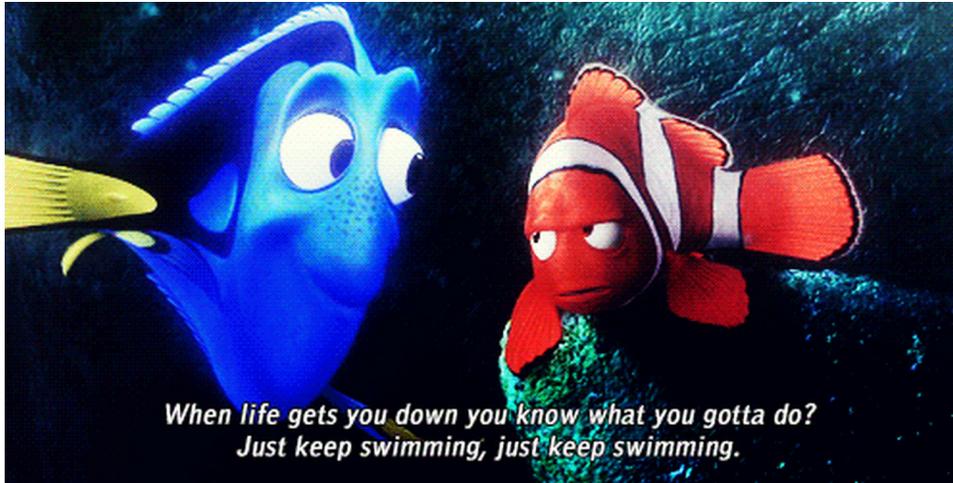
"A strong theme is always running through a well-told story."

Andrew Stanton: Clues to a Great Story. TED. 2012

38. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. 76-78. Print.

39. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

Resolution

All stories must have a resolution. By the end of a story the protagonist has made some irrevocable change, a conflict has been resolved, or a question has been answered.

Not all stories need a happy ending. It can be a reflection of the higher learning one has achieved, it can ask a question that provokes compelling thought, but no matter what there needs to be an offering so the audience leaves the experience differently than when they began.

Its is also important to note that the most interesting and exciting stories have resolutions that are not obvious before the conclusion. An audience will generally be much more engaged if they are theorizing about how things might turn out and what might happen next.[38] **Suspense is not only important to thrillers, suspense is what keeps the audience immersed and focusing on understanding what is happening.**

As we discussed before, humans are born problem solvers and even subconsciously try to cognize information through patterns. The archetypes the audience associates with the narrative might lead the audience to a logical conclusion about how it will end. The challenge for the storyteller is to make the resolution both seem approachable to try to uncover, and still retain an element of surprise that can provoke a deeper understanding of the story.[39]

Resolutions to stories are essentially the pay off and without a resolution, the audience is left feeling unfulfilled. The resolution of a compelling narrative might be a sensation of hope, coupled with a call to action, so the audience feels control over the evolution of the story.

"When you're telling a story, have you constructed anticipation? In the short-term, have you made me want to know what will happen next? But more importantly, have you made me want to know how it will all conclude in the long-term? Have you constructed honest conflicts with truth that creates doubt in what the outcome might be?"

Andrew Stanton: Clues to a Great Story. TED. 2012
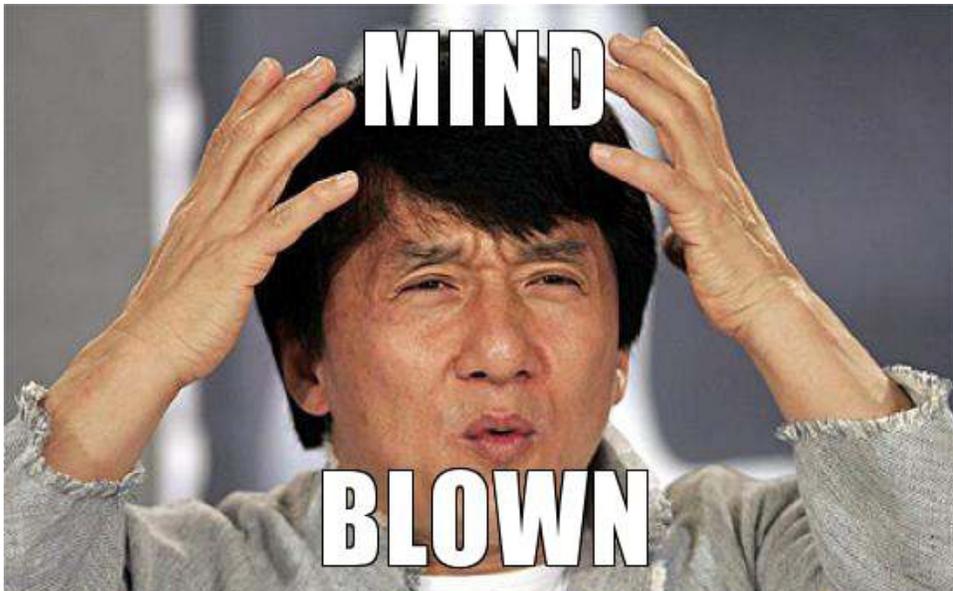
"MIND, BLOWN | Jackie Chan Whut?" 2013 www.troll.me

"We have to remember how to raise a barn."

-Richie Havens

FUNCTIONAL STORYTELLING

40. "What Is Storytelling?" National Storytelling Network. National Storytelling Network, n.d. Web. 16 Oct. 2013.

41. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. Print

42. Englander, Ferdinand. "Story 101: Why Do We Tell Stories?" Animator Island. N.p., n.d. Web. 07 Nov. 2013.

The Story Teller

While narration is one form of storytelling, the function of storytelling is to convey narrative in an expressive form. Nearly every industry relies on storytelling to communicate. This is why it is extremely important to understand the role and responsibilities of being a storyteller in order to express compelling stories.

In the design of compelling narratives, which likely use multiple media platforms to present a story, the success of the story relies on the designer's ability to present the narrative in an informative, engaging, and motivational way.[40]   When a designer acts as a storyteller and can successfully create all three of these experiences, the audience will be attentive and more likely to invest into the aim of the compelling narrative.

Create Interest: Interest is how the audience becomes invested in the content of the story and not just the experience of the narrative form. Storytellers can create interest by expressing the relevance of the story to audiences lives (relatability), or through presenting information in a limited way to build anticipation, curiosity, and surprise. [41]

Amuse: Amusement is created by the storyteller's tone, pacing, and level of enthusiasm expressed through the narrative form. The effect of amusement is a lively narrative experience that is what makes an audience want to engage with the narrative form.

Instruct: The storyteller's most significant role in compelling narratives may be to instruct. Instruction is the combination of presenting information in a consumable way and presenting a practical application for applying that knowledge. Instruction is what empowers the story, and the audience. [42]

Interest

Amuse

Instruct

Compelling Narrative
Design Responsibilities
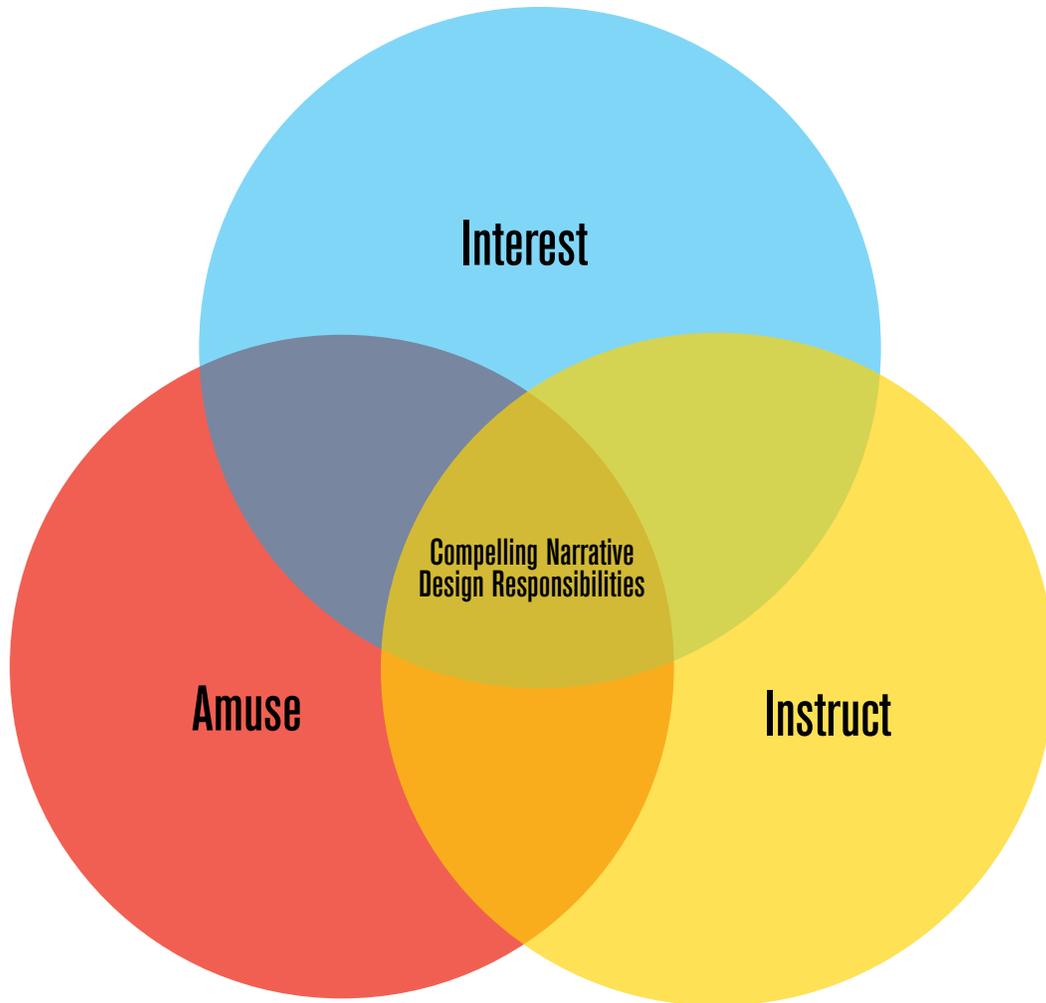
43. Manney, PJ. "Empathy in the Time of Technology: How Storytelling Is the Key ToEmpathy." Journal of Evolution and Technology 19.1 (n.d.): 51-61. Journal of Evolution & Technology. Institute for Ethics and Emerging Technologies, 19 Sept. 2008.

44. "What Is Storytelling?" National Storytelling Network. National Storytelling Network, n.d. Web. 16 Oct. 2013

45. Englander, Ferdinand. "Story 101: Why Do We Tell Stories?" Animator Island. N.p., n.d. Web. 07 Nov. 2013.

Applications of Storytelling

There is not one industry or field of study that is unaffected by storytelling. From personal stories and gossip, to written math problems and text books, stories allow us to cognize information that the storyteller wants us to have. Stories are told to prompt a specific reaction from the audience. **Education through storytelling teaches us how to apply knowledge in the future,** *empathy* **allows us to develop emotional connections with people we have not met and deepen connections with those around us,**[43] **and** *entertainment* **is the reason we are willing to engage with a story and one of the most important factors in determining how willing we are to continuously invest in the narrative.**

Every form of entertainment, every educational tool and activity, and nearly every conversation and personal connection we make tells a story.[44] While these three applications can be used in different ways and have specific industries that surround them.

Compelling narratives are able to make use of all three applications for a more wholistic experience.

Storytelling is used to make the seemingly irrelevant, relevant. When the audience becomes connected to the content or characters of the story, the narrative has created empathy. When a storyteller uses imagery, action, and emotion to make the audience more interested and engaged, the narrative is entertaining. When the storyteller uses metaphor and patterns to help the audience understand the story and remember the lesson it contains, the narrative is educational.[45]

The designers role is to ensure that the narrative form they have created functions in all three of these ways. If they are successful, the audience will have an enjoyable and meaningful experience with the story, and will be more willing to engage repeatedly in the future. **For compelling narrative designs, one of the goals should be longevity of the relationship with the audience.**

Empathy

Compelling
Narrative

Entertainment

Education
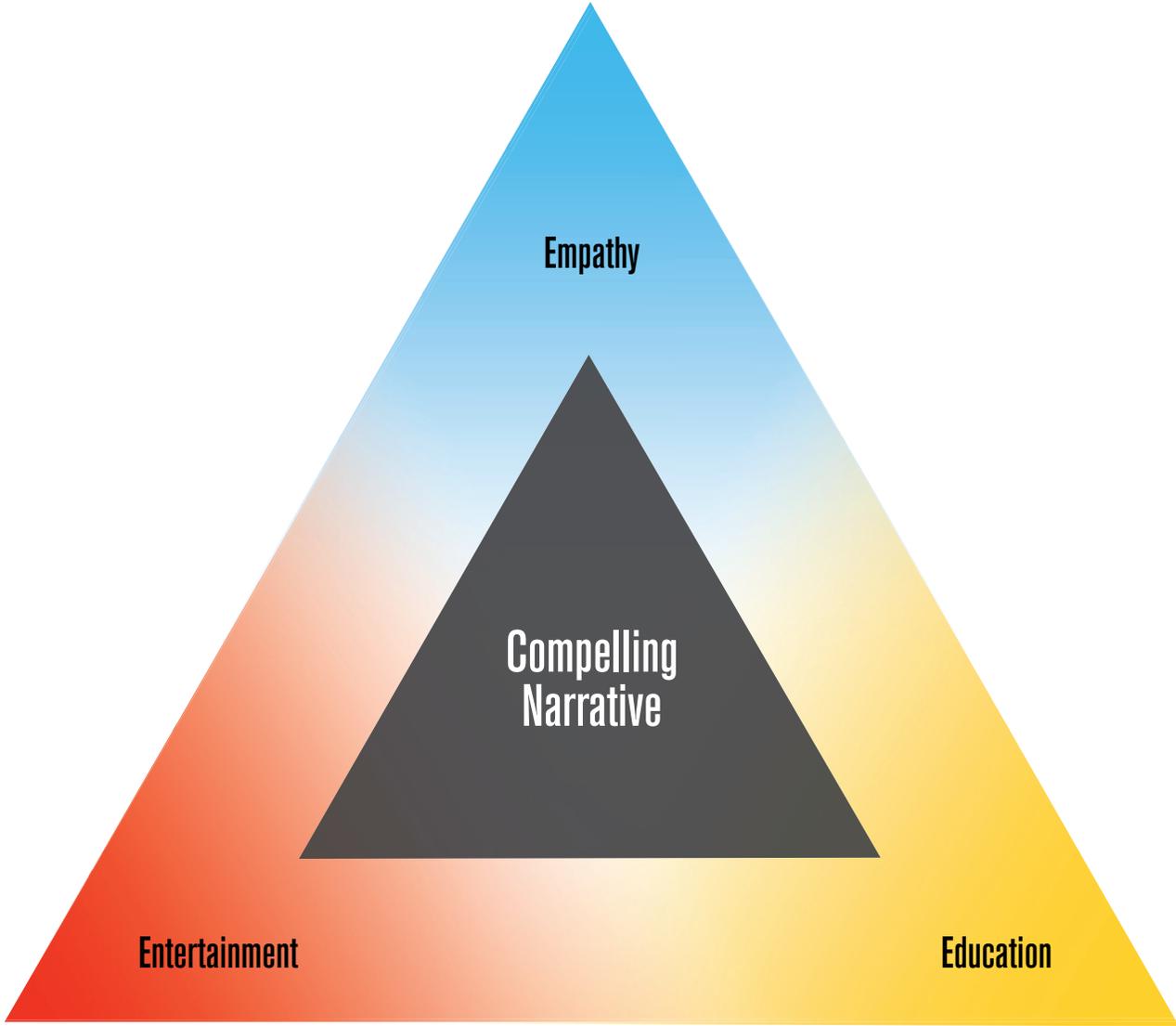
46. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

47. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

Entertainment

All stories should be told in an entertaining way. This does not mean all stories should necessarily be fun and amusing, however, they should be interesting and fulfilling. The level of entertainment in the narrative form is what allows us to leave the present and become immersed in the story.[46] **Audiences are much more willing to invest time, money, and effort into an experience that is as enjoyable as it is rewarding.**

Entertainment can be achieved through passive immersion, such as watching a video or reading an article, or it can be created through active involvement, such as games or rituals. Compelling narratives tend to use a combination of active and passive involvement with the story, so it is important that the designer is able to make both forms interesting and exciting to be interact with.

One way to create entertainment is to leave parts of a story untold or open ended so the audience has to figure it out for themselves.[47] As discussed, the human brain is constantly trying to solve problems and recognize patterns. In designing stories, a bit of suspense, mystery, or a surprising twist make the narrative more entertaining.

Another way to further the audience's involvement is to design a competition into the story. The competition could be between characters (every great underdog story) or between the audience. Establishments like Medieval Times, a dinner theater show, separate their audience into teams to cheer on a specific knight, which serves to not only keep the audience amused, but personally involved with the story and emotionally engaged with the character they have been assigned.

"Medieval Times Atlanta Castle".
Desi. 26 Jul 2012. Weeshare.net

"Race to Recycle" at Discovery
Science Center in Santa Ana. by
Cinnabar California.
www.Cinncabar.com

48. Fuge L. From fables to Facebook: Why do we tell stories?. Australian Science. Web.: 22 Sep. 2013

49. Johnson, Anna. The Museum Educator's Manual: Educators Share Successful Techniques. Lanham: AltaMira, 2009. Print.

Education

When you think about "education", you most likely envision the journey from Kindergarten to High School graduation. **Education, however, has been possibly the most important function of storytelling that has prepared humans to respond to new experiences that may be dangerous or difficult to navigate long before education was standardized.** From the beginning of verbal language, storytelling has been used to pass down knowledge through the generations to best prepare them for experiences they may encounter. As we have described the use of story to help us cognize information and make it both relatable and usable.[48]

Early examples of learning through storytelling would have allowed early humans to warn the younger generations of dangerous plants and animals in their surrounding land. Ineffective stories meant the audience would be less likely to retain the information, thus they would be unprepared for the dangers and were less likely to survive. Today, we use stories for survival as well, whether it is through addicts and felons telling their personal stories to middle school students, or enacting scenarios with parents-to-be to prepare them to take care of babies in crisis situations.

As a designer, two large trends have been growing in popularity since the 1990's. Firstly, education expert Howard Gardner defined "multiple intelligences", which is the idea that holds that different people have unique ways of learning. For designers, this means that the form a narrative takes should accommodate each of the learning styles to have the greatest affect on the largest portion of the audience. Secondly, the idea of "edutainment" (education disguised as entertainment) has been found to be one of the most successful ways of getting an audience engaged. If designers can make a narrative experience entertaining, the audience will be to learning.[49]

existential

musical

intrapersonal

kinaesthetic

visual/spatial

interpersonal

naturalistic

linguistic

logical

$E=mc^2$
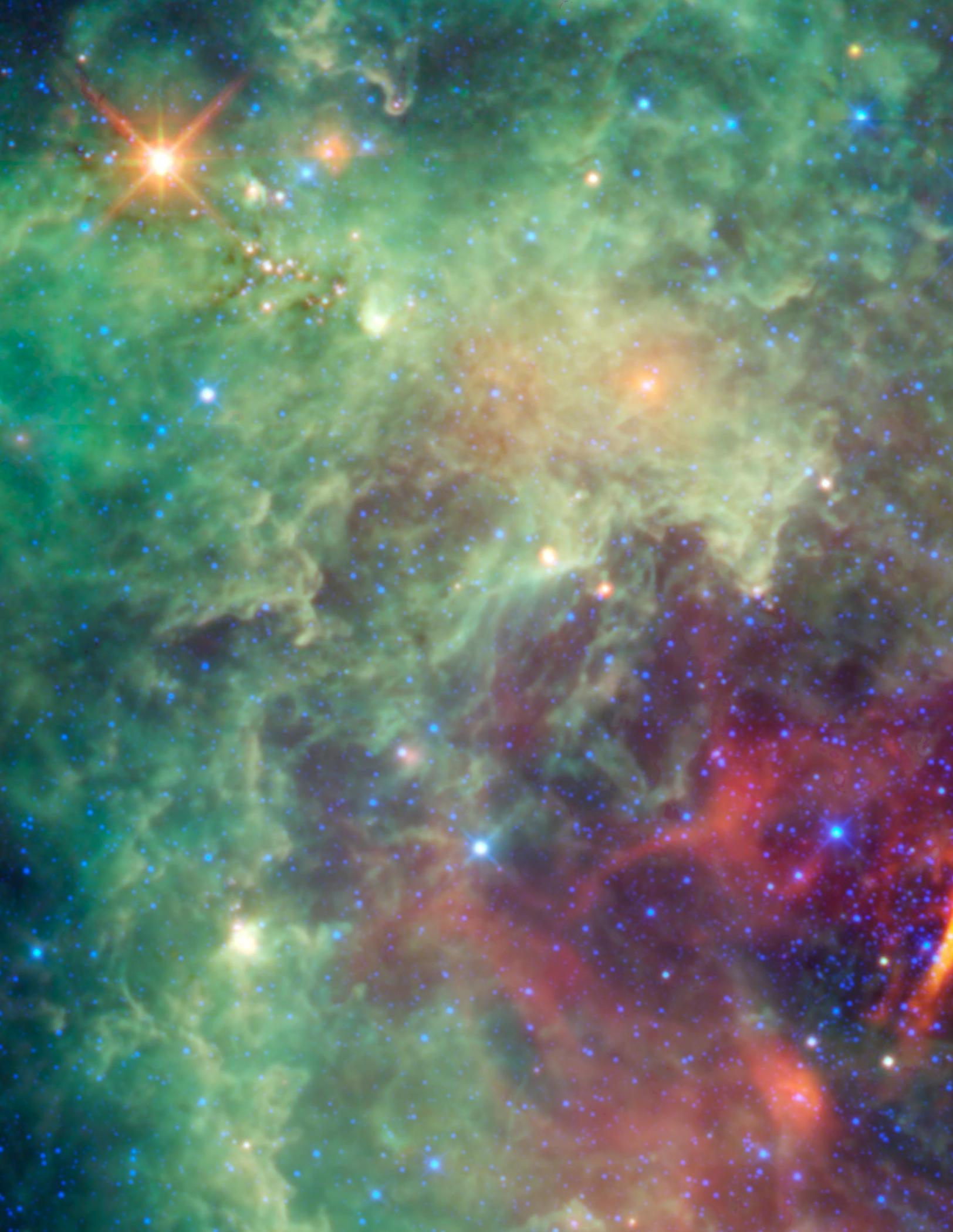
"The storylike character of science is most obvious when it deals with origins: of the universe, of life, of storytelling itself. As we move back in time, the links between science's explanatory stories and established facts become fewer and weaker. The scientist's imagination becomes more adventurous and fecund as he or she is forced to infer more and more from less and less."

Gottschall, Jonathan (2012-04-10). The Storytelling Animal: How Stories Make Us Human (Kindle Locations 288-292). Houghton Mifflin Harcourt. Kindle Edition.

50. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. 49. Print.

51. Goleman, Daniel. "Three Kinds of Empathy: Cognitive, Emotional, Compassionate." Daniel Goleman. N.p., 12 June 2007. Web. 05 Dec. 2013. <http://www.danielgoleman.info/three-kinds-of-empathy-cognitive-emotional-compassionate/>.

Empathy

If a story does not evoke empathy, the result will be an unengaged audience. Narratives have to provide a reason for us to related to the story, and this is usually through caring about the characters.

While characters do not have to necessarily be human, they all should relate to the "Human Experience", which simply means the fundamental struggles and emotions that everyone encounters throughout life. Everyone can relate to birth, aging, death, family, nature, grief, fear, loss, hope, desire, and hopefully compassion. When we hear stories of other beings experiencing those same things, we relate through our own past experiences and feel more connected.[50]

Emotional intelligence psychologist and scientist, Daniel Goleman, defines three kinds of empathy. **Cognitive empathy is the ability to understand the perspective of others.** This kind of empathy means the audience has learned enough about the story and character to understand the conflict and how it is affecting them. **Emotional empathy is when we share the emotional experience as someone being afflicted.** This is the empathy a moving book or film will create (maybe even a really sappy Google commercial). **Compassionate empathy, or "empathetic concern" is the form of empathy that compelling narratives aim to achieve. This form of empathy means the audience shares the perspective, emotion, and feels moved to help or change.** [51]

Compassionate empathy is created when the audience has an understanding, is emotionally moved, and sees the cost-benefit ratio of investing into the narrative as worthwhile. These emotional responses can only be leveraged by a specific opportunity to interact, otherwise they will likely be dismissed as soon as the story has ended.
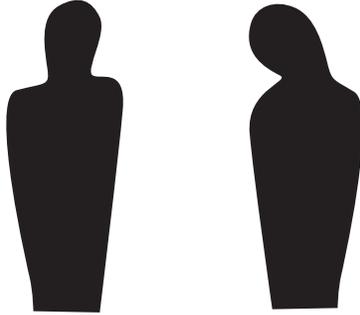
Cognitive Empathy
"I understand"
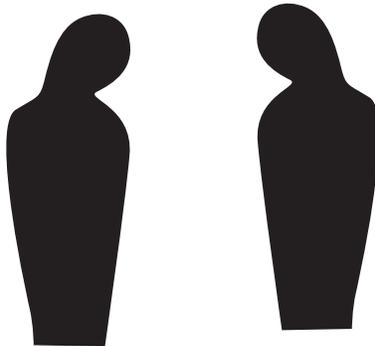
Emotional Empathy
"I feel your pain"

Compassionate Empathy
"I want to help"
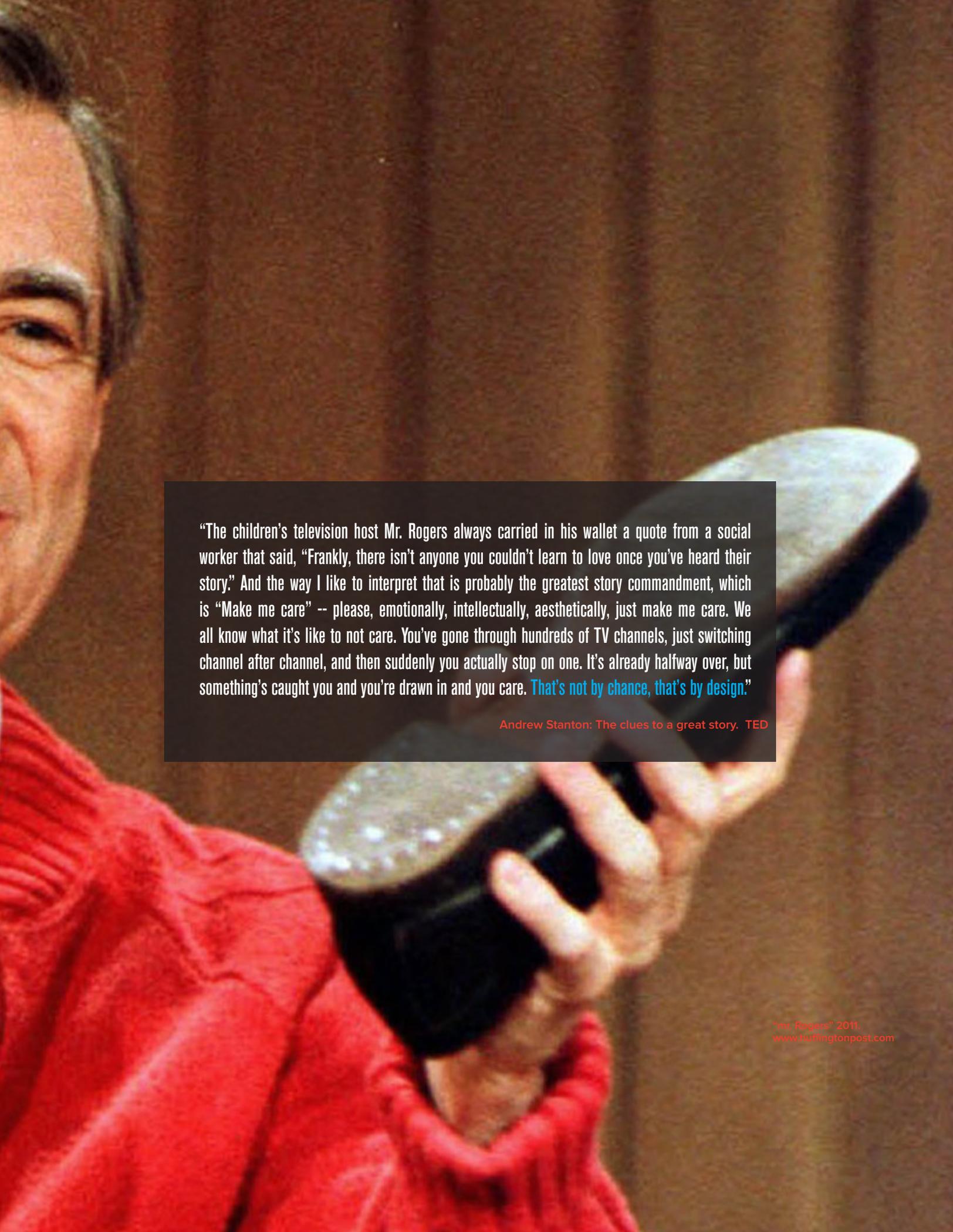
"The children's television host Mr. Rogers always carried in his wallet a quote from a social worker that said, "Frankly, there isn't anyone you couldn't learn to love once you've heard their story." And the way I like to interpret that is probably the greatest story commandment, which is "Make me care" -- please, emotionally, intellectually, aesthetically, just make me care. We all know what it's like to not care. You've gone through hundreds of TV channels, just switching channel after channel, and then suddenly you actually stop on one. It's already halfway over, but something's caught you and you're drawn in and you care. That's not by chance, that's by design."

52. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

53. "What Is Storytelling?" National Storytelling Network. National Storytelling Network, n.d. Web. 16 Oct. 2013.

The Audience Experience

The most important factor in every design is understanding the audience you are designing for and the experience you want them to have. Being part of an audience inherently has three separate social experiences. **The *individual experience* of a story is how each person relates to the experience through their own interpretation. The *shared experience* of the narrative describes the social nature of interacting with the narrative form at the same time as others ("We were there"). The *collective experience* of the story is the interaction with both the narrative and narrative form that everyone who has encountered the story can relate to (same story, different time).**

Storytelling was historically a social experience, usually centered around events or specific locations. Industrialization and inventions such as the printing press and personal media devices allowed for the same story to be experienced by a huge audience without any direct social interaction.[52] While some parts of compelling narratives may be designed for an individual experience (for example if there is a reflective exercise), however an advantage of a social atmosphere and immediate communication is that the audience can have a direct interaction with one another and the story itself. [53]

To design a compelling narrative, it would be beneficial to approach the design of each experience separately. If you want to tell the story of child malnutrition in a specific city, you will need to design the narrative in a way that encourages individual reflection to promote empathy with the story. It could be exciting to allow audiences to leverage the shared experience by playing a game or acting out an event. To continue the narrative and attract loyalty from a larger audience the design might include an online conversation about the collective experience of the story.

Individual
Personal Experience
Personal Photo

Shared
Everyone at the game
Personal Photo

Collective
Everyone who watched
"Fado Irish Pub Austin Soccer Pub" www.livesoccertv.com

"You cannot not communicate."

Paul Watzlawick

DESIGNER AS STORYTELLER

54. Lidwell, William, Kritina Hold-
en, Jill Butler, and Kimberly Elam.
Universal Principles of Design:
125 Ways to Enhance Usability,
Influence Perception, Increase
Appeal, Make Better Design
Decisions, and Teach through
Design. Beverly, MA: Rockport,
2010.

55. Alderman, Naomi. "How Inter-
active Technology Is Transform-
ing Storytelling."Theguardian.
com. Guardian News and Media,
12 July 2013. Web. 29 Nov. 2013.

Design Responsibilities

"Story" may be the single most abused and misused term thrown around by designers, artists, historians, marketers, managers, scientists, and politicians alike. It seems today, that to be successful in any field, the importance of being a good storyteller can not be understated. We have reflected on why stories are such an effective form on communication for conveying meaning and emotion to an audience. Now we will explore the responsibility of the designer in creating the experience of the consumable narrative form. The storyteller, not only the story, is the determinant of how successful a narrative is in evoking the intended response from the audience. As we are exploring the concept of "compelling narratives" that are strategically designed to make the audience interact and invest in the narrative, we will be looking at the factors in effective storytelling that the designer is responsible for developing.

When the designer, or more frequently a collaborative design team, is creating the narrative form, their responsibilities are not limited to composing text, arranging images, or planning a layout.[54] The responsibility of designer is similar to that of a maestro. Not only do they have to orchestrate all of the sensory elements, they have to ensure the composition of these elements will provide a moving experience for the audience. [55]

For a narrative to be compelling, the narrative form needs to be seamless with the story. It should highlight meaning, prompt interaction with the story, and most importantly be completely believable. To achieve believability, every detail of the story and the physical form need to be consistent.

56. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010.

57. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

Framing

The way a story is "framed" will determine the audiences expectations of the narrative experience and how much they will invest in return. Universal Principles of Design defines framing as manner in which a designer uses context, language, and visual cues to influence how the audience interprets the story. This technique can help spin information in a positive or negative light, depending on whether the designer hopes the audience will respond in outrage or give them hope and inspiration. **Framing a compelling narrative means determining the tone, themes, and desired interaction in the "frame story", which should be reinforced by each internal story and the narrative form itself.**[56]

Designing for an intended interaction from the audience requires careful consideration of how a story needs to be interpreted. Like politicians, advertisers, and news sources, the amount of drama a story is framed by can make audiences equally interested or revolted, so it is imperative to design with an awareness of whether the frame is evocative or off-putting.[57] **According to Universal Principles of Design, negative framing generally elicits negative emotions and makes the audience less likely to take risks or act in a way that may feel vulnerable. At the same time, positive frames can make audiences feel more confident, and willing to take risks.** In the design of compelling narratives, one might want the audience to be open to sharing personal stories, have a conversation about a controversial topic, meet dissimilar people, or reflect upon their own behavior. Thus, to encourage these new and often uncomfortable experiences, designing a positive frame is more likely to yield a participatory audience.

The Future of America: Kotkin Vs. Leinberger. America in 2050 ffud.org

The Terrifying Future of The United States by StormCloudsGathering via Youtube.com

58. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

World Building

Compelling narratives are not meant for one-time consumption, rather they should develop and evolve with time and interaction. Since setting is an element of story, creating a world around the setting of the individual stories allows the narrative to evolve within a framework. World-building is the narrative equivalent to "systems design" in design terms, meaning it is the creation of a framework of inter connectedness between parts of the story. **Like designing complete systems, designing immersive worlds required a schematic and detailed approach to making sure all of the parts within the story work together.**

The Immersive Worlds Handbook describes a worlds (for narrative purposes) as, "space inhabited by beings. It is complete, diverse, consistent, it has a background story or history, and a culture. It is ever-changing or evolving and is characterized by relationships and forms of interaction."[58]

As a design practice, actually mapping out a physical world, creating a time line, making fake advertisements, or enacting activities and social encounters may be extremely helpful in gaining insight as to the sensory experience that needs to be designed to tell the story in the most experiential way. Through world building, designers establish all of the rules to follow in the creation of the physical form. Understanding the social, emotional, behavioral, and preferential habits of characters can be made apparent through their interactions with their world, thus when designing the form, cues or nudges to those same interactions will help the audience identify with their experience.

Place	Planet, Continent, City, Town
Beings	Species, Races, Organisms
Environment	Land, Geography, Weather
Structures	Housing, Work, Leisure
Communication	Language, Symbolism
Behavior	Basic Behaviors, Action
Value	Love Values, Roles, Value Conflicts
Social Order	Laws, Conformity, Deviance
Material Culture	Technology, Tools, Design
Expressive Culture	Art, Stories, Ritual
Culture	Traditions, Folklore, Key Concepts

58. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

59. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

Rules

Rules are also how we get to know a world. If the audience feels like they understand the rules, then they will be more comfortable seeing the story through the lens of that frame narrative. **There are two significant kinds of rules that define the world of a frame narrative: social/behavioral rules, and physical rules. These rules are what define the interactions, provide consistency, create believability, and allow the audience to develop expectations of what is possible within story.**[59] Remember how people naturally want to problem solve and predict what will come next? Creating a guiding set of rules will allow you to create an unexpected resolution that is entirely plausible to that story.

For example, we are able to imagine and understand the world of Star Wars so clearly because there are distinct that are followed throughout every story. There are physical rules we understand, such as the existence of the Force, travel at "Light Speed", and sabers of light that can cut nearly anything. There are social rules as well, such as the evil Empire's power and the Rebel Alliance's fight against it, how hostile civilizations are on different planets, and exactly what kinds of aliens you shouldn't mess with. There are over 100 star wars books, movies, television shows, games, and products that are cohesive because they follow basic rules of the world.

Functionally, rules are the internal structure of a story that reinforce consistency through the narrative form.

The Star Wars Galaxy

25783 BBY JEDI ORDER FOUNDED
25,053 BBY GALACTIC REPUBLIC FORMED
24,500 BBY FIRST GREAT SCHISM
7,000 BBY SECOND GREAT SCHISM
5,000 BBY DISCOVERY OF THE SITH

1000BBY RUUSAN REFORMATION
32 BBY THE SITH RETURN
23 BBY THE CLONE WARS
19 BBY GALACTIC EMPIRE FORMED
19BBY LAST STAND OF JEDI ORDER

STAR WARS TOR Fever

JEDI ORDER HISTORY

2000 - 1000 BBY NEW SITH WARS
3954 BBY THE FIRST JEDI PURGE
4015 - 3950 BBY THE OLD SITH WARS
4,250 BBY THIRD GREAT SCHISM

11 - 18 ABY NEW JEDI ORDER
5 ABY - NEW REPUBLIC ERA
19 - 1 BBY THE GREAT JEDI PURGE

Star Wars History

"[R2-D2 and C-3PO are playing the holographic game aboard the Millennium Falcon]
Chewbacca: Aaaaaaaaaaaaaaaaaarrrgh
C-3PO: He made a fair move. Screaming about it can't help you.
Han Solo: Let him have it. It's not wise to upset a Wookiee.
C-3PO: But sir, nobody worries about upsetting a droid.
Han Solo: That's 'cause droids don't pull people's arms out of their sockets when they lose. Wookiees are known to do that.
Chewbacca: Grrf
C-3PO: I see your point, sir. I suggest a new strategy, R2, let the Wookiee win."

"Brand consistency? Nah."
Mark & Andrea Busse

60. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 68-70. 2012. Print.

61. Lukas, Scott A. The Themed Space: Locating Culture, Nation, and Self. Lanham, MD: Lexington, 2007. Print.

62. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 68-69. Print

Consistency

Consistency in a system of narratives can make or break the success of how the stories are intended to work together and the targeted interaction and investment of a compelling narrative. **The frame story of an effective compelling narratives, that uses multiple narrative forms, often works more like a brand than just a frame through consistent imagery, themes, meaning, and calls to action.**[60] With an increasing shift towards transmedia and rapid communication, it is essential to the compelling narrative's designer to be aware of the level of consistency in great detail to ensure cohesiveness and longevity.

Branding as a form of consistency provides visual cues of recognition and an understanding of what to expect from the experience.[61] Visual consistency uses colors, typography, graphic design, and imagery. The color coding of the text in this book is used to show different types of information, just as the page layouts change depending on what information is being explained. Each page were different it would be distracting, but since there are consistent codes and forms, it is recognizable, functional, and cohesive. [62]

Universal Principles of Design notes the significance of functional consistency which improves the ability of the audience to leverage their existing knowledge and learn. For example, if you are designing buttons for familiar functions, they should use common iconography. Likewise, if you are trying to prompt an uncommon action, such as sharing a personal story in a recording booth, common iconography for record and speak, as well as visual cues for what to speak into that seem familiar, will make the user more comfortable and inclined to participate.

Inconsistent
The signs are not the same so the branding is ineffective

"Brand consistency? Nah."
Mark & Andrea Busse
November 12, 2012 Flickr

63. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 68-70. 2012. Print.

64. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 68-69. Print

65. Lukas, Scott A. The Themed Space: Locating Culture, Nation, and Self. Lanham, MD: Lexington, 2007. Print.

Themeing

Themeing is designing the visual and formal language of a story that makes it recognizable and reinforces the theme of the narrative itself.[63] This is very similar to branding, however the themeing of a narrative needs to speak to the identity of the characters, setting, conflict/themes, tone, and mood. Themeing a narrative allows it to be expanded to include new stories because it essentially provides the visual framework for new additions, in the same way the "rules" of world building allow for new stories to be added. [64] Theming also allows independent stories to be identifiable as belonging to the same frame narrative, even if they are being told in isolated forms and places.

Themeing is commonly used to design narrative environments, such as retail flagship stores, restaurants, branded space, amusement parks, and city centers, as well as interpretive environments, such as museums, zoos, aquariums, and cultural institutions. Within those spaces, all of the language, visuals, objects, sounds, movement, etc. should align with the theme in a simplified and immediately recognizable way. The designer is responsible for conveying all of the elements of the story (characters, setting, action, conflict, imagery, etc.) through symbolic communication and experience. [65] The more realistic details that are presented to the audience, the less they will actually pay attention to the form, and instead they will completely be enthralled by the action of the story. Effectively doings so should result in complete immersion.

IF YOU NEVER DID,
YOU SHOULD.
THESE THINGS ARE FUN,
AND FUN IS GOOD.

"And it struck me that if I could write stories that were about this world as being small and interconnected, that maybe I could get people interested in the issues that affected us all, and maybe engage them to make a difference."

Skoll, Jeff. "My Journey into Movies That Matter." TED 2007

NARRATIVE
FORMS

66. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 68-70. 2012. Print.

Defined by Experience

While there are endless amounts of mediums through which stories can be told, the ones that have been used for the longest time are performance, imagery, symbols, and the written word. Before industrialization allowed for mass production of media, such as the printing press and phonograph, almost all non personal stories were told in a social setting with a large audience.

Now, narrative forms are just as often meant for the individual to consume privately as they are designed to be interacted with interpersonally, publicly, and more recently virtually. Each of these narrative forms evokes a different level of interaction and immersion from the audience.[66] As a designer, it is important to understand the effects that the medium of a story has on an audience in order to express meaning in the most compelling way.

As there are new mediums through which to share and experience stories developing every day, rather than explore the design opportunities through each form, we need to understand them in terms of the effect they have on audience investment, interaction, and identification. Text and audio are "imaginative" because your brain creates the imagery, plays and movies are "immersive" forms of storytelling because the imagery that is provided is captivating, performances and role playing are "active" forms that require physical engagement or communication, games and products are "interactive", and events and location based forms are "environments". While many mediums may fit under multiple headings, these categories each frame different kinds of investments the audience makes in consuming the story, different social interactions they provoke, and different ways the audience internalizes and identifies with the actually narrative.

"The kids who have grown up consuming and enjoying Pokemon across media are going to expect this same kind of experience from The West Wing as they get older. By design, Pokemon unfolds across games, television programs, films, and books, with no media privileged over any other...Younger consumers have become information hunters and gatherers, taking pleasure in tracking down character backgrounds and plot points and making connections between different texts within the same franchise."

Jenkins, Henry. "Memoir App Brings Back Past Memories." 2003

67. Herr-Stephenson, Becky, and Meryl Alper. "T Is for Transmedia: Learning through Transmedia Play." USC Annenberg Innovation Lab, n.d. Web. 11 Nov. 2013.

68. Alderman, Naomi. "How Interactive Technology Is Transforming Storytelling."Theguardian.com. Guardian News and Media, 12 July 2013. Web. 29 Nov. 2013.

Transmedia Storytelling

Transmedia storytelling uses multiple forms of media, usually associated with digital, to tell the same story or convey the same narrative experience. While these stories are generally coordinated with each other (the look, feel, theme, mood, etc...) however they can also exist independently from one another. Transmedia storytelling has become increasingly popular in education because multiple platforms for understanding a story caters to the learning needs of a wider range of individuals and allows for different social experiences to imagine, collaborate, and reflect on the story.[67]

This method of storytelling is increasingly important to narrative spaces, such as museums, because it allows for the story to extend past the physical space. Children's museums increasingly offer online content that relates to exhibits, while the exhibits offer connections to outside resources and "take aways".

Investment: Offering more content in a broader range of media platforms allows an audience to invest as much time exploring a story as they would like. As curious creatures, it is likely if the audience enjoys one form, they would seek out others [68], and if they enjoyed multiple forms of the narrative they will become loyal to the storyteller.

Interactions: As transmedia storytelling uses a range of narrative forms, each form can be tailored to create different interactions. In education, a teacher may use a combination of online articles and video before bringing a class to a museum exhibit which would provide context and an initial understanding of the story, so in the narrative space they are more able to learn through experience and interaction with the exhibit and one another.

Identity: An audience that is deeply invested in the same story across multiple platforms becomes loyal to that story.

69. Vicino, Miasha. "The Harry Potter Experience". Survey. 05 Dec 2013.

Experience and Investment

To study how the experience of different narrative forms changes the audience's relationship to the story I turned to Harry Potter. By surveying Harry Potter fans as well as people who have casually interacted with the story, I found connections between what people were willing to invest into consumption of different narrative forms, how they identified with the story differently based on their interactions, and how their social interactions changed based on each experience. From an online survey asking qualitative data about what ways surveyors have experienced the story and how they understood and valued their experience, I was able to draw conclusions about variances between form and which hold the most potential for compelling narratives.

When people described the experience of reading the books they repeatedly referenced using their imaginations, feeling closely related to the characters, and investing large amounts of time into reading to "escape" the present. When people described their experience watching movies they described the social nature of dressing up with their friends and the anticipation, as well has holding viewing marathons. When people described visiting the Wizzarding World at Islands of Adventure and the studio tour in London, they invested large amount of money to get as much of the experience the location offered in terms of authentic rides, foods, and products. A final interesting takeaway was how fans described the objects and clothes they bought which were used in conjunction with both social behaviors such as role playing, parties and events, or just showing off their $50.00 wands, that have no practical function, to their friends, and how they identify with the story and made claims that they are actually witches and wizards themselves and their invitation to Hogwarts was somehow lost in the owl mailing system.[69]

409,000 PEOPLE

follow J.K. Rowling on Twitter—even though the *Harry Potter* scribe has posted only six tweets. **"Pen and paper are STILL my priority at the moment,"** reads one.

In 2001, Jelly Belly started selling real-life versions of the *Harry Potter*-inspired snack **Bertie Bott's Every Flavor Beans.** There are now 20 flavors, including booger, black pepper, grass, and rotten egg.

AT LEAST 13 COLLEGES

have taught *Harry Potter*-themed courses, including **Swarthmore** ("Battling Against Voldemort"), **Yale** ("Christian Theology and Harry Potter"), and **Oregon State** ("Finding Your Patronus").

Electronic Arts has sold more than **40 million** *Harry Potter* video games, generating revenue north of **$1 billion.**

20,000 SPECTATORS

watched **46 teams** run around on broomsticks at the 2010 Quidditch World Cup in New York, which pays homage to Harry's favorite sport. The winner hailed from Middlebury College, home to the four-year-old International Quidditch Association.

UNIVERSAL ORLANDO RESORT SPENT $200 MILLION

developing the Wizarding World of Harry Potter attraction, which opened in June 2010. Within three months, overall park attendance spiked **36%,** concession revenue soared **60%,** and merchandise sales more than doubled.

THE WIZARD FLICKS HAVE CONJURED UP NEARLY $6.4 BILLION

worldwide, making *Harry Potter* the highest-grossing franchise in box-office history. Runners up: James Bond **($5.1 billion),** *Star Wars* **($4.4 billion),** and *Shrek* **($3 billion).**

It pays to play Harry Potter: 21-year-old Daniel Radcliffe made $25 million last year.

The *Harry Potter* books are available in **69 languages,** including Bengali and Sinhalese. They have sold at least **400 million** copies worldwide—more than any other series.

70. Gottschall, Jonathan. The Storytelling Animal: How Stories Make Us Human. [New York]: Mariner, 2013. Print.

71. Manney, PJ. "Empathy in the Time of Technology: How Storytelling Is the Key ToEmpathy." Journal of Evolution and Technology 19.1 (n.d.): 51-61. Journal of Evolution & Technology. Institute for Ethics and Emerging Technologies, 19 Sept. 2008. Web. 19 Nov. 2013

Imaginative

An imaginative storytelling method, is one in which the audience has to make their own assumptions and interpretations of the sensory experience. In reading a book, the audience has to envision what the story looks like, what the characters sound like, as well as how things feel, smell, and taste. Imaginative forms of storytelling actually prompt a more fulfilling sensory experience because as we read or listen to a story, our brains vividly interpret experience.[70] When we read about pain, we are more likely to imagine how that pain would feel if we experienced it, than with other forms of storytelling in which we would be an observer. For this reason, imaginative storytelling methods can promote strong empathy for the characters. [71]

Investment: Books, spoken word, and language based storytelling require time invested into the experience. As a design consideration, one needs to plan how long they hope to hold the audiences attention. In reading Harry Potter books, readers reported spending a lot of time reading and re-reading the novels.

Interactions: The most surprising social interactions that Harry Potter audiences described was the closeness they felt to their family when reading together and discuss the story after.

Identity: When using one's own imagination to interpret experiences of the characters, they develop a much stronger connection to the characters and the world they live in.

"Describe the experience of reading books, being read to, or audio books..."

Frequently used Terms:
Me, Escape, Characters, Family, Transported

Common Themes:
Investing time, Escapism, Imagination, Reflection

69. Vicino, Miasha. "The Harry Potter Experience". Survey. 05 Dec 2013.

"Harry Potter" by Fabrice Clerc
September 15, 2007
Flickr

72. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. 68-69. Print

Immersive

Immersion is achieved when the form of storytelling provides multiple sensory experiences in a manner so effective that the audience stops paying attention to their present time, place, or situation and becomes engrossed in the story.[72] The most common forms of immersive storytelling are movies, television, and performance which provide audio and visual stimulation. The reason books and spoken word are not classified under this category is because immersive storytelling allows for a passive audience. While the audience may be entirely enthralled with a movie or book, immersive storytelling captivates an audience without effort on their part. Conversely, when we imagine we have to use the filter of our own experiences to envision a story, when we are immersed we are provided the lens of how others experience the narrative.

Investment: Movies, television, documentary, and performances are all time based experiences, meaning they require a specific amount of time, and are generally meant to be consumed at one time.

Interactions: The social experience of immersive narratives is two fold. While the act of seeing a movie or performance is traditionally a social experience, the experience of immersion is an extremely individual experience. If an audience is noisy or if you feel compelled to speak during a movie, we typically understand this to mean the movie is not immersive enough.

Identity: Individuals identify least with immersive narratives because the sensory experience is provided, thus, the audience is a step removed from internalization of the experience.

"Describe the experience of seeing the movies..."

Frequently used Terms:
Midnight, Waited, We, Costume, Friends

Common Themes:
Pride, Social Event, Expectations, Excitement

69. Vicino, Miasha. "The Harry Potter Experience". Survey. 05 Dec 2013.

Star Wars Immersion
http://www.wired.com/images_blogs/underwire/2013/02/intro-graphic.jpg

73. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

Interactive

Interactive narratives are games or prescriptive activities where the audience is actively engaged with the narrative. Interactive narrative forms cannot exist or unfold without effort from the audience. The participant in an interactive usually takes on the conflict of the story personally as one they must overcome. Generally, interactives, especially in games, are tailored specifically to retain audience engagement through competition or setting rewarding goals.

Interactives (used as a noun) are designed activities, relating to a physical space or object, generally used in museums and amusement parks.[73] As a form of experience based learning that can engage audiences of multiple intelligences, interactives such as quick games that detail a portion of the story, a short questionnaire or test to make the audience more interested in the information, or an opportunity for creativity to express the meaning they have interpreted, are used to stimulate and engage diverse audiences.

Investment: Interactive storytelling requires the participation and effort of the audience. For this reason, there is usually an incentive built into the narrative that keeps audience involved.

Interactions: The main interaction is between the physical form and the audience, however social interactives, such as multiple player games or contest, the audience tends to remember the action of the story better as relate to the other players rather than the story within the game itself.

Identity: Through interactive forms, the audience identifies with the sensory experience of the narrative and they better understand the cause and effect relationships within the narrative because they have played a role in bringing about change.

"Describe the experience of games and authentic products..."

Frequently used Terms:
Play, We, Join, Bought, Show, Share

Common Themes:
Shared Experience, Pride, Investing Money, Becoming "Real"

69. Vicino, Miasha. "The Harry Potter Experience". Survey. 05 Dec 2013.

"Eco Challenge: Discovery Market" Discovery Science Center, Santa Ana, Ca.
www.Cinnabar.com

"Discovery Market" Discovery Science Center, Santa Ana, Ca.
www.Cinnabar.com
www.discoverycube.org

74. Lidwell, William, Kritina Hold-
en, Jill Butler, and Kimberly Elam.
Universal Principles of Design:
125 Ways to Enhance Usability,
Influence Perception, Increase
Appeal, Make Better Design
Decisions, and Teach through
Design. Beverly, MA: Rockport,
2010. Print

Active

Play and role play and the predomi-
nant forms of active storytelling by the audi-
ence.   Designers often act out skits and
pantomime experiences when they are try-
ing to better understand stakeholders or
situations they are designing for.[74] Likewise,
the audience interprets meaning about the
narrative through actively interpreting the
story through their own bodies, which can be
equally as emotionally draining as rewarding
for hard to address topics that a compelling
narrative might take on.

We learn to act out stories specifically
to confront the hard problems in life. By act-
ing out stories we become more empathetic
to the experience and better prepare our-
selves for encountering difficult situations.
It empowers us by building confidence and
allowing us to imagine confrontation. Prac-
ticing battle, fire drills and CPR training, ter-
rorist attack scenarios, and even practicing
speeches all help us understand, prepare,
and confront inevitable hardship.

Investment: Active storytelling requires the
physical participation and effort of the audi-
ence, though it does not require much time,
nor money, if the audience has a powerful
imagination.

Interactions: Not surprisingly, role playing is
one of the most interpersonal forms of nar-
rative. The interesting part however is that
participants do not necessarily feel more
closely connected to the other people that
are performing with them, they are more
likely to feel connected to the characters
they all played.

Identity: Active participation created the
strongest sense of identifying with the story.
It provides a more compelling experience
for perspective.   Unlike immersion which
makes the audience feel bad for the charac-
ters, play makes us internalize the emotions
that the story has evoked as our own.

"Describe the experience of events or dressing up..."

Frequently used Terms:
Friends, Feel, Together, Act, Party

Common Themes:
Togetherness, Acting, "Becoming" a character, Pride

69. Vicino, Miasha. "The Harry Potter Experience". Survey. 05 Dec 2013.

"How many Lockdowns are too many?" MARILYN VOS SAVANT

75. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

Narrative Space

Museums, amusement parks, themed restaurants, themed retail spaces, exhibitions, city and town centers, themed destinations, and historical sites are narrative spaces. Narrative spaces are defined by finite narrative limits as well as physical borders. Narrative spaces, like other experience-based forms of storytelling, have less control over how the audience engages with the story in terms of time, pacing, and sometimes progression, than language based narrative forms.

Some narrative spaces are designed with the intent of the audience experiencing the story in a linear or predetermined fashion, such as a museum with a clear path that cannot be avoided. Other spaces, or areas within a larger space, allow for the audience to roam and interact with the space in a less structured manner. In this form of design, the success of the "theming" is increasingly important to telling a story in a non-linearly.[75]

Investment: Generally, audiences visit narrative spaces infrequently, thus when they go they are very willing to invest full attention for what is a relatively short amount of time, and expect they will pay premiums for this "specialized" experience.

Interactions: Narrative spaces are particularly interesting because they literally have a captive audience, creating a shared experience. We rarely go to these spaces alone, and when we have the shared experience with loved ones and peers, the social experience becomes equally as memorable and significant as the narrative itself.

Identity: Narrative spaces generally incorporate some immresive or imaginative content and interactive engagement. When exploring a space the audience goes back and forth between empathy for the characters and internalizing the experience through their own lens.

69. Vicino, Miasha. "The Harry Potter Experience". Survey. 05 Dec 2013.

Yad Vashem.
This exhibit space in the museum allows for a range of experiences. The most compelling space are the seats next to the shoes and personal artificats they found on victims so people might spend time reflecting.

"London and Israel 2011-461" By Brian October 27, 2011. Flickr

"Storytelling has evolved a lot over 6,000 years through technology, from hunting on cave walls to Shakespeare of twitter walls"

Joe Sabia- The technology of storytelling TED Talk

INNOVATIONS IN STORYTELLING

But most importantly, like the best storytellers, we must make these stories universal in their appeal. And make them from our heart. Then we must spread these stories as pervasively as possible in the multicultural sphere, using as many forms of media as possible

Empathy in the Time of Technology: How Storytelling is the Key to Empathy
PJ Manney

76. Manney, PJ. "Empathy in the Time of Technology: How Storytelling Is the Key ToEmpathy." Journal of Evolution and Technology 19.1 (n.d.): 51-61. Journal of Evolution & Technology. Institute for Ethics and Emerging Technologies, 19 Sept. 2008.

77. Mumford, Monty. "Technology Killed Storytelling, Then Resurrected It." Wired UK. N.p., 07 Oct. 2013. Web. 18 Nov. 2013.

Leveraging Technology

Technology and rapid forms of communication are changing the way we share, collect, and listen to stories. **While the most exciting change in communication in the 21st century has been the internet, the ability to share information and ideas around the world within seconds can only create compelling change when people are able to leverage empathy through storytelling.**[76] As digital media thus far has been primarily dispersed through screen interfaces, it inevitably has not allowed for the same experience of in person narration and reflection. The internet has also allowed for audiences to filter the content they want to engage with and control the content itself to align with *personalized media*.

This is why it is especially important to be able to create an engaging story, and then translate the story through the most effective forms of media so the audience will enojy the experience, feel compelled by the content, and ideally share it and create an ongoing dialogue through their online communities. [77]

Rapid communication also has the ability to make or break the success of a compelling narrative. If the content of a story is controversial, but evokes a lot of empathy, the audience will feel more compelled to engage with the story and engage with others to reflect upon the content. If the story is controversial in nature and does not successfully evoke empathy or understanding, there will likely be a harsh online backlash that undermines the intent of the narrative. **As all designs today, compelling narratives are subject to world criticism, thus being aware of the global audience aand preparing ways to reach out and respond will promote the longevity and success of the narrative.**

78. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

79. Lidwell, William, Kritina Holden, Skoll, Jeff. "My Journey into Movies That Matter." TED: Ideas worth Spreading. TED, Feb. 2007. Web. 07 Dec. 2013.

80. Steffen, Alex, and Carissa Bluestone. Worldchanging, Revised & Updated: A User's Guide for the 21st Century. New York: Abrams, 2011. Print.

Social Media

As a method of storytelling, social media allows for any individual to share personal stories, which can create an empathic dimension to online communication. [78] It is important to note that not all social media promotes empathy, but as sites like facebook can create a sense of online community, walls of people who have passed away get filled with stories about that person from their loved ones and community members.

Secondly, social media allows for easier communication between people that are passionate about a similar narrative. [79] The concept behind a support group is that members share their stories to evoke empathy and in-turn share empathy for others. Social media, likewise, allows for this far reaching empathic connection.

Finally, social media is increasingly used by businesses and industries as a whole to tell their own stories and engage a larger audience through a channel in which they can receive immediate feedback.

Investment: The most significant investment audiences will make in stories told through social media is empathy. While might be leveraged to gain funding, the act of engaging with social media stories is free and audiences move on quickly.

Interactions: Social media provides the opportunity to direct a narrative to a larger audience. When audiences of an online narrative find a piece that is particularly moving, they might feel compelled to re-share it. Once it is shared, there is also immediate opportunity for reflection by others, which can range from a supportive comment from a friend, or an argumentative comment from someone with conflicting views.

Identity: Social media can provide a snapshot of how individuals, brands, companies, or organizations self identify by telling their "story" in order to make audiences feel more connected to the entity. [80]

facebook

December 2010

Facebook 2010

81. Steffen, Alex, and Carissa Bluestone. Worldchanging, Revised & Updated: A User's Guide for the 21st Century. New York: Abrams, 2011. Print.

82. Barton, Jake. "The Museum of You." TED: Ideas worth Spreading. TED, n.d. Web. 11 Nov. 2013.

Crowdsourced Narrative

"Crowdsourcing" is soliciting input or aid from a large crowd of people. ***Crowdsourced narratives are when stories are collected from a large amount of people to present a more wholistic image of a theme, topic, event, or issue.*** Technology has allowed for crowdsourced narratives to be more easily collected, organized, and retold. [81] While crowdsourcing is typically done through online communities, providing opportunities to tell a story in person or at a physical location can be much more compelling and rewarding. Crowdsourcing stories allows consumers of the narrative to become contributors, and through the process of inputting their own experience into the stories, there is an opportunity for them to become a community of participants. [82] The act of storytelling is inherently reflective, thus if an audience is asked to describe how they relate to a narrative they will feel more connected to the story.

Investment: Corwdsourced narratives require some time on behalf of an individual who shares and is part of the audience, however most significantly it requires an emotional investment and honesty.

Interactions: By allowing the audience to participate in a story by sharing their own experience or understanding, the designer has to set a stage for comfortable personal reflection as well as an opportunity for the participants to communicate with the stories they are most compelled by. Since the storytellers are the public, people deserve a designed outlet to make empathic connections with the story and one another.

Identity: Individually, participating in a crowd sourced narrative forces people to understand their own experience, which will change when they become the audience of the larger context of the narrative. Through the experience the individual identifies how

Screen Capute from Barton, Jake. "The Museum of You." TED: Ideas worth Spreading. TED, n.d. Web. 11 Nov. 2013.
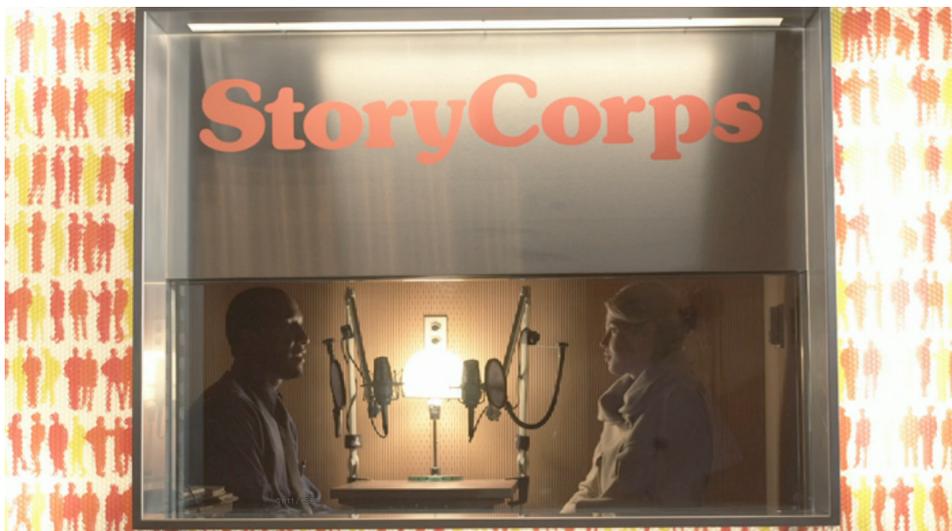
Screen Capute from Barton, Jake. "The Museum of You." TED: Ideas worth Spreading. TED, n.d. Web. 11 Nov. 2013.

National September 11 Memorial & Museum New York
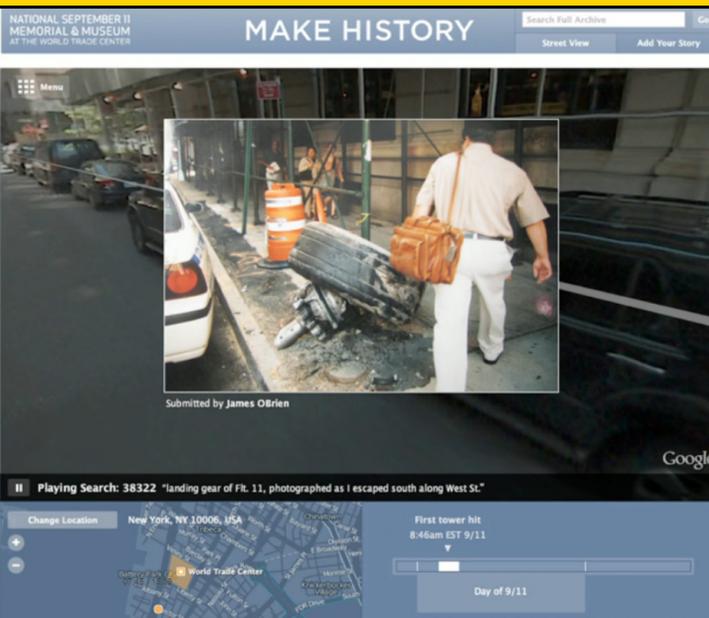
An extremely compelling example of crowdsourcing narratives is being used by Local Projects and Thinc Design to create a compelling and inclusive experience at the 9/11 Memorial and museum at ground zero.   They described 9/11 as being "an unprecedented moment of global awareness", so their design approach was to express as many personal stories of people who experienced 9/11 from around the world as they could. First they reached out online and asked people to send in their stories and photos.

At the museum, guests pass through projections of quotes, images, videos, and voices from around the world. The space to sit allows reflection and deep thought. The frame of a "collective experience" and personal stories from around the world, rather than just the US, highlight the global
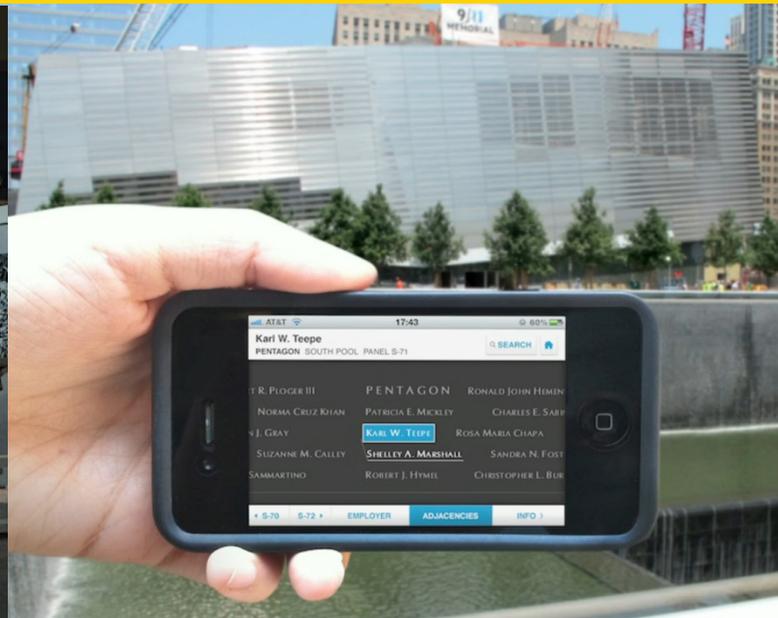
scale and far reaching impact of 9/11.

      After venturing through the exhibit space, the guests are encourages to interact by recording their own stories and thoughts. The question prompts are intentionally ones that are difficult to answer such as "How has 9/11 changed the world?" "How should democracies handle terrorism" to provoke deeper thought and meaningful discussions.

      The memorial itself makes use of crowdsourcing and mobile media. To determine where names would go, the designers created an algorithm to put friends, relatives, and co-worker near each other with help from families sending information. At the memorial you are also able to look up the biographies of victims (if they have been supplied) and you can see their connections to the names around them.

83. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

84. Alderman, Naomi. "How Interactive Technology Is Transforming Storytelling."Theguardian.com. Guardian News and Media, 12 July 2013. Web. 29 Nov. 2013.

Mobile Media

Mobile media allows storytelling to extend beyond physical borders of space and connect them. Cell phones and tablets provide the opportunity to design storytelling in motion. Portable media devices can be a platform for independent storytelling, such as mapping experiences and locations you've visited and uploading personal images and video. Mobile media however can also be directly related to another form of narrative such as a movie or interpretive space. [83] Museums and cultural institutions might have an accompanying app for wayfinding or interacting with an exhibit.

Augmented reality can be created through personal media as well and has holds exciting possibilities for storytelling in physical space. Imagine visiting Ellis island and being able to hold up your cellphone and see immigrants actually coming to America for the first time.

Investment: As long as the audience has a smart mobile device, downloading an app or visiting a website is non cumbersome. By adding new opportunities for education and superimposing information and images, the audience will be able invest more time into experiencing the whole narrative.

Interactions: Mobile media and augmented reality allow the individual to interact directly with the content of the story. [84] At the same time, these forms of media might have a social component that allows the audience to share their opinions and experiences.

Identity: Mobile media brings the narrative into ones personal device reflecting their interaction with the narrative as a personal experience. Augmented reality gives the audience a chance to identify story with a specific space, especially when they space is historical or public and a physical narrative form cannot be designed there.

"Augmented Reality Gaming"
thesocialjoystick.
www.thesocialjoystick.com

"National Geographic's recent
AR campaign let people interact
with dinosoars." Christina Austin
BusinessInsider.com

Dumbo Arts Festival 2012   Brooklyn, NY

...ublicly presented video projection installation onto the Manhattan Bridge in ...Arts Festival from September 23 - 25, 2011. The multi- part video projection, ...onal artists and curators, will cover over 30,000 sq. feet of the Manhattan ...and the surrounding cityscape, through the use of cutting-edge video

September 23rd-25th, 2011
8.30 p.m. to 11.30 p.m.

AS PART OF
THE DUMBO ARTS FESTIVAL

Featured Artists

Over 20 artists from around the globe are participating in "Immersive Surfaces!" Click here to get information on the Featured Artists participating in "Immersive Surfaces." A complete Artists list with links is included below.

Participate

Immersive Surfaces will be accompanied by a mobile augmented reality component created by Elysium Media. A QR code, posted here, around the show site, and in the guides, with instructions to download the Layar app to viewers' smartphones. Throughout the festival you can tweet images and comments with the hashtag: #dumboarts. Tweeted images will float through the atmosphere and around the installation, as self-referential surfaces of their own.

...deas of "crowd art," and ...edia platform in a ...n three phases, ...8 works in a more ...a projected, Op-Art ...self in the second part of ...o the climactic third

...eatured piece which the ...onsists of a video ...conceived and created ...Anaya, Farkas Fulop,

The Dumbo Arts Festival in 2012 included many projection artworks that made creative use of new technology and mobile media. The festival itself offered an opportunity for attendees to send in their own photos which would be part of a projection installation. While the festival does not have a specific narrative structure, the collection of crowsourced media captures the spirit of the festival and people who live in Brooklyn.

The art installation "Superhero" by Wildbytes projects people on the sides of buildings, making them literally the superhero of their own lives for a short time.
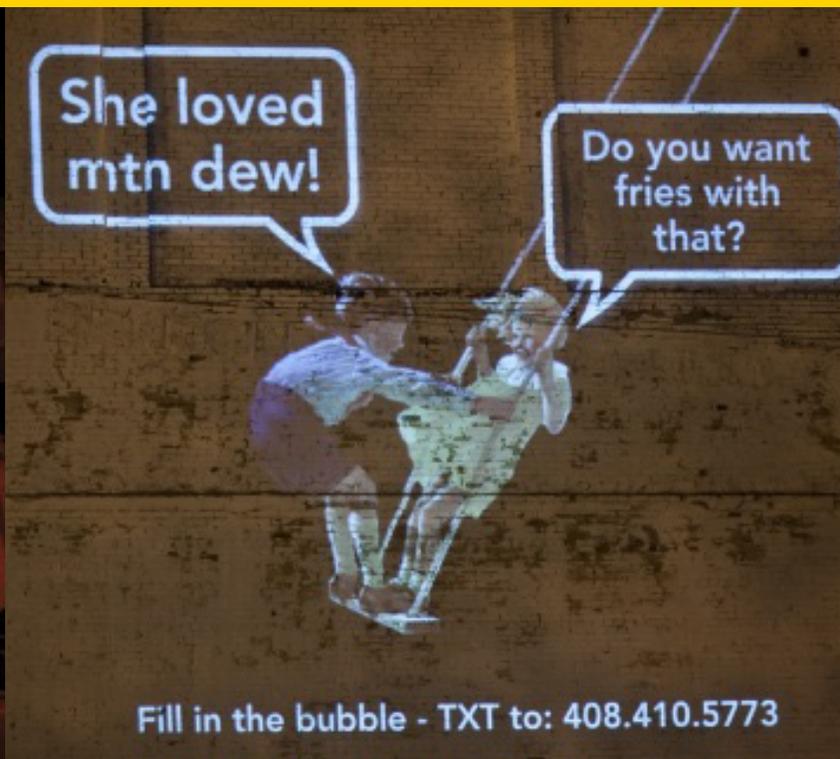
A projection installation by Paul Notzold encourages passersby to text message a quote that will be presented in different contexts. This interaction connects the audience to the content and creates a dialogue between the other participants.

85. Lukas, Scott A. The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces. Oxford: Focal, 2012. Print.

86. Barton, Jake. "The Museum of You." TED: Ideas worth Spreading. TED, n.d. Web. 11 Nov. 2013.

Responsive Interactions

Integrated technology can act as an extension of architecture by changing environments based on audience interaction. [85] The use of large scale screens, lighting units, and projectors can transform build environments instantly. Specialized sensors and touch screens are giving the audience to interact with space in fascinating new ways. Touch and movements sensors allow designers to create unique experiences for each person interacting with the space based on how they physically react to the narrative. [86]

Another advantage of responsive and easily changeable environments is the ability to customize the experience for special needs audiences so no one is excluded. Educational narratives especially can benefit from being able to change the sensory experience (or add to it) to accommodate physical and psychological needs.

Investment: When people can see their energy directly effecting their environment, especially at a large scale, they will be much more excited to spend their time and effort.

Interactions: Humans love having control, especially if a simple interaction will make something interesting happen. In many of these situations people also get a kick out of asserting their control over a space that others occupy. The interaction between a person and the narrative content has never been quite so apparent as when sensors let the audience manipulate the the information within the story. Using unique sensors that require a gestural interaction can physically teach the audience meaningful information.

Identity: Audience movement helps them physically identify with the cause and effect relationships within the narrative.

Cleveland Art Museum: Gallery One.

While art history may seem a bit stuffy and serious, the interaction design at Gallery One by Local Projects ads a bit of whimsy and movement to what can be a stagnant environment. Giant touch screens allow visitors to discover artwork by either making a face, striking a pose, or drawing a shape that it matches to a piece.

Three Images
Screen capture "Gestural Interaction" Barton, Jake. "The Museum of You." TED: Ideas worth Spreading. TED, Web. Nov. 2013.

Dream Cube Shanghai Corporate Pavilion

The Dream Cube at the Shanghai Corporate Pavilion is an interactive and immersive space that prompts patrons to physically interact with the space as well as use mobile media to change the environment.

Upon entry guests are told through media how they can affect the space around them through physical actions. Guests are prompted to clap, move around, and wave their arms which change the lighting and imagery around them.

Since the space is meant to display the modern culture of Shanghai, guest are also able to send in their personal photos via text message which then become integrated into the exhibit itself. This creates an honest representation of the people of Shanghai through their own lens, as well as further connecting them as a community.

Finally, the LED facade of the structure is controlled by a central room with 360 degree projection. The audience is prompted to make collective movements which sensors read and create different colors and lighting patterns on the exterior, based on what is going on in the heart of the structure.

Weizmann Institute of Science Levinson Visitor Center, Israel

The Visitor Center at the Weizmann Institute is an excellent example of how technology can be used to make education more entertaining. The exhibit room never has to be updated and shows never have to be installed, rather their media content is entirely digital because the room is filled with screens and touch panels. While this does not directly relate to education, it makes for an exciting experience.

Large touchscreen table surfaces allow for exciting interactive experiences that can leverage groups of people who are interacting with the content individually, or as a shared activity. This would be especially useful technology for small learning groups or classes because they can crowd around the table and each engage with the content simultaneously.

Next, guests are led into a dark room with projections on the floor of different materials. Each projection also has a concentrated beam of light that acts as a sensor. When guests place their hand into the light and move it up and down, the control the magnification of the material down to the atomic level.

Guests then line either side of the room for a film. Projections line wall above their heads, and a second projection is under the translucent floor. While the style of the projections looks exciting, it is also a great example of opportunities for new kinds of storytelling because designers are not limited to one screen, surface, or focal point.

Personal Images. June 2013

87. Steffen, Alex, and Carissa Bluestone. Worldchanging, Revised & Updated: A User's Guide for the 21st Century. New York: Abrams, 2011. Print.

88. Weinschenk, Susan. 100 Things Every Designer Needs to Know about People. Berkeley, CA: New Riders, 2011. 76-78. Print

89. Lidwell, William, Kritina Holden, Jill Butler, and Kimberly Elam. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, MA: Rockport, 2010. Print

Visible Impact

Transparency is unquestionably a key factor in the success of compelling narratives. If the goal of the compelling narrative is to encourage monetary donations, the audience will likely turn to the internet to see how the organization spends their money. Since outside sources might present misleading or inaccurate information, as the source, it is important to design with transparency in mind. This will act as a fail safe and build trust.

Data collection is extremely easy because of technology, and there are plenty or methods to quickly analyze and represent information related to a narrative. [87] If the compelling narrative is about a war zone in another part of the world, the design might include a feed of updates. If advancements have been made towards the cause, presenting them will encourage more aid because the audience can see the effectiveness of the design and trust their effort will be worthwhile too.

Investment: The more apparent it is to the audience that their investments are actually affecting a cause, the more likely they will be to not only invest, but to check in to see how the cause has progressed. This is what secures the longevity of a compelling narrative. [88]

Interactions: Transparency encourages the interaction between the audience and the actual cause the narrative has been designed for. Making the investments of the audience visible also encourages social accountability (if you can see how many people have helped a cause, you may feel more compelled to join in).

Identity: If the audience sees the effect of their efforts, they will feel empowered to change the story, will be more likely to take on the narrative as a personal cause, than a one time investment. [89]

Yad Vashem.
The final room at Yad Vashem is the Hall of Remembrance. The outer wall is completely bookshelves. The books are the museum's records of Holocaust victims, and each book contains about 300 victims. While most of the wall is filled, there is still an empty section, for the rest of the victims that were lost that have not been traced yet. This is a clear visible marker of their goal and an opportunity for anyone who has information about a victim to contribute in their memory.

"Remember only that I was innocent and, just like you, mortal on that day, I, too, had had a face marked by rage, by pity and joy, quite simply, a human face!" Benjamin Fondane (Murdered in Auschwitz, 1944)"
By jackfre2 May 24, 2013

"And that's the first story lesson I ever learned. Use what you know. Draw from it. It doesn't always mean plot or fact. It means capturing a truth from your experiencing it, expressing values you personally feel deep down in your core."

Andrew Stanton: The clues to a great story. TED. 2012

DESIGNING THE NARRATIVE

Form

Design

Narrative

WHAT

HOW

WHY

Why is this narrative important?
Why does it need to change?

How can the audience invest in the narrative?
How can we best reach the audience?
How should this story be told?

What is the "Call to Action" for the audience to invest in?
What forms will the compelling narrative use?
What is the experience?

COMPELLING NARRATIVE

10. Implement and update

5. Develop Narrative Forms

4. Diagram the system of narrative progression through intended forms

9. Prototype and test

6. Design Interactive Elements

1. Choose a cause, define scope of the narrative, assess opportunity for audience investment

3. Design the frame story and map the audience interactions

2. Define goals of the audience experience

8. Design the Call to Action

7. Aesthetically interpret Theme

NARRATIVE DESIGN PROCESS

Goals

Goal setting is a key step in any design process. When you have figured out why you want to accomplish something and how you want it to function, you should set parameters for what you expect in return. Quantitative goals should be calculates, and qualitative goals should be considered in a way that will allow you to record them.

Know what you are trying to accomplish

Focusing on the purpose of the design and the function of the compelling narrative will give meaning to the experience you design.

Create an evocative experience

The use of imagery and interactive elements should be applied to create an emotional, relatable, and empathic narrative experience.

Make it universal and repeatable

By using archetypes, symbols, and common themes the compelling narrative will cut across personal, political, and cultural boundaries.

Constraints

As compelling narratives are generally intended for public interaction, the main constraints and concerns to be aware of are the diversities of the audience. Be aware while you are designing of what might exclude or offend some of the audience. You can also leverage core values of all humans to enhance the compelling nature of the story.

Does the narrative reflect or reinforce the audience's values?

Their Family
Have you designed prompts for communication that will deepen their relationship?
Does the design include obvious cues for interaction and memorable moments?

Their Faith
Do the values of the narrative align with most religious and spiritual principles?

Is the content presented in an inclusive and accepting manner?

Their Goals
Will the narrative experience provide the audience with newfound knowledge, cultural insight, awareness, and compassion for dissimilar situations?

Their Friends
Have you designed prompts for communication that will deepen their relationship?
Does the design include obvious cues for interaction and memorable moments?

Their Experiences
Have you designed a unique and memorable experience?
Does the narrative experience leave opportunity for future interaction?

Development

Compelling narratives are not static stories. They are to be interacted with and sculpted by the audience. A constantly changing and growing story means the design and form will need to adapt as well. To be sure you are making the best choices for the longevity of the narrative, remember to collect account of the narrative experience from the audience. Assessing audience interactions and feedback will not only benefit the design, but it will encourage loyalty from the audience as well.
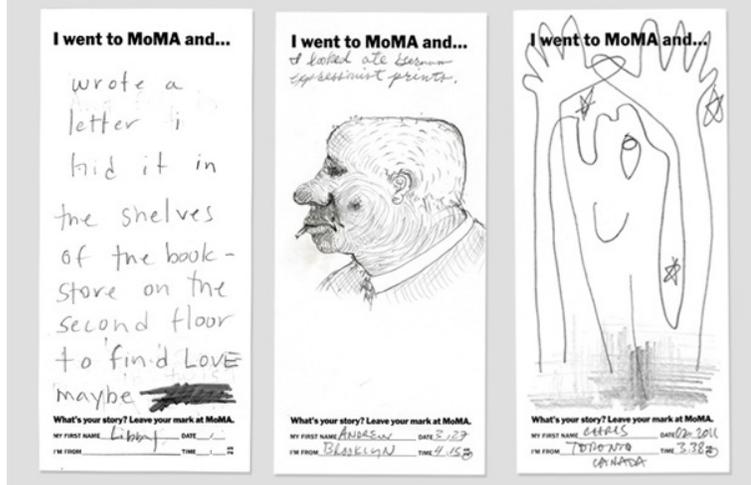
"For us futures are not a destination or something to be strived for but a medium to aid imaginative thought-to speculate with. Not just about the future but about today as well, and this is where they become critique, especially when they highlight limitations that can be removed and loosed, even just a bit, reality's grip on our imagination."

Anthony Dunne & Fiona Raby Speculative Everything: Design, Fiction, and Social Dreaming

DESIGN PROCESS, IN PRACTICE

And so we begin...

To test the principles and processes outlined in my research, I needed a story to tell. Feeling overwhelmed by the vast options that were before me, I realized the only way to figure out what the story would be, was to follow the steps I had outlined as the "process" for designing compelling narratives. From the first step, I felt conflicted about the "why" of this project. What narrative would be best to test the concepts I had researched? Should I find a story or make one up? Should it expand upon a narrative that is not currently being told in a compelling way? No, all of these questions missed the mark.

The "why" was not just why I wanted to make it, by "why" the narrative needs to exist. I began working under the assumption that I could not create a compelling narrative about something I did not believe was important to explore. After creating a list of things I believed needed to be addressed more publicly, I realized they all were connected to governance and policy.

I have always been frustrated when people say they are "not into politics", or "just don't care", about government. Politics and policy change are hugely important to how we advance as a society and promote a better future for generations to come. I reasoned that people tend to ignore or distance themselves from politics when there is of a lack of empathy, education, and feeling of control over the system. There is also a huge sense of frustration with the polarization of political parties within the current system. This inhibits many people from openly exchanging ideas for solving current political issues and stunts the progress of our country.

The narrative I decided to explore is an idealized yet satirical story of a possible political system that encourages working together to find new solutions and promotes optimism for our future.

10. Implement and update

5. Develop Narrative Forms

4. Diagram the system of narrative progression through intended forms

9. Prototype and test

1. Choose a cause, define scope of the narrative, assess opportunity for audience investment

6. Design Interactive Elements

3. Design the frame story and map the audience interactions

2. Define goals of the audience experience

8. Design the Call to Action

7. Aesthetically interpret Theme

ROUND 1 PROCESS

Design Challenge

When you have defined the relative scope and goals of what you seek to design, putting it into a challenge statement is like creating a target that will be central to every design decision you make throughout the process. IDEO, a world leading company and resource for socially conscious and innovative design offers that, "A good challenge is framed in human terms (rather than technology, product, or service functionality), with a sense of possibility."

For this project and my own process, the design challenge I posed had to be direct enough to keep my efforts aligned with the experience I wanted to create, without being so confining as to dictate what the actual form or way the narrative was told would be yet. IDEO also notes that, "Your challenge will guide the questions you ask in the field and the solutions you develop later in the process..", so my challenge statement, that guided my first round of prototypes, after several re-writes became:

"How can we leverage the educational, entertaining, and empathy-provoking nature of story telling to create a memorable shared experience that allows people to exchange political ideas in a non-biased way?"

Form

Design

Narrative

WHAT

HOW

WHY

Our current political system is
inefficient and ineffective at
solving complex issues.

We can encourage political participation by
creating opportunities to discuss issues and
solutions in a non-partisan way.

A game, event, or narrative space should tell stories
that explain problems and prompt immediate
conversation about possible
solutions.

ROUND I
PROTOTYPE

Anthony Dunne & Fiona Raby
Speculative Everything: Design,
Fiction, and Social Dreaming. 11.

Concept Development

The second week of school this semester, our professors gave us three readings, one of which was a section from Speculative Everything that greatly influenced my concept design and development. "Speculative design" is the creation of pieces that tell effectively tell a story which suggests larger implications for a world in which that design would exist. The significance of this form of design to my project would allow me to design for what could be or what should be, in an ideal political situation.

The principles behind speculative design, conceptual design, critical design, design for debate, and futurescaping are to shed light on conflicts we currently face, and to encourage optimistic discourse about problem solving for our future. Fictional and conceptual design allows diverse audiences to become involved in a conversation about how our cultures and value systems currently exist, and how they should exist.

The passage, "Rather than giving up altogether, though, there are other possibilities for design: one is to use design as a means of speculating how things could be-speculative design. This form of design thrives on imagination and aims to open up new perspectives on what are sometimes called wicked problems, to create spaces for discussion and debate about alternative ways of being, and to inspire and encourage people's imaginations to flow freely. Design speculations can act as a catalyst for collectively redefining our relationship to reality," (p. 2) guided my concept development to design a narrative based situation where people would discuss potential political issues we will face in the future, in order to begin shaping how we will respond to those issues at present.
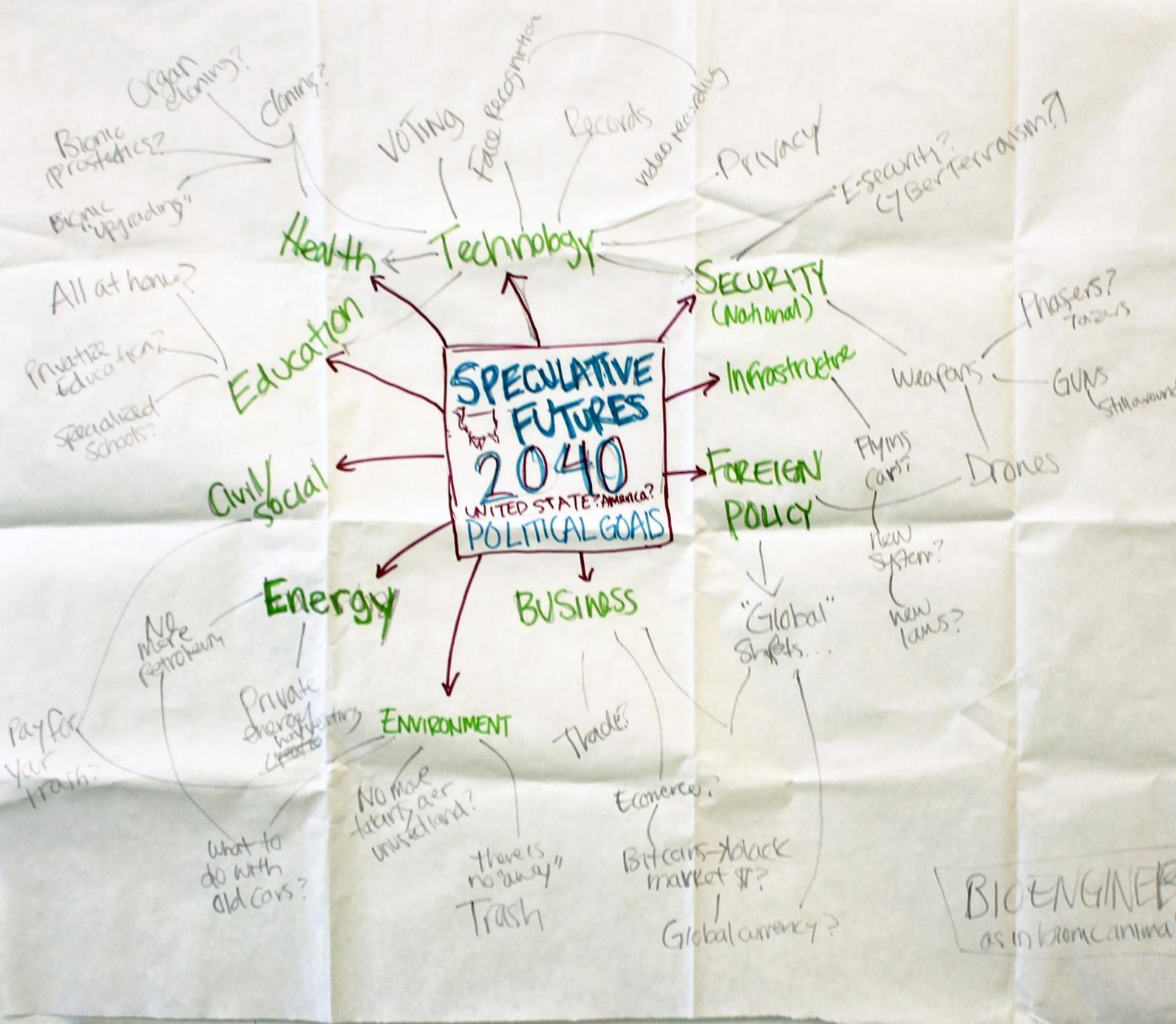
Interaction Ideation

There were several key factors in deciding what type of interactive experience I wanted to design. The most significant factor was wanting to create an opportunity for people to have face-to-face political discussions without fear of being judged. Other interactive elements that I wanted to incorporate were acting out government related roles and a competitive element that would keep audiences invested in problem solving large issues, regardless of how knowledgeable or invested they felt in the topic before playing. The combination of these intended experiences and interactions led me to designing a "game".

While my initial ideation about what the experience would look like for the audience seemed a lot like a "board game", I found it increasingly important to refocus on the experiences and interactions than the form itself, so that I would design the narrative experience rather than a game experience. The danger of thinking about the design in terms of its form, is limiting the potential of what the final solution could be. After spending too much time researching a variety of board games, card games, role playing games, online games, and apps, I found that while there were design elements that help facilitate the experience of playing, few existing games combined storytelling, reflection, and discussion experiences I wanted to design. It also became clear, however, that the opportunity to combine elements of in-person games and an online extension or expansion would help make the game itself into a "compelling narrative" by allowing the story to grow with player investment.
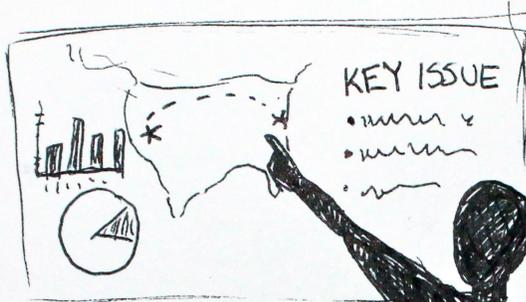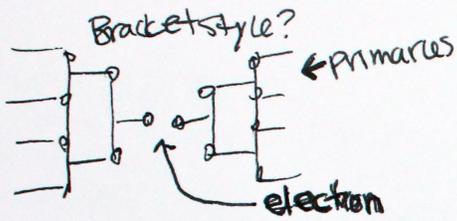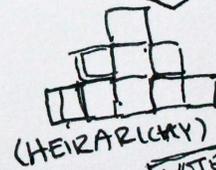
Round 1: "Mock-up" (Score Board and Issues)
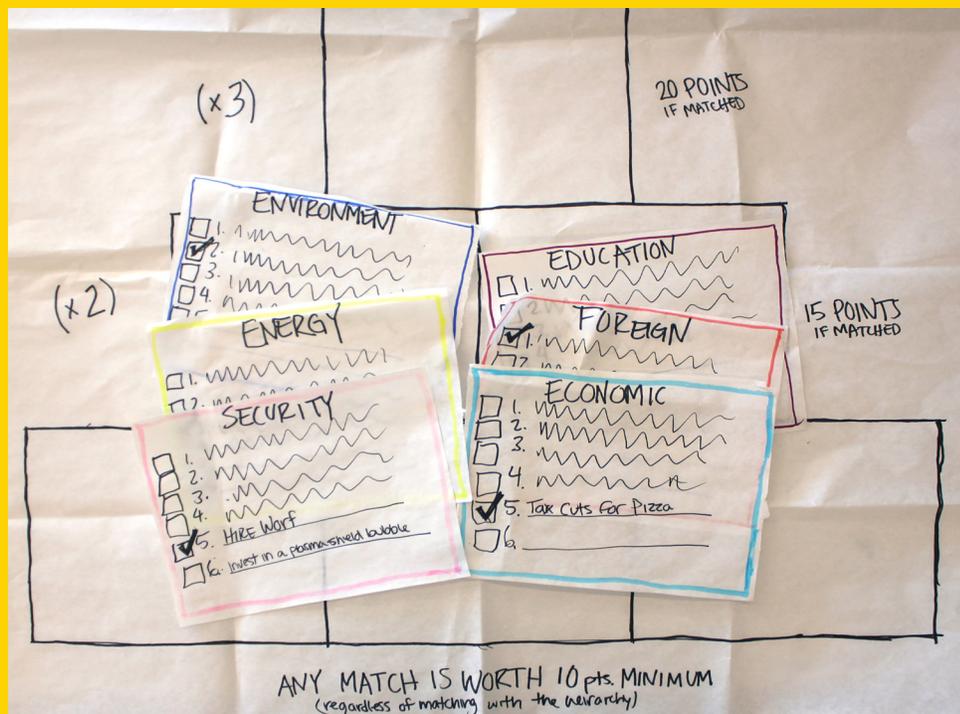
While six topics/issues worked well for creating this pyramid layout, there was really no other reason it was limited to six questions, so I quickly realized that the amount of questions should not necessarily determine the form or play. This also made me think about how the game could change or evolve over time. Also I thought it might be limiting myself by creating these categories, because in the future, there is a very good chance we would have entirely new "headings" or topics. I did, however, like that the poster would allow for a large group of people to participate, and that the rules written onto the poster would allow players to keep track of their own scores.

Round 1: "Mock-up" (Finalized Score Board)
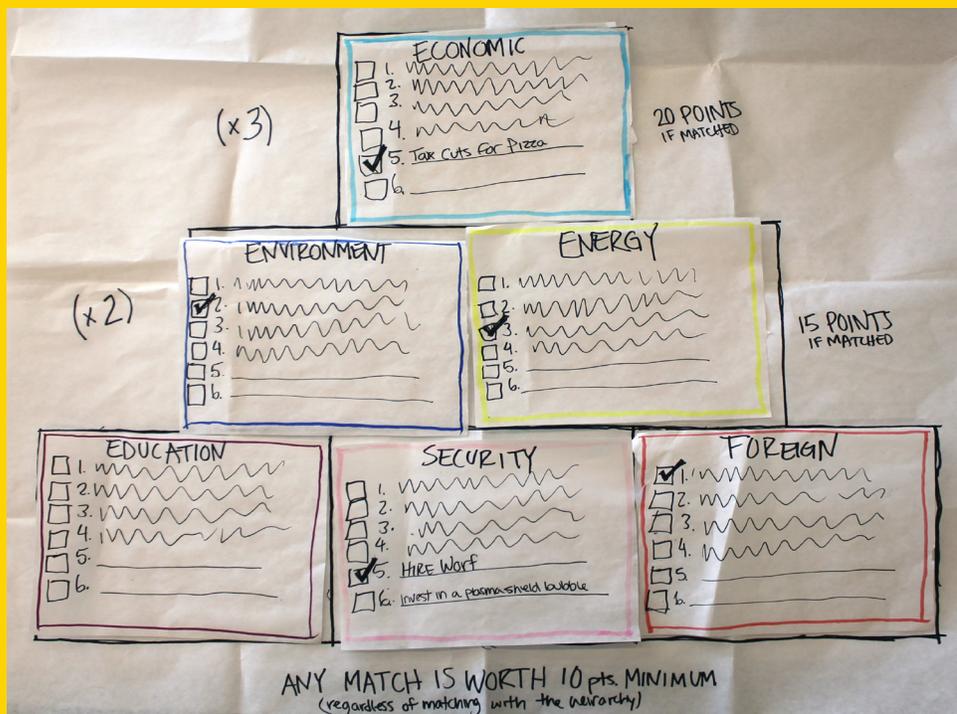
The most successful aspect of the first mock up was that everyone could see the poster and follow along, however the poster is only used for the second half of the game, meaning everyone plays completely separately for half of the game. It also requires that everyone who wants to play has enough free wall space to hang a poster, which limits where and when it can be played.

The most valuable intended experience of the game is when the players discuss which topics are most critical and assign their hierarchy. The problem I had was that since the players had already created their platform, they would be lobbying rather than discussing and trying to find solutions they agreed upon.

Round 1: "Mock-up" (Developing Platforms)
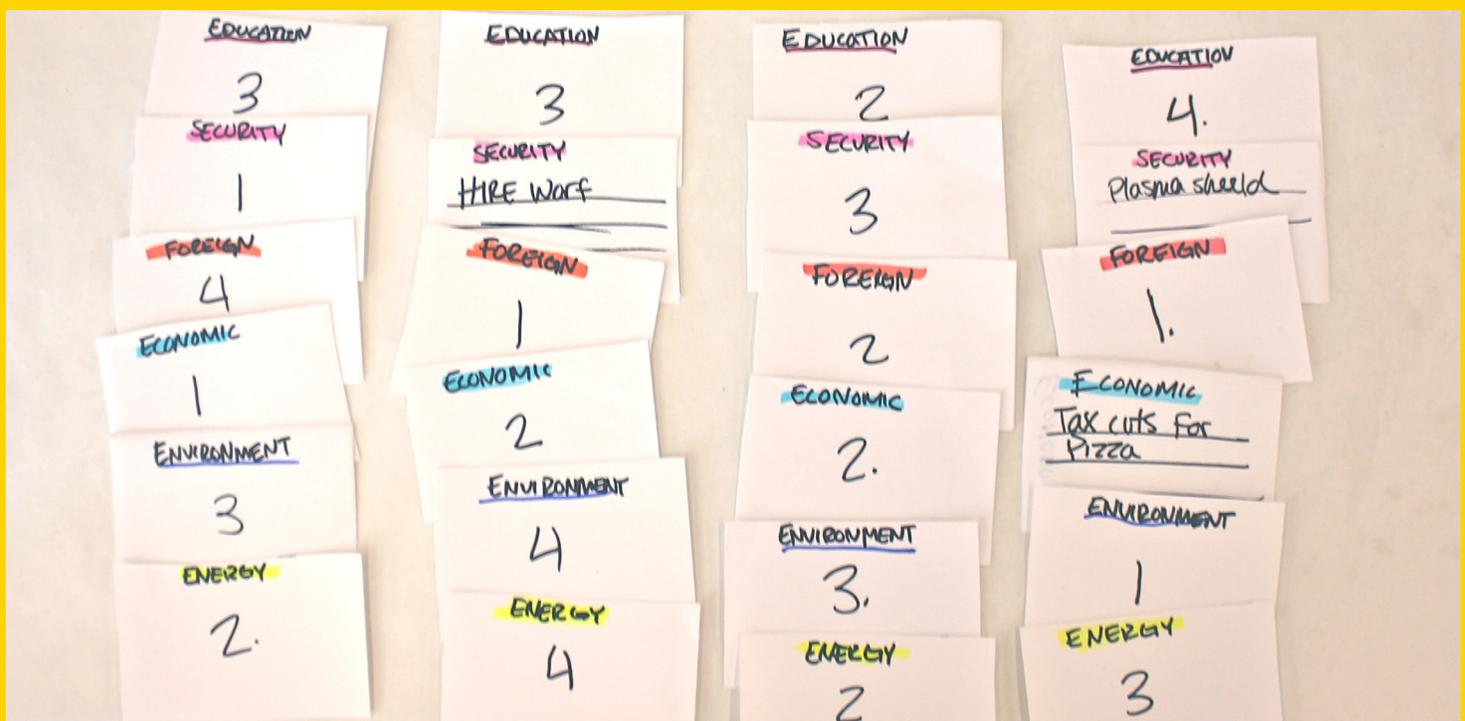
In my first mock-up of the game, I imagined that each player would have some sort of voting card for each issue. I planned the cards would have the question and options on one side, and space to vote on the back. The size of the index card felt about right for a small group competitive interaction while each player works to develop their own platform.

An immediate problem I realized with the way I had initially imagined the game, is that creating a personal platform before voting and debating does not allow for the kind of conversation that might sway opinion. Also, it did not allow people to address "write-in" answers to the group while they too developed their platforms.

Round 1: "Mock-up" (Scoring Votes per Issue)
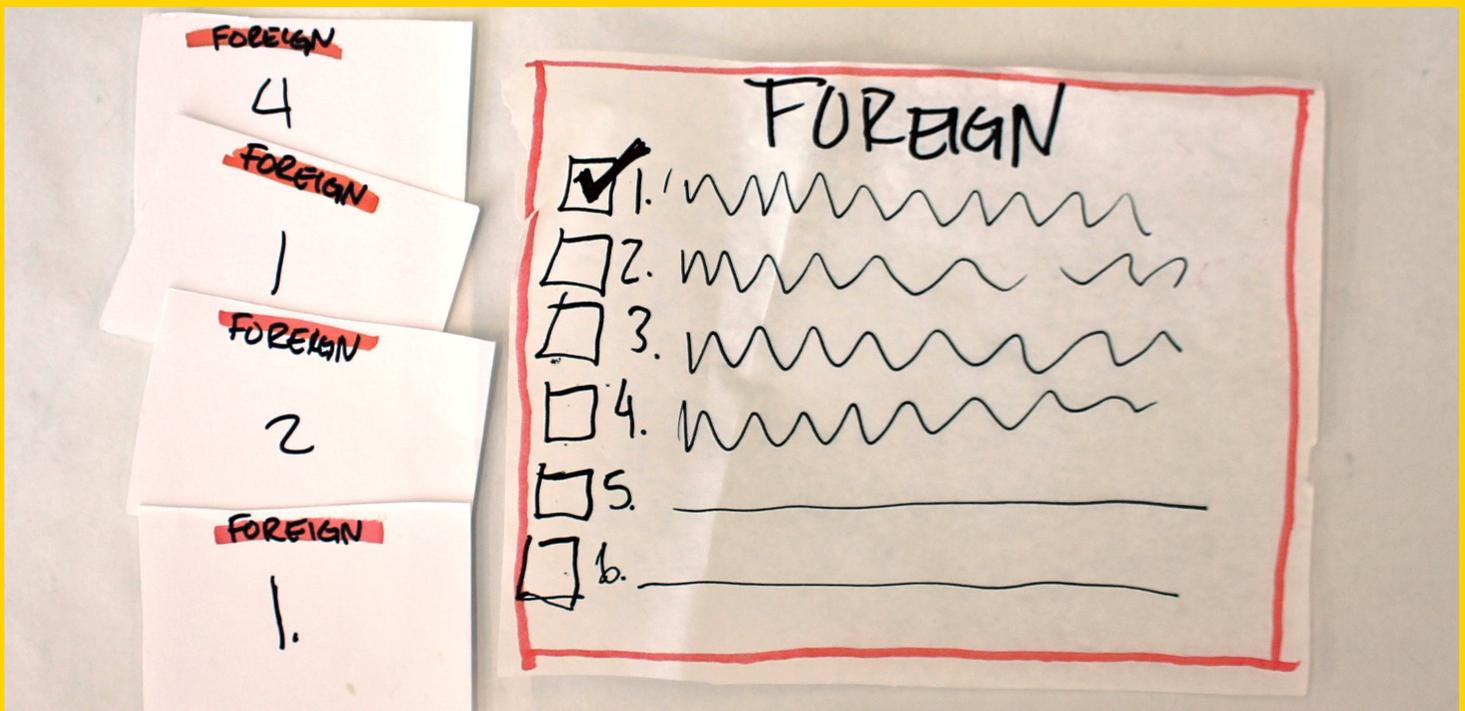
In this mock-up, the topics are color coded, so after developing a platform, the players would hand-in or reveal their voted to tally the score. This ultimately lead to a problem with anonymity of the players, and it makes the dynamic of the game such that your goal is to be "right" and choose one correct answer to get points, rather than rewarding conversation and debate.

This mock-up also did not have a plan for a tie. Initially I imagined there would be a "tie breaker", however that would not speak to the point of the game, that there may be two equally correct answers. Already I had found there is a hard balance between a game that is both competitive and rewards the quality of conversation and thought that players share.

General Takeaways

The first mock up was a great way to figure out what the game should not be, which is a score based competitive game that rewards strategy of play over problem solving and discussion. The most obvious problems with this game were that it was a highly individualized decision making experience, and that the only time the group interacted was when they decided the hierarchy of political issues. To change this, the game had to be restructured to highlight discussion around each topic individually, so there could be a reasonable amount of discussion and debating before any strategic elements are introduced.

Another important takeaway was that there needs to be a way to express opinions in a much more evocative way than voting. The structure of discussion is extremely important to making sure that every player participates equally and is rewarded for their participation without being overshadowed by more opinionated players. In newer prototypes I also wanted to develop questions that inspire empathy and feel more relatable to situations most people already face, rather than abstract and far-off possibilities.

This mock-up of the way the game could be played did not leave any opportunity to express the storytelling aspect of how our political system works, or how it should work in the future. Contrary to my goal, this was much closer to a strategy based game, rather than an immersive narrative-based interaction for idea sharing and problem solving.

New Goals

Test an experience that can be played in many settings

Develop questions about speculative political futures

"Future" America and issues should be a metaphor for now

Scoring reflects qualitative game play* (discussion & ideas)

Record personal platform throughout rather than at once

Questions evoke empathy for multiple view and stances

Design Consideration:
How can the questions
change or evolve each
time the game is played?

Developing Questions

As the most important aspect of this game is the "storytelling" component, which allows the conflicts of our future to feel both relevant and approachable, the structure of the questions and how they would be answered also needed to follow a narrative form. The questions that I developed for this experience prototype followed the same flow of classic storytelling. Each question begins with an exposition that describes the brief history of how the conflict came to be and the key people that are affected by it in the future. The conflict itself is outlined in terms of the opposing views people have on the issue.

The climax of each "round" is the debate and discussion section in which players must defend their opinions and lobby for support for their stance on the issue. The attempted extrication is the problem solving that happens when players discuss the best possible options for dealing with each issue. This would not be possible without the appropriate amount of backstory for each question that players then can use to support their arguments.

The storytelling within each question is also significant in creating the depth of empathy that the players should feel for the people who will be directly affected by each issue. Without developing empathy, players would simply be arguing their stances based on previous life experiences and potential biases they may already have. When we create empathy through a narrative, however, the players then will begin problem solving with a different perspective, a lens that promotes critical and creative thinking rather than personally-driven quick reactions.

Classic Storytelling

Context + Character
Exposition

⬇

Predicament (conflict)
Inciting Incodent

⬇

Rising Action

⬇

Attempted Extrication
Climax

⬇

Faling Action

⬇

Irrevocably Changed
Resolution

Narrative Questions

Since ____, this problem has arisen.
It has effected ____ people in ____ way. They are mad.

⬇

Current Context. Scope, & Arguments
Stances & Solutions are presented

⬇

Write-In Answers are explained

⬇

Discuss & Debate
Climax

⬇

Voting

⬇

Consesus Reached
Score Calculated

Round 1: "Experience Prototype" (Player Discussion)

For my experience prototype, I wanted to test it on college students who may have a varying degree of desire to play and a range of political opinions. My first test was conducted by coaxing 8 design students, some of whom were excited, others were half-asleep, to play. I used the promise, "It is only 5 questions, and who knows, you might become the president!" to lure them.

I hypothesized that some of the questions might bore them, so I opened by asking about probing the brains of pets to control them, as an ice-breaker. As I was reading from my computer, I realized the question was too wordy and I was losing them already. After asking for clarifications a few time and becoming a bit visibly frustrated, They asked whether to just vote or talk, and when I said ,"either," they began to chat.

Round 1: "Experience Prototype" (Score Board)

While this is kind of a side-note, I did find it interesting that everyone wanted to play under and alias. This was unexpected, yet makes sense because it makes the game a bit more light hearted (and the topics can be pretty intense), and it also adds to the anonymity of the voting process. Players were much more comfortable arguing while using the alias of the opponent than their real name.

Round 1: "Experience Prototype" (Voting)

When it came time for voting I immediately had issues. First, because they could clearly see one another's votes, and change their own votes just to earn more points. Second, the rapid counting of numbers on hands, and numbers of players, and who's fake name deserved which score, meant that voting took just as long as asking my long questions.

Round 1: "Experience Prototype" (Game Results)

Player	1	2	3	4	5	Total	
Alessandra Lah Bomb	45	5	5	6	7	(27)	Prez
KING	1	3	5	5	7	21	Secretary
Rex Victor	45	3	96	6	1	21	
Vincent	2	1	6	5	7	21	President Lay
Sleepy	45	5	5	6	7	(27)	VP!
Danra	5	3	5	5	7	25	Head ETA
Jack Nicholson	5	5	5	5	7	26	Speaker of the House
Brandon	2	5	6	5	7	24	

Each round, you score the same amount of points as votes you share in common.

Another aspect of this game that was askew was the point system itself. Since I really wanted to incentivize players thinking independently and coming up with write-in solutions, I awarded those answers double points for the writer and everyone who agreed. This completely skewed the results because the top 3 scores were based off of one round where they got a huge amount of point's for a write it.

At the end of the game when a tie was reached, I had the tow players make a one line campaign slogan and promise to the voters, then the voters were the tie-breakers to decide the president, After that however, the players took it upon themselves to ask for respective titles within the cabinet before walking away.

General Take Aways

The most important thing I learned from this round of testing was that the questions need to be concise and written in simple terms for people to be willing to listen to, let alone understand. While I had intentionally written fairly lengthy questions that followed a narrative structure, I had not anticipated that the backstory to each conflict would be too long to follow. The depth of description in the questions also made the issues seem "scary" and "imminent" to the players, when I had hoped they would sound like an approachable challenge. Players also felt the questions would be a lot easier to understand if they could read along and had some personal record or way to take notes on each topic.

It was exceedingly apparent that the questions that sounded less serious and like less of an immediate danger got much more creative responses and ideas shared about how they could be solved. Since the seemingly "light hearted" questions got players more actively involved, I felt torn as to whether the game would have to lose some depth and seriousness in order to create a more exciting interaction. After reviewing my research on compelling narratives, I found that a useful tactic in developing the next round of games could be to include more back story into the game itself, rather than the questions, which would encourage sustained participation through each round. By leveraging the narrative of the campaign within the game in the next round, I could incorporate the "lighthearted" aspects of game play, such as scandals and personas, without compromising the moral and ethical depth to the questions that is central to the purpose of its creation.

Feedback & Observation

Questions were too long

Players wanted visuals to accompany questions

There should be more variation in questions each game

Voting & scoring needed to be more resolved

Funny = More Exciting = More conversation

More playful questions get more creative solutions

ROUND 2
"AMERICA 2040"

"America 2040" The Game

"America 2040" is based on the premise that in the future, the Democratic and Republican parties that dominate our elections will become so ineffective that the voting system will be completely restructured to ensure that our leaders goals for the country align with popular opinion and represent a more diverse population. This backstory is meant to encourage players to consider why we currently have such polarized political parties, and how our country may benefit from ignoring these outdated political biases for the sake of finding new solutions to complex issues that are not as two-sided as our current government.

The game takes place far enough in the future that players can imagine the scenarios of political issues we will face, without feeling intimidated by the immediacy of many of the conflicts that the game deals with. While the 6 political issues that the game addresses may not seem threatening to an audience that does not closely follow politics or recent scientific advancements, many of these issues are currently being considered by world leaders because of their imminent global and social impact. Questions about mind-controlling microchips and weapons that can debilitate without killing force players to consider ethics and humanity, while questions about surveillance, autonomous cars, and power sources prompt players to consider the price of comfort and security in the future.

To make an accessible and easily testable version of the game, I designed a simple printable packet that has enough playing components for 6 players. Each round, players take turns being the reader of a topic and facilitating discussion on the issue. At the end of the rounds players vote on a personal score card to keep track of their own game.

America 2040
Presidential Campaign Briefing

It is 2040, a presidential election year in the United States. The traditional two party campaign system was found insufficient to meet the growing needs of our country in 2024, and has been replaced with a panel of elected nominees who spend the election year developing their own non-partisan platforms.

Voters no longer vote for nominees. At the polls, citizens vote directly on pressing issues, and the nominee who's platform best aligns with the country's goals as a whole is elected President. The nominee with the second closest platform with be Vice President.

Round 2: "America 2040" (Game Components)
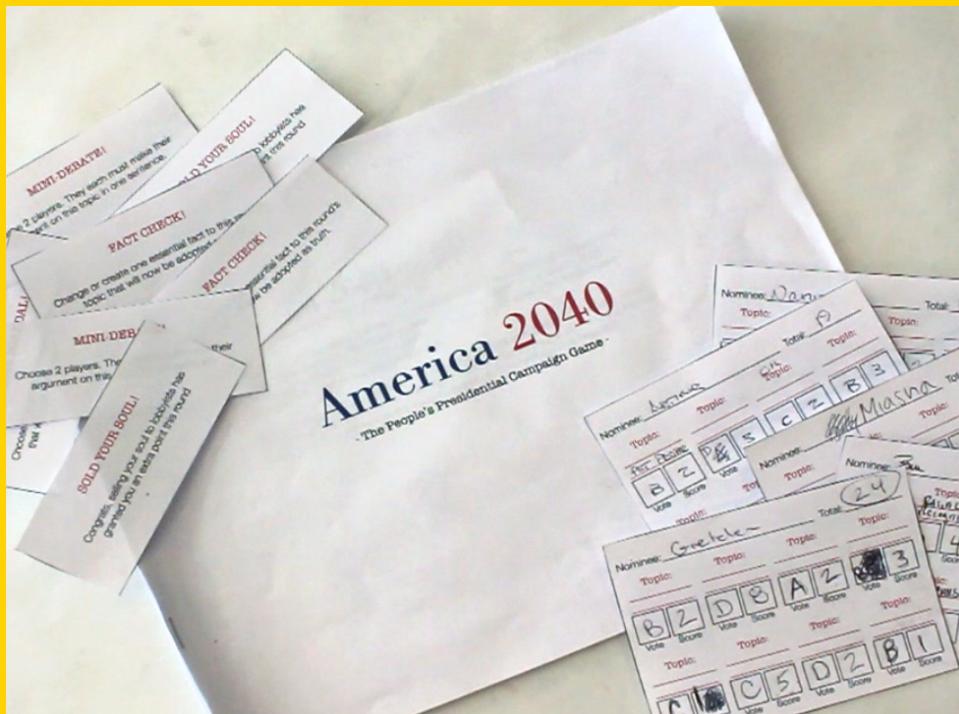
To test the game through a quick prototype, I decided to print the materials and host a brunch with adult family members, where they would play at their leisure while I video taped. I asked them to do their best to pretend I was not there, and not ask me questions, so that I could also see the clarity of the rules that I had written.

The game now consisted of a packet which contained 8 separate "questions", or issue briefings. Each round a new player was in charge of reading the question as well as taking a "wild card", This game was played with 5 people, and half way through one had to leave, so I took over. This gave me better insight into the experience I had designed and what I was asking of players.

Round 2: "America 2040" (Rules)

When the rules were first read, players seemed genuinely interested in the "briefing", which describes in a very simple way what has happened to the political system in America up to 2040, when the game takes place. Players are told they each run as individuals and voters vote on issues rather than nominees, thus they are rewarded points for having a platform that best aligns with public opinion.

The snickering and head-nodding that at least 4 players did at the quote ," The traditional two party cam- paign system was found insufficient to meet the growing needs of our country in 2024, and has been replaced with a panel of elected nominees who spend the election year developing their own non-partisan platforms," affirms the widely felt frustration with our current political system as I had hypothesized.

Vicino, Miasha. "Round 1: "America 2040" (Game Begins)". Feb 8, 2014.

Round 2: "America 2040" (Questions)

Self-Driving Cars

Since the commercial adoption of "Auto-matic" smart driving technology ... America have become 800 times safer. Within the past three years, au... become so efficient there is nearly no need for drivers which requires... With automatic driving abilities, how important is it that drivers have... sober? Or be present in cars at all?

A.)   Traditional driving laws are still important in practice and...
B.)   Since computers are safer drivers than humans, we n...
C.)   Write in

While 5 of the 8 questions were almost the same as previous testing, however they functioned much better with this more contemplative and politically engaged crowd. One reason that I will attribute to this is because the college (and design) students had more interest in the technology and discussing the possible opportunities to push technology even further. The adults, while just as knowledgeable about current technology, were more interested in the social and individual implications of the issues. I also found that the shorter questions that I added were far less debated and discussed, implying that the more depth to the story behind each question, the more real it would feel and become worth debating.

Round 2: "America 2040" (Debating)

One major finding from this round of testing was that I might not actually want people to have "heated" and emotional political debates. While I had intended that invested interests in a topic would make players react stronger and create more empathy for dissimilar views, some of the debating got controversial in a way that inhibited people from truly listening due to aggression.

This made it clear to me that in my next designed experience, I need to build in A. a time limit for debating (because 20 minutes debating one topic was far too long), B. a "structure" or rules for debating, and C. ensure the questions provoke open-minded speculation rather than combative debating.

Vicino, Miasha. "Round 1: "America 2040" (Debating)". Feb 8 2014.

Round 2: "America 2040" (Wild Cards)

Each round the "reader" takes a wild-card, which was generally one of the most exciting moments of the round because the cards are a refreshingly silly change of pace. I found the "slander scandal" and "Fact check" cards were the most exciting because they prompted the players to be spontaneous and witty about their responses.

I also found that they were deeply upset to find out that I had only made four cards and printed them twice. They were looking more forward to the surprise on each card than the questions themselves. Also they thought the cards were funny because they are all about political corruption in a very light hearted way.

Round 2: "America 2040" (Voting and Scoring)
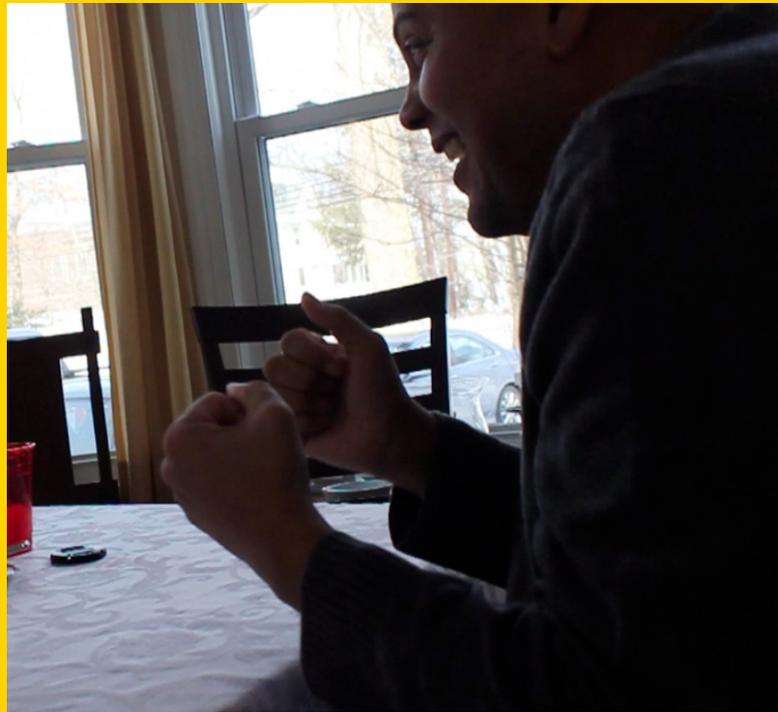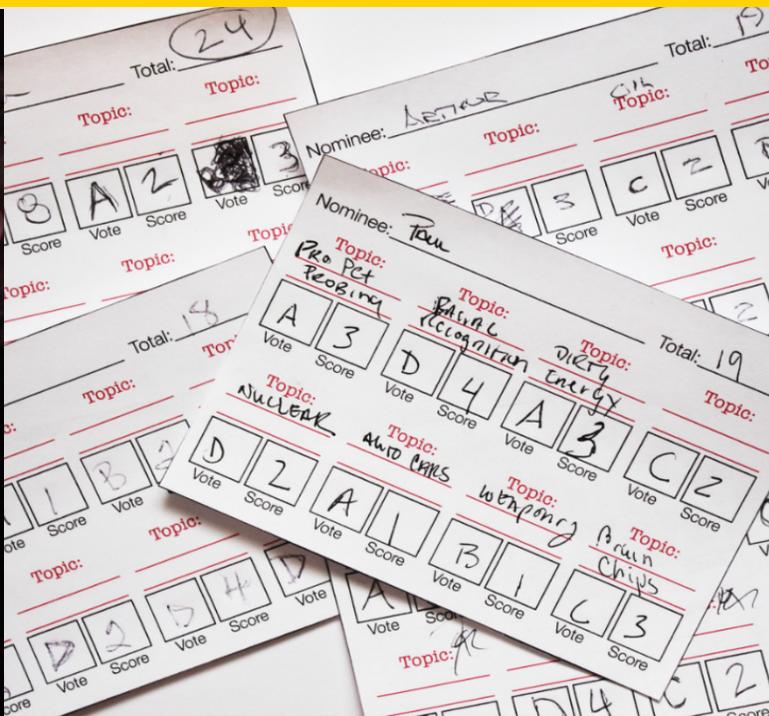
The voting and scoring process went much smother this round than the last because each player had their own score card an dcould conceal their vote before counting points. Again, to score the points the players had to confess their votes, although sometimes it was interesting because players would seem like they were leaning towards one answer, and change it at the last minute.

The scoring problem from the previous round was fixed. Now, only the people that submitted the write-in answer were awarded more points (meaning their voters genuinely agreed), and there were two instances where players agreed to co-author a write-in, even though it was never explicitly outlined in the rules.

Vicino, Miasha. "Round 1: "America 2040" (Voting and Scoring)". Feb 8 2014.

Round 2: "America 2040" (Key Ideas)

Designer DNA

DNA manipulation has been used to eliminate her... with a high rate of success, however the technology... now able to change nearly any attribute of their childre... "designer babies". Pro-Designer DNA citizens argue tha... ments in their children will lead to a better quality of life an... tion. Other foreign countries have already adopted this tech... "superior beings", making our stance on this issue important...

What is your stance?

A.) Designer DNA needs to be outlawed nationally and internat... disease

B.) DNA manipulation is only acceptable to eliminate predisposition...

C.) We should practice Designer-DNA to the same extent as internatio... provide better quality of life and opportunity to our next generation an...

D.) Write in

Due to the length of this game as opposed to the previous test (an hour and a half, rather than 20 minutes) and the depth of responses, there were a lot more ideas and concepts that kept resurfacing, which has interesting implications for not only the game, but the values of different players and an over all sentiment towards our future.

Vicino, Miasha. "Round 1: "America 2040" (Key Ideas)". Feb 8 2014.

1. If a technology exists, it will be abused
2. If technology is regulated, it can be corrupted
3. If "they" (foreign powers) are doing it, we have the right to do it too
4. Not all policy needs to be based in moral or ethical beliefs
5. Trading rights for safety
6. The extinction of privacy

Round 2: "America 2040" (Narrative)

The most important aspect of this game was not the issues, rather it was the narrative about how the predicaments evolved and how America should solve them. There were far more example of storytelling from the players than I had expected, however, which made me realize the next version needs a way to capture the personal narratives, invented scenarios, and historical reflections of the candidates.

My favorite part of observing the game was the end, when Gretchen made her acceptance speech, and without being prompted, talked about her journey through developing her platform, the "scandal" she was accused of during the game (and went so far as to 'set the record straight), and what she looked forward to over the next 4 years.

Vicino, Miasha. "Round 1: "America 2040" (Narrative)". Feb 8 2014.

Round 2: "America 2040" Game Time Line & Observations

Game Begins

"pet probing"

Gretchen Reads

(Confusion about voting system)

EVERYONE had an opinion... kept arguing...

?!

ROUND 2 "Facial Tracking"

light-hearted break

ROUND 3
~~Racial Engage~~
Designer DNA
"I have a right..."

~self-driving cars
ROUND 4

RULES
3 min

ROUND 1
→ wanted to start with a funny one... Got serious answers
35ish mins
→ some "head nods" to the game concept of no more 2 party political system (shows a general frustration) ✓

20 minutes?!

WHY SO SERIOUS!
• Already happening (too "close to home"
• Abuse of power
• PRIVACY & TECHNOLOGY
• terrorism?

MORAL & ETHICAL debate!
"A lot of politics don't have to do with our personal morals so I feel comfortable voting for ___"...
Hmm... lost the empathy???

Funny proposals. Excited to talk about possibilities

world history & personal stories

HISTORY

"Nuclear"

ROUND **5**
• Chernobyl
• Japan
→ Long-term futures

RISK.

you know how ||||| like to drive!!...

ROUND **6**
"Non-lethal weapons"
FUNNY?!
• Write-ins (funny proposals)

"President must serve on front line"
"Back to Bayonettes".

$$

"Dirty Bags"
ROUND **7**

3 WRITE IN ANSWER!!!!!!!

GAME TIME TOTAL
1 HOUR 24 mins

"add a fact" was a
10% death rate
↑ → moral dimension

ROUND **8**
"Brain chips"
FDA or **DEA**?!
• Both are terrible

AS DRUGS!

did not-even cross my mind when writing the question

narrative sucess!

SCORING

3 mins

"as your president..."

WINS
"speech"

Incorporated her "back story" from within the game and tied in topics from her platform = wild card

FEED BACK and JOKES

General Takeaways

The testing of this game was most helpful for figuring out the different kinds of political discussions I wanted people to have. While playing "America 2040", the conversations and debates that players were having ranged from intensely serious and verging on aggressive, to outrageously silly and unrealistic. Getting such a broad range of feedback allowed me to see what parts of the story, questions, prompts, and rules helped to facilitate open-minded problem solving, and which caused confusion and conflict. The most pressing needs were to provide clearer rules, define time limits, and create more structure for people to share their ideas.

When players were prompted to debate or share their personal opinion, they often became too serious and self aware to listen to one another and reflect on a range of possible solutions. In reflecting on my research I found a possible solution to tempering player's self-consciousness and combative responses could be developing personas or aliases. This allows players to feel like they are individually represented however they would like to be perceive, and to express their values in an open way without fear of being judged outside of the game for whatever positions they take on the issues.

Feedback & Observation

-Questions should be shorter

-Each players wants to read along

-Voting should be anonymous

-Time limits should be imposed

-More humor built into questions

-More variation in wild-cards

New Goals

How can the game/interaction grow or change over time?

How can it keep record of previous discussions & solutions?

What is the incentive to re-play the game?

How will it reach larger audiences?

How will the intended interactions be represented through the physical play, form, and visual cues?

ROUND 3
"CONSENS**US**PRESIDENT"

Consensus Problem Solving

On a field trip, for a class on Design Philosophy and Ethics, to an intentional community called Eco Village in Ithica, NY, I participated in a workshop on consensus problem solving. The Eco Village itself was founded as an answer to global social, ecological, and economic crisis on a local scale. Members of Eco Vilalge participate in consensus decision making groups that dictate how each community is organized and operated. After seeing how successful the act of consensus thinking was at bringing together diverse audiences and encouraging creative problem solving, I knew it would be extremely beneficial to incorporate those techniques in non-partisan political decision making, and thus, my game.

During the workshop itself we developed our consensus communication skills by creating a set of rules that help facilitate this kind of interaction. Some key elements to the group dynamic were to always have a facilitator, prompt everyone to participate in the process, encourage one speaker at a time, and document the process for reflection and development.

In ConsensUSPresident, each round requires one player to be the facilitator, making them responsible for reading the issue, directing questions, and taking notes on what the other players' opinions are. Every round, each player also receives a different role in developing the "story" of how each problem is solved, whether it is expressing the "public opinion" or deciding the ultimate fate of how the solution the facilitator put forward plays out. Since everyone in this version of the game responds verbally, as well as on a card that gets stored with the question, the documentation of the problem solving method is kept organized and easy to follow when reviewing answers and evaluating the success of the solution.

Steps for Consensus Group Thinking

1. Frame the Issue: Identify underlying goals and values, outline the problem and criteria for acceptable solutions.

2. Consider Options: Gather needed information and generate options and alternatives.

3. Select Options: Consider proposals, identify concerns, test for consensus, select options everyone can support.

4. Finalize the Decision: Make contingency plans and check for final agreement.

Shapiro, Elan. Communication for Consensus Learning Session. Feb 22 2014.

Narrative Documentation

"ConsensUSPresident" is a much more structured game experience than the previous prototypes. The game still follows each player as they campaign for president, however they create personas, backstory, and icons to represent them throughout the game. This aspect is essential to making the opinionated reactions of players less personal and to establish the narrative lens from the beginning.

ConsensUSPresident also relies on documentation and creative expression through prompt cards to build the narrative of how each problem was discussed and solved throughout the game. Since documentation is extremely important to consensus problem solving, every player expresses their opinion through a series of response cards that ask them to write, draw, and act. All of the cards are stored in a pocket in the topic cards themselves. The symbols from the personas are then used to mark who responded to each card to reference the dialogue of each round.

Rather than every player scoring points by voting their opinion on each topic and hoping it matches with other players, one player each round is the facilitator, and responsible for listening to the ideas other candidates put forth and trying to come up with a consensus solution that makes everyone happy. This way, the approval rating each facilitator would receive will reflect how well they were able to listen, synthesize, and come up with a creative solution that the most people agree with, as an ideal leader would.

Brain Un-Dead

It is now possible to re-stimulate synapses in the minds of legally brain-dead patients, though their memory will never be able to be recovered. People are feuding over the ethical, legal, and even practical applications of this technology which preserves physical life without personality or identity.

**What would your stance be on bringing the brain-dead back to consciousness?**

Final Outcome

Voting Results

Proposed Resolution

Public Opinion

Draw the bumper sticker that people who
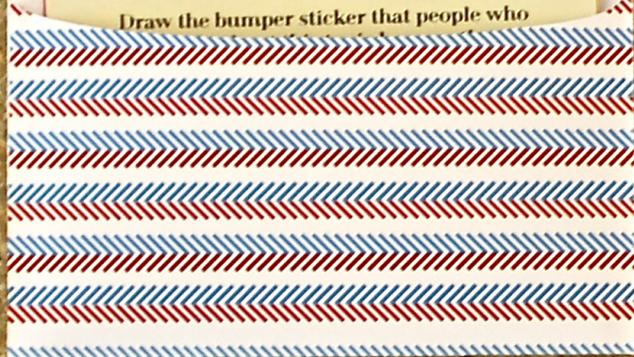
Round 3: ConsensUSPresident (Experience Design)
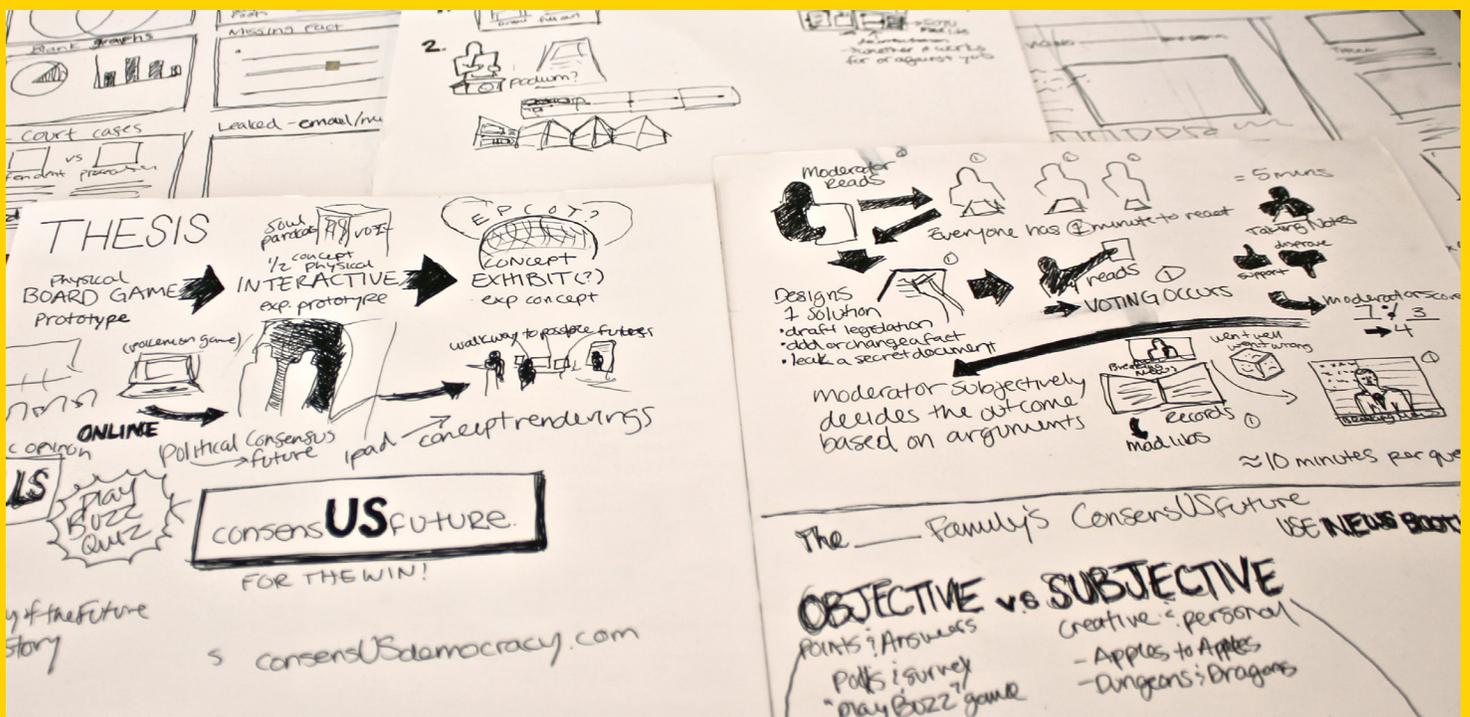
The experience design for this game changed a great deal from previous prototypes because it became increasingly important to highlight the individual experience throughout the game, rather than just the shared experience and group discussion.

The need for tracking the responses of players throughout the game also meant the experience of playing would need to be more involved. Now the game requires more expressive forms of reacting to the issues than just discussion and debate, forcing players to take time and reflect on their opinions before sharing them. The creative expression prompts also create new opportunities to change perspectives on an issue or develop more empathy for the people that may be effected.

Round 3: ConsensUSPresident (Parts of the Game)

To make ConsensUSPresident feel approachable, playable, and like a classic board game, I designed parts that reference classic pieces of table top games. The transition from entirely paper based games to a game with more physical pieces helped establish the understanding that the game has a structure and that there will be different cues within the game to use the different pieces. Players first choose a color to represent them throughout the game then fill out their persona cards. Small bags and voting beads are used for scoring each round. A larger bag and colored balls are used to randomize which role the players get assigned each round.

Round 3: ConsensUSPresident (Personas)

While the addition of personas was effective in keeping the tone and play of the game more light-hearted than it had been in previous versions, players also tended to design their personas way more imaginatively than expected. This actually complicated the game because many personas seemed too silly, which was a stark contrast to some of the serious topics and discussions in the game.

Round 3: ConsensUSPresident (New Questions)
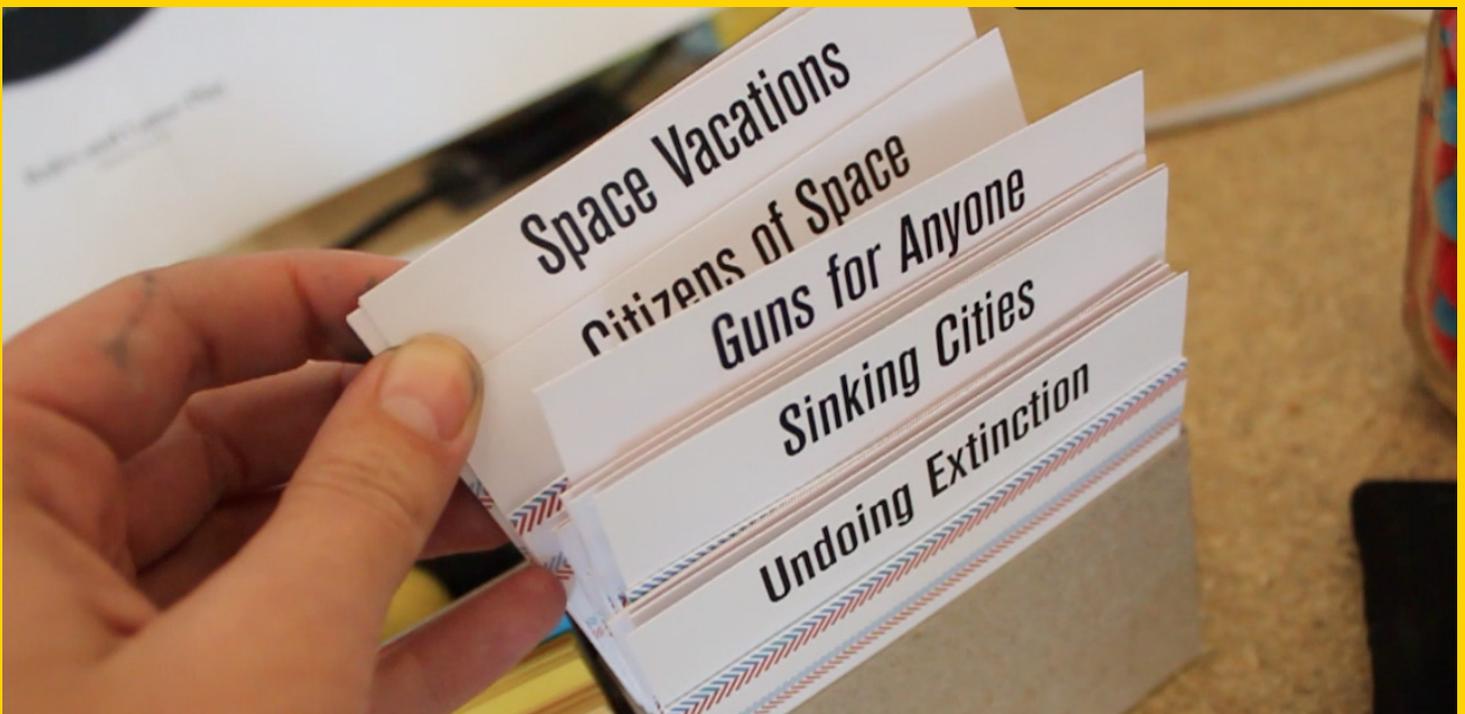
The Issue/Conflict questions were extremely different in this game because they were much shorter, open ended, and there were a lot more. In previous prototypes the questions had always been between 3-5 sentences long, whereas the demand to make them more concise drove me to write 30 questions that are each 1-2 sentences with a brief following question, which is only meant to direct how the facilitator phrases their solution for that round. By writing entirely open-ended questions, however, I found many players struggled to take a position or propose a solution when they were not given answers to choose from or write in their own.

Vicino, Miasha. "ConsensUS-President". March 7, 2014.

Round 3: ConsensUSPresident (Response Cards)

The progression of prompt cards in this game show the evolution of how problems are solved. First a question is read and briefly discussed, then a player responds to a "Public Opinion" card which forces them to phrase their opinion in a creative way, such as political cartoon, news report, bumper sticker, or made up polls. The facilitator then directs questions before answering their proposed solution. Next, players vote on how favorable the solution that has been set forth is. Finally, a player is selected at random to write whether the solution was successful or not and how it all "played out" in the future. The blue cards denote a successful solution, while red represent the worst case scenario for what could happen.

Vicino, Miasha. "ConsensUS-President". March 7, 2014.

Round 3: ConsensUSPresident (Narrative Collection)
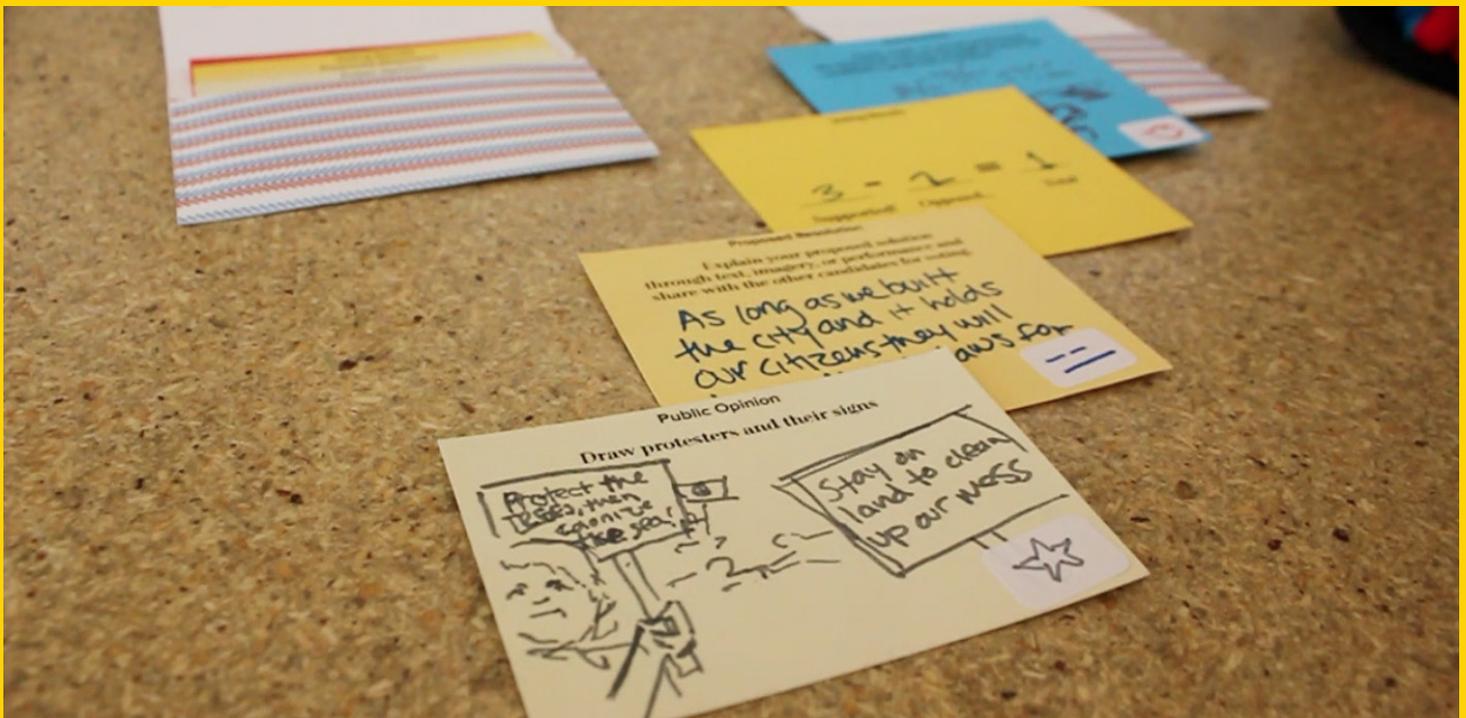
The cards became essential in collecting the "story" of how each solution was found. Since there are so many different Issue/Conflict cards, this game can be played multiple times and by different groups of players. The collection of the cards allows players to reflect on how they played the game and to share the story with new audeinces. It would also be possible to play the same Issue/Conflict twice and see how different (or similar) the final solutions were and how the other players responded during that game.

8 Reflect and Replay!

As you play the game, your discissions and ideas are saved within the cards, so you can always play with new friends, new goals, and new perspectives on how to solve our rapidly approaching future.

7 Election Day!

The group of players may decide to have as mant rounds as they like, but all players must have been facilitators the same amount of times. The player with the highest total score at the end will be the new president! Their first order is to make an acceptance speech and express wha they are looking forward to in their term.

CONSENSUS

A game of the future based on conser

Could you be our

6 Results and History

The final score for the facilitator during the round is the total number of blue votes minus the total number of red votes. Then, the player responsible for writing the historical significance of their resolution decides whether it went well or was a fairlure and why. If the story went extremely well, the teller may subjectively give the facilitator another point. Likewise, if their vision ends with WW3, they may decide to take a point away.

Welcome t

Our rapidly evolving worl nagivate and regulate. As face will not be solved by To mee the demands of ou will have to eliminate our favor of a consensu

You are now in the future more Dems or Reps, now are individuals running for the election your ideas and match those of the popu

Each player will practice th leading problem solver to complex future conflicts in fresh ideas and stories of wh

5 Resolution & Voting

The facilitator is then times using the 1 minute while timer to compose their proposed resolution. At the end of that minute they present it to the audience for their votes.

To vote, the audience covertly places between 1-3 blue or red voting spheres into the large bag. 3 blue would give the facilitator 3 points for their proposal, while 3 red would take away 3 points.

Rules and

Game requires 4-8 persona* (not necessarily players) Decide how many rounds to play, or "freestyle" it Pick a color to represent you throughout the game.

Collect your individual supplies: Colored ball, Persona Card, Marker, Pen/Pencil, and pouch of voting spheres.

PRESIDENT

nsus politics and collective narratives.

future president?

2 Create a Persona

Your persona is who you want to see become a president in the futre, which can include yourself. Feel free to create elaborate identities and back-stories.

o the Future

d is increasingly difficult to
a society, the issues we now
our current political system.
r new country and world, we
biased and partisanship in
us driven democracy.

e of America. There are no
you and your fellow players
president. To become win
d solutions will have to best
ular or consensus opinion.

heir skills as a facilitator and
respond to the demands of
America, while exchanging
envisioning lively
at is to come.

3 Take an Issue, Any Issue

The first facilitator places all the colored balls in the large bag, mixes them and chooses two balls at random.

The first pick person will respond to a "Public Opinion" card

The second pick person will respond to a "Outcome" card

The facilitator then takes a conflict card and reads it aloud to the group. The group uses the blue timer to measure 2 minutes of discussion before the Public Opinion discussion

4 Public Opinion

The public opinion card is read and expressed. The reader recieves two points for their participation, to be added to the Wild Card section on the individual's score card.

Game Play

Space Vacations

Since orbital space vacationing has become not only possible, but relatively affordable for many middle class travelers, there has been a growing international tension about normally illegal businesses, drugs, and gambling being allowed in space.

Make a proposal for how international orbital destinations should, or should not, be regulated.

Violent Thirst

A 2 degree rise in climate has caused new dramatically dangerous weather conditions. Widespread draught has led civilizations around the world into wars and massacres with one another over water supplies.

Make a proposal to the UN for how America will address these foreign conflicts.

Privately Owned Cities

While floating cities around the world have been funded as government run projects belonging to specific countries, the first one that is entirely privately owned and operated (by Microsoft) is about to become home to 26,000 international residents. Microsoft now wants the city to join the U.N.

Make an address to the U.N. about your official stance on letting them join.

Guns for Anyone

4 out of 10 Americans today have a 3-D printer in their home. Online resources now give anyone the ability to print weapons. These web sites also block the ability for anyone to track who is producing weapons, and how many.

Draft a proposal for how the government can promote gun-control, awareness, or safety.

Non-Lethal Weapons

The Department of Defense has recently developed non-lethal weapons that disable enemies by eliminating their sense of vision, hearing, and muscular coordination. In testing and some covert field practices it has been found that the effects are often permanent, and may be viewed as unethical.

As president, what would you do with this weapon technology?

Undoing Extinction

We can create fully developed organisms and life forms that have become extinct, Some people feel this would be an exciting achievement and opportunity to study animals such as Woolly Mammoths, Dinosaurs, and even Neanderthals, while others believe it is unethical.

As president, what would you do about this scientific capability?

Designer DNA

A new wave of "Designer Babies" that allow for complete manipulation of physical and mental traits. It is not only a growing trend, but quickly becoming an economy supporting industry. Some Americans fear the ability to create a genetically superior generation will lead to widening social inequalities.

As president, how would you address this issue?

Citizens of Space

3 years ago Google began building its sub-orbital space city that will become home to over 8,000 global citizens upon opening next year. As the first civilization to call space their home, Google will create an entirely unique consensus government structure and provide new citizenship to its members.

As president, how would you approach foreign affair with privately owned and run civilizations in space?

Lunar Real Estate

Since the discovery of precious elements on the moon, the U.S. has began plans to create our own colony for over 3,000 citizens, however Japan and Russia have already created small colonies at either poles and are claiming the uninhabited land as their territory.

Make an address to the U.N. on your official stance and plan of action.

Brain Un-Dead

It is now possible to re-stimulate synapses in the minds of legally brain-dead patients, though their memory will never be able to be recovered. People are feuding over the ethical, legal, and even practical applications of this technology which preserves physical life without personality or identity.

What would your stance be on bringing the brain-dead back to consciousness?

Voting Age

High-school students have begun to rally, demanding the voting age be lowered to 16 years old. Their cause is receiving a lot of traction because of the connectedness and information sharing of younger generations. They argue that having to conform to driving laws and paying income taxes should grant them democratic representation.

As president, how would you address this?

Seeing Thoughts

An official mind-reading machine has been secretly developed by the current administration that allows a seamless view into thoughts, through mirrored sound and imagery.

Would you expose this capability? In what context would you allow or forbid its use?

Sadness Epidemic

Stress, depression, and suicide have risen to the status of "epidemic" in the past 15 years.

What national initiative would you create to combat this?

Permanent Highs

Brain chip implants that can increase energy, productivity, and promote constant euphoria are now commercially available and completely unregulated by the government.

What, if any, action or legislation would you take while in office to address this?

Remote Mind Control

Brain-probing microchips can be implanted that allow someone to remotely control the physical actions of any living creature. While they have been used to train pets, some animals appear to be being controlled as weapons.

As president, how would you address this issue?

Net Neutrality

Internet providers, such as Comcast and Verizon, won a court case allowing them to limit their patrons accessibility to certain web sites, derailing net neutrality. Now they are lobbying for more benefits from the government, and threatened to block access to all government run sites and news sources.

Make a response to these threats.

Sinking Cities

Sea levels are projected to rise a foot over the course of the next term, which will cause costal communities, (including 6 major US cities) to evacuate their homes or temporarily barricade as much water as possible.

What course of action do you suggest for the communities and what kind of infrastructure projects would you support investing in?

Growing Organs

Now that growing individual vital organs is an efficient and cost effective process, the only organ that cannot be replaced is the brain. Private businesses are producing organs without regulation.

Would you appoint a branch of the government to oversee these businesses and their practices? Why or why not?

200 Years Old

Now that vital organ replacement is widely available due to in-lab growing, 3-D printing, and bionic organ system development, humans that have elected for continuous organ replacement can live at least 200 years.

What would you plan to change for social security and retirement?

Brain-Sans-Body

A boy with a muscular degeneration disease has had every vital system of his body replaced with bionic parts, meaning the only original parts of his physical body are his brain and some blood.

Should we be allowed to implant human brains into more functional, effective, and long lasting vessels than our biological bodies?

Travelling Cities

As the surface of the Earth becomes less hospitable, colonies above and under the sea are becoming a favorable option for our future. Some people argue that moving cities should not have to adhere to one government.

How important is it to create these colonies, that will operate under the federal government, near to our physical country versus able to travel throughout the seas?

New Frontiers

We are in an age that allows for colonization of the sea, sky, and space. These new civilizations and expansions of U.S. culture present appealing opportunities and potential complicated foreign affairs.

What goal would you have while in office for the development and creation of new U.S. colonies?

Self-Driving Cars

70% of all cars still in use have auto-drive capability that is 600 times safer than manual driving. As cars can be auto-programmed without a driver, is it still necessary for riders to be awake, sober, or even behind the wheel at all?

How would you address changing our current driving laws?

Surveillance

Video surveillance in private businesses has been used for over 10 years but many citizens are concerned that federal surveillance in public spaces is an invasion of privacy, and might not agree the rewards of safety are worth being tracked.

Make a speech addressing your plans for the future of public surveillance regarding crime and terrorism prevention.

General Take Aways

While previous prototypes were, at times, slightly too serious, ConsensUSPresident failed to promote much of the depth of conversation that I wanted to keep. In part, I believe that this is due to the lack of a cohesive aesthetic appeal that would set the tone for the serious yet creative conversation I intended the players to have. Another reason for this was the nature of open-ended questions because they failed to inspire different ideas and opposing views. Some questions were also far too short. The facilitators seemed much less comfortable making up facts about the scenarios that did not provide enough of a back story for them to build upon.

The questions that were most successful throughout all of my testing were 2-3 sentences long, followed a narrative structure, and offered 2-3 examples of opinions or solutions people may have on the issue. This is partially due to players being more comfortable criticizing opposing views than coming up with their own. This phenomenon also has larger implications for how our current political system works and highlights that it is easier to be given specific options and to disagree with them, than to work together to come up with new ones. Providing several examples without limiting the opportunity to propose their own solutions greatly improved participation and the creativity of new solutions.

Final Design Goals

Aesthetically communicate the narrative of the game

Create a platform for sharing ideas and solutions

Design for Expansion (Online component)

FINAL DESIGN "PREZOLUTION"

"PREZOLUTION" The Game

Prezolution is a political campaign game set in America in the year 2040, where each player is a candidate in that year's presidential election. This 4-8 player game prompts candidates to develop solutions to complex issues we will face in the future, without the partisan political biases we face today. To play, candidates create a personal campaign platform and record their ideas on how we should solve key issues. To win the game, the candidates must also convince other candidates to support their vision, or work together to find consensus answers to these problems.

While the game follows six top political issues of the year 2040, it is designed for players of all party affiliations, levels of political involvement, and backgrounds to play together. The game is designed especially to encourage players who are uninterested in current political matters to develop their own opinions on problems we will face in 25 years. The slogan, "Don't talk politics, play them," sets the stage for the game playing experience, which is equal parts political problem solving and scandalous competition. Although the game is politically themed, the topics and issues that the players must address are rooted in questions of morality, ethics, humanity, and social responsibility.

The Narrative System

While the social playing experience of Prezolution is a board game, an online network also connects larger audiences and a more diverse range of players. The storytelling and sharing system built into Prezolution is what makes it a compelling narrative and allows the game itself to grow and change when more players participate. The board game and online platform can both be used completely separately, or the web version can be used to enhance the board game experience.

The board game uses a series of prompt cards that dictate how players respond to the issues they are trying to solve. Many of these prompts call for players to act, role play, make speeches, and even create poetry that reflects their personal opinions. These can be recorded and uploaded to the web site through mobile web devices.

If players choose, they can also upload personal profiles to compare scores and comment on other shared content.

The online extension of Prezolution has a very different playing experience, while still keeping the users connected to the content that other candidates have shared. The web site for the game has the added benefit of using polls to keep track of public opinion. The online polls are able to show players how closely their ideas align with other candidates. The most important part of the online platform is that getting constant live feedback allows the results of the game to constantly change. The system also allows the game to be expanded and new versions to be designed based on what previous solutions were reached and how they might play out before the next election year.

Immersed through persona & story

Empathy created through Prompts

Develop Solutions & share online

Uploads connect players and change next version
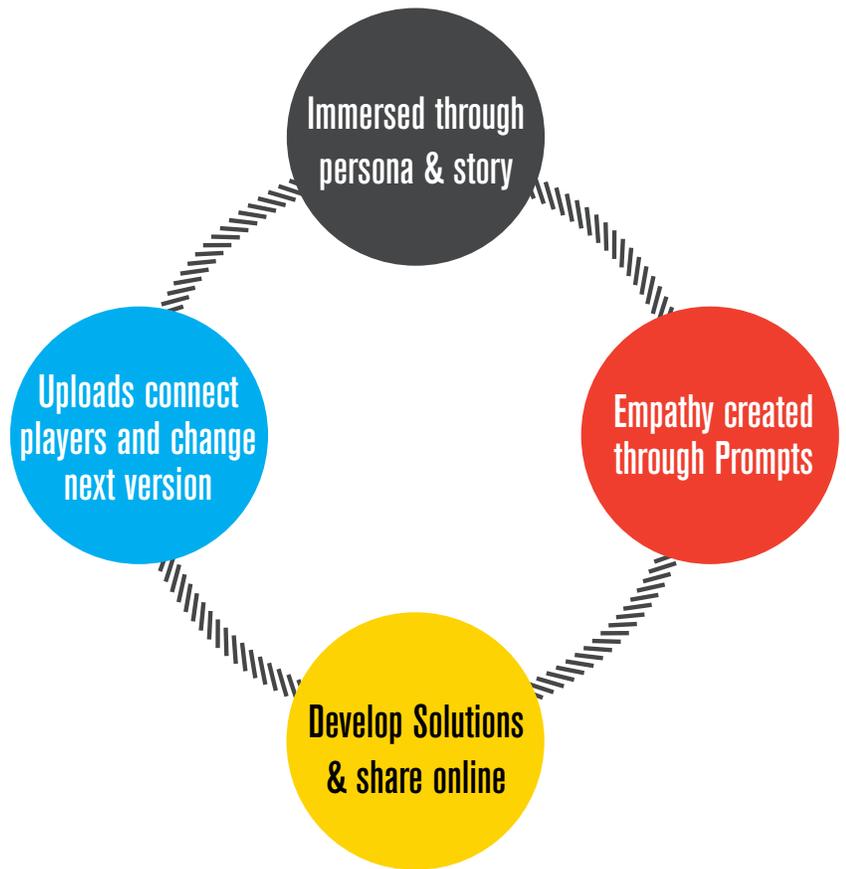
The Game Narrative

Storytelling may be the most important form of communication for the development and progress of individuals, communities, and civilizations as a whole. For thousands of years, humans have used storytelling to share experiences, warn of imminent dangers, and unite people for a common goal. Prezolution functions as the method of future storytelling that can bring together people with opposing political views today, to find solutions to tomorrow's problems.

Each player is a candidate in the 2040 presidential election. In the game, the traditional two-party system has disappeared a decade before, leaving opportunity for much more diverse candidates and ideas to emerge and help solve more complex issues than we have ever faced as a country before. By setting the game 25 years in the future, it allows players to think critically and respond honestly because they do not have an immediate personal stake in the issue and their opinions are not associated with any current political parties. This also creates candidates that are more willing to think creatively and take bigger chances when proposing solutions, which is exactly the kind of political discourse we will need to build a better future.

The game then follows six rounds in which candidates are presented top political issues of the year. Each issue is presented as a short story and question. The storytelling aspect promotes empathy for the people that will be affected by the conflicts. Prompt cards also force players to not only express, but explore their opinions by making up creative responses to the issues that tell the story of the issue itself in greater depth, show and the public's relationship to the conflict.

BIONIC BODS

NON-NEUTRAL NET

WATER WARS

Welcome to 2040!

RIP

1776-2029

NEW FRONTIERS

VOTING AGE RAGE

UN-EXTINCT
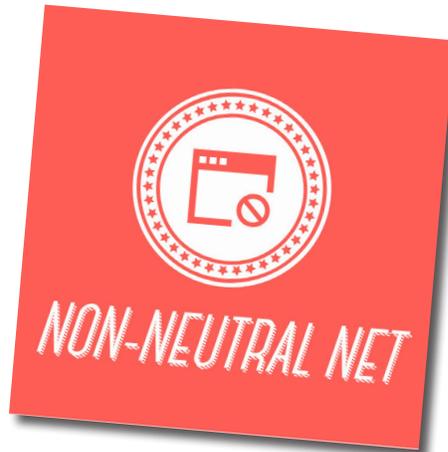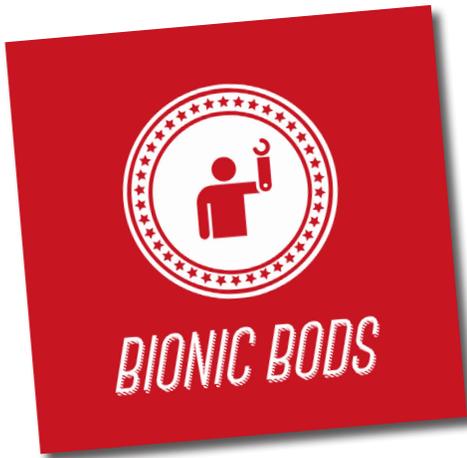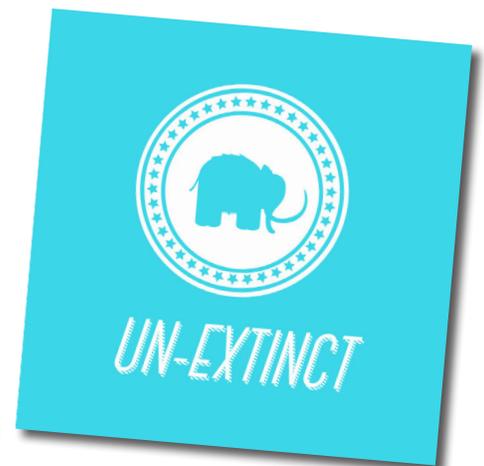
Building Personas

The creation of a persona to represent the candidates and their personal platforms is the first step in playing Prezolution. While using personas in ConsensUSPresident failed to create the reflective and competitive experience I hoped it would for the individual players, I found that having the players design official seals was very effective. This is more successful because official political seals are already associated with the government, rather than a cartoon drawing of a character like in ConsensUSPresident.

Another reason the seals are so effective and fun is because candidates have to make one using a set of stickers that already hold a wide range of political, cultural, and humorous symbolic references. By having specific icons that you are allowed to use to represent yourself as a player, candidates tended to spend more time thinking about their own personal, political, and social values. The seals are the cover of each player's individual book which holds the record of how they responded to issues and tracks their campaign history. The candidate profile on the interior of the book also allows candidates to create a richer back story, which they may use to lobby for support during their campaign.

PREZOLUTION
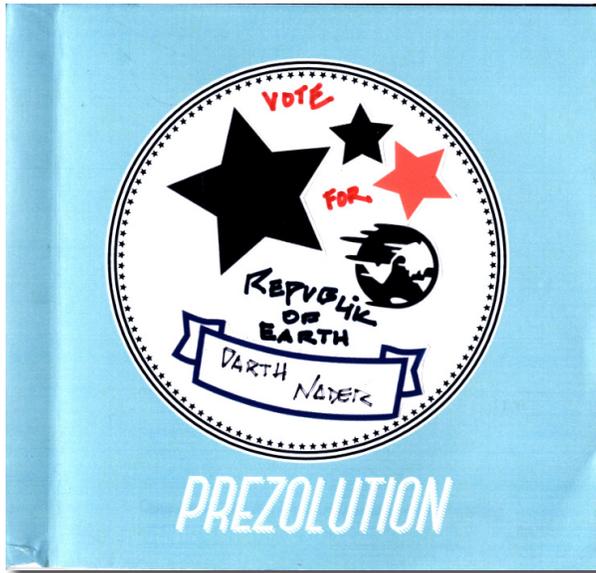
CANDIDATE PROFILE

Name (or Alter Ego): DARTH NADER

Favorite State: TEXAS

Reason for Running: LOWER TAXES

Favorite President: RONALD REGAN

Quirky Fact: FLEW TO MARS

"America needs more BIG INDUSTRY"

PREZOLUTION

PREZOLUTION

PREZOLUTION
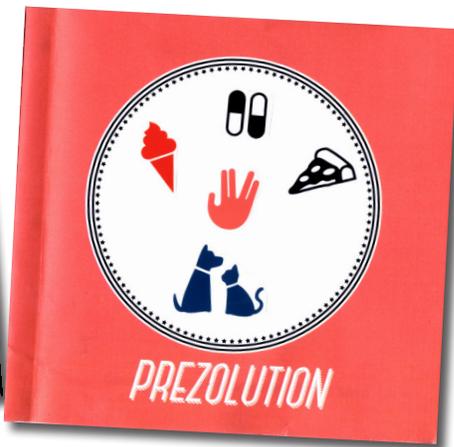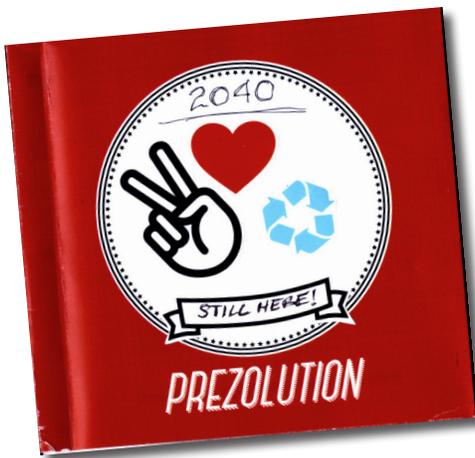
Types of Cards & Prompts

Every round a new player takes a turn reading an Issue/Conflict card. Each game has six different topics that are stored within each player's personal campaign booklets. After reading the question and some potential solutions, the other candidates are allowed to ask questions about the topic, which the facilitator must make up an answer for if one is not provided.

Next, players must express their stance on the issue, as well as their ideas for how the conflict might be resolved, through a prompt card. These prompts range from writing a short news cast, to drawing bumper stickers, to writing an imaginary interview, or creating a political cartoons. Candidates should try to use these prompts to help persuade the other players that their solution is the best option for the future of the country.

Within the deck of Opinion prompt cards, there also Scandal cards. These work a lot like "wild cards" and function to create more interesting stories between the candidates, such as slandering an opponent for having big businesses in their pocket or by exposing that someone scandalous is blood related to an opponent.

After everyone has shared their responses, players vote on the best solution. At this point, candidates use Result cards to write how they voted, what the outcome of the vote was, and how they think it would affect the future. This card is not essential to playing the game, though it helps document the solutions and encourages reflection.

UN-EXTINCT

Scientists have experimented with bringing extinct animals back through preserved DNA for years and it is now possible to re-populate much of the Earth with previously extinct species. What do you think we should do with this capability?

A. Bring on the Woolly Mammoths and dinosaurs! I want a prehistoric pet!
B. This should only be used sparingly for scientific research
C. Hello, Darwinism? If they're gone, they should not be brought back.
D. _____

UN-EXTINCT

OPINION

1 VOTE

Bill Board

Someone must have cared a lot to have buy space on that billboard...

WHAT'S NEXT???
ZOOS WITH PREHISTORIC
PEOPLE! SAY NO TO
NEANDERTHAL
REPOPULATION!

Final Design: PREZOLUTION (Making Official Seals)

The first step in playing Prezolution is choosing a campaign booklet (six are included in a boxed game) and creating an official seal on the front. The seals are made using an array of stickers of simple icons that range from the Statue of Liberty to pizza and cats. Players genuinely enjoyed this process because they were able to creatively represent themselves without the intimidation of having to draw or write. To connect the board game and website, players can take photos of their seals and upload them as icons for their online profiles.

Final Design: PREZOLUTION (Personal Platform)

I found it extremely amusing that players became so invested in collecting the stickers that would best represent them, and how competitive they were about making a seal that was better than their opponents'. In this picture we see Paul explaining a story behind his seal, which is basically that he will create a new republic of America and colonize space if he is president.

Vicino, Miasha. "PREZOLUTION". Apr 11 2014.

Final Design: PREZOLUTION (The Issues)

Limiting the final game to six main issues was the right amount for playing an hour long game. The six topics that I chose for the 2040 election year of PREZOLUTION are intended to show a range of issues and a varying degree of seriousness, in terms of the threats they pose to the government.

Final Design: PREZOLUTION (Understanding Questions)

While almost every player understood the questions, they always wanted a bit more time to develop their opinions and create their responses. Several players spent several minutes looking blankly at the questions, which I immediately assumed was a bad sign. After the game however, when I asked them individually what took them so long to respond to each question, they told me it was either because they were spending extra time imagining the different possible scenarios, or because they needed to visualize how they would present their ideas. This showed a deep level of involvement in the topics, especially ones that posed difficult moral questions.

Vicino, Miasha. "PREZOLUTION". Apr 11 2014.

Final Design: PREZOLUTION (Responding to Prompts)

Unlike the political debate-like opinions I had expected people to share, most answers that players put forth revolved around morality and ethics. While some opinion prompts did not receive serious answers, many responses were extremely imaginative and bridged serious concepts with intentionally fun storytelling. I largely attribute this to the simple aesthetics of the game and the "fill in" prompts that seemed to serve more as a challenge for players to think outside the box than to answer within it.

Final Design: PREZOLUTION (Thought Processes)

Since the questions were formatted as stories, many of the players explained their thought processes for understanding the conflicts and picturing scenarios of what could happen as stories too. About half of the answer that I collected incorporated some character or fictitious individual who had a personal stake in the issue. This validated that the game promotes empathic understand of the topics rather than only personal opinions and the players' biases. In this photo, Blythe is describing a scenario where an oil shortage could cause people with bionic implants to need to fight in the streets for oil to keep their bodies functioning, which both expressed her opinion and told a story about a speculative future that warns against bionic upgrading.

Vicino, Miasha. "PREZOLUTION". Apr 8 2014.

Final Design: PREZOLUTION (Active Storytelling)

While there are many different kinds of response cards, some of the most effective forms of storytelling involved the acting and narration of possible scenarios. Acting the responses seemed to make players much more willing to jump into character, which is a form of empathy that allowed them to more closely relate to the story. Recording and sharing these responses also encouraged some of the quieter players to assert their ideas more.

Final Design: PREZOLUTION (Creative Expression)

Many of the other prompts for creative expression used simple visual cues and ambiguous blank "fill in" shapes to respond within. Much like the simplicity and symbolism of the icon stickers, the simple graphic templates, that look nearly juvenile, made self-proclaimed unartistic players less intimidated to draw or write creatively. When players explained what they drew and wrote, they rarely explained it in terms of their personal opinion. Rather, players used it to explain their fears or visions for the best and worst case scenarios of each issue.

Final Design: PREZOLUTION (Voting)

While I spent a lot of time worrying about how the players would vote and keep track of scores in previous prototypes, PREZOLUTION has an extremely simple ballot card that gets voted and entered into a box until they are scored. When votes are scored, the outcome is also tracked on a large graph that everyone can see, to monitor each players' approval ratings and keep the competitive edge to the game, which is extremely important for politics. To make the game more believable, I phrased the scoring in terms of "public approval" rather than an arbitrary amount of votes, which fit much better into the narrative development of the campaign.

Final Design: PREZOLUTION (Resolution)

At the end of the game one player is awarded the presidency and has to make a speech addressing their goals and intentions for the next four years. To do this, players are encouraged to go back through their campaign booklets and revisit the solutions they plan to enact during their presidency. Aside from the online platform which also records each player's game, the booklet is the most valuable piece of the game. When a game is over, players can always look back at their campaign as one story.

While the solutions that players come up with are important, the ability for the individuals to reflect on their own values, ideas, and decision making processes, may have a greater long-term impact on how they relate to politics and try to understand complex issues.

BIONIC BODS

Plastic surgery has always been controversial, but now you can upgrade body parts that are even cooler than your boring old body. For the right price, you too can become an inspector-gadget like super human! Is this a political or social issue?

Social, what people do with their bodies is none of our business

Political, this is dangerous and regulation would help protect citizens
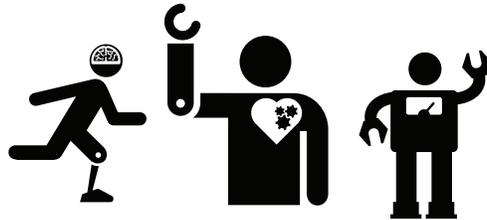
_____

UN-EXTINCT

Scientists have experimented with bringing extinct animals back through preserved DNA for years and it is now possible to re-populate much of the Earth with previously extinct species. What do you think we should do with this capability?

Bring on the Woolly Mammoths and dinosaurs! I want a prehistoric pet!

This should only be used sparingly for scientific research

Hello, Darwinism? If they're gone, they should not be brought back.

_____
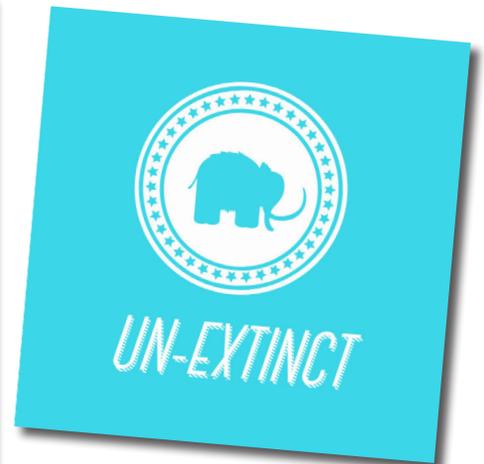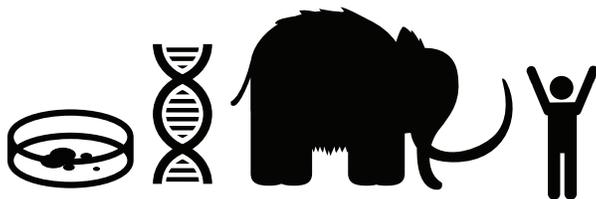
VOTING AGE RAGE

High school students across the country are rallying and demanding voting rights at age 16. They argue their generation is better informed, more connected, and more equipped to face modern political issues than previous generations. They also argue that once they conform to driving laws they deserve democratic representation. What do you advocate?

Change the voting age to 16
Keep it the same
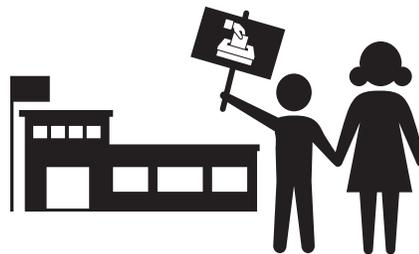
NEW FRONTIERS

Now that we can efficiently build cities virtually anywhere, where should the U.S. put their efforts towards colonizing over the next few years?

Deep underground, to protect us from air pollution and foreign attacks.

Floating cities on the sea so they can travel anywhere in the world.

Space, the final frontier, because it's space!

_____

NEW FRONTIERS
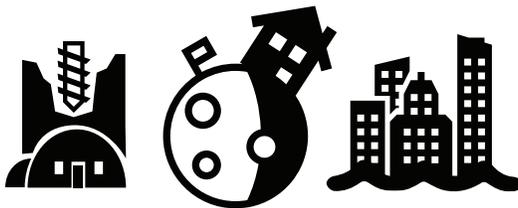
NON-NEUTRAL NET

Internet providers, such as Comcast and Verizon, won a court case allowing them to limit their patrons' accessibility to certain web sites as they see fit for business, ending net neutrality. Now they are leveraging their ability to block their users access to all government run web sites and news sources to push their corporate agendas. What would you suggest the government do?

They have the right, so we shouldn't fight
We're taking their butts back to court!
Send covert Special Forces to destroy their internet
_____

WATER WARS

A 2 degree change in the global climate has created widespread draughts and left entire countries without drinking water. Now dehydration kills more people per minute than cancer, and that doesn't include deaths due to the wars that are being fought for control of water sources. How would you handle this through foreign affairs?

Export our clean water, with a tax, to help and make money, win-win!

Allocate American resources to help these thirsty countries

_____

OPINION

(+20%)

Ouija Words

When you took out the Ouija Board, the ghost of _IRON MAN_ came through and argued...
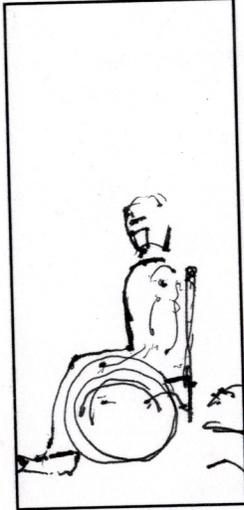
that arthritis of
metal joints, brought
him down to earth,
and not in a good way.

OPINION

### Fact Check

What is that fact you just und[...]
your opinion, again?

" Studies show
Humans fe[...]
with the [...]
to alter t[...]
It's their cu[...]
outs.
99% of ~~people~~ people

-From somewhere marginal[...]

OPINION

(+20%)

Expert Opinion

Who is your "totally non-biased" expert on staff and what are they advocating?

← Built-in
top hat
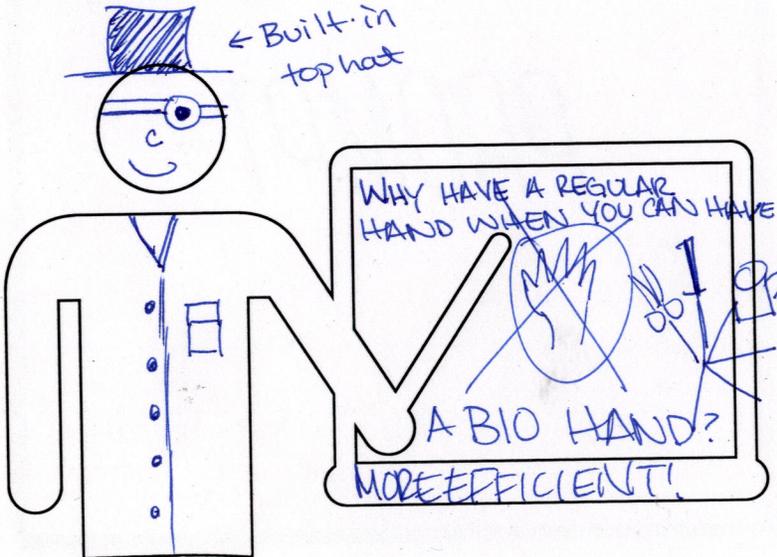
WHY HAVE A REGULAR HAND WHEN YOU CAN HAVE
A BIO HAND?
MORE EFFICIENT!

OPINION

What's the Worst

I mean really, what's the wors[...]
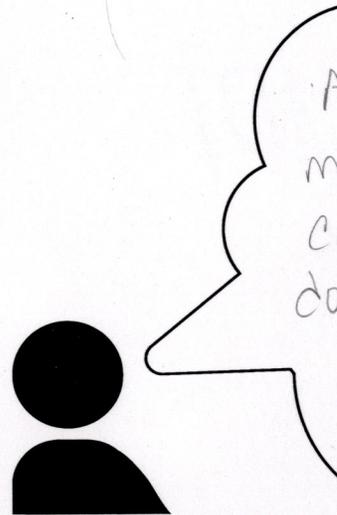
○ +10%

covered, which only supports

l happier
ability
their body.
oice, not

"

alter
their bodies now.

ly more reliable than Wikipedia...

---

social
social political

○ +15%

Pros and Cons
What are the good, bad, and ugly sides to the issue?

• People can become whatever they'd like	People that can't afford fall behind.
• ⚘	• building a person as opposed to being who you are.
	↓ diversity

V.S.

---

○ +20%

st that could happen?

rms made of
acuire parts
uld = cost
mination!

OPINION

○ +15%

Protesters
What do those passionate protesters have on their signs thiiis time?
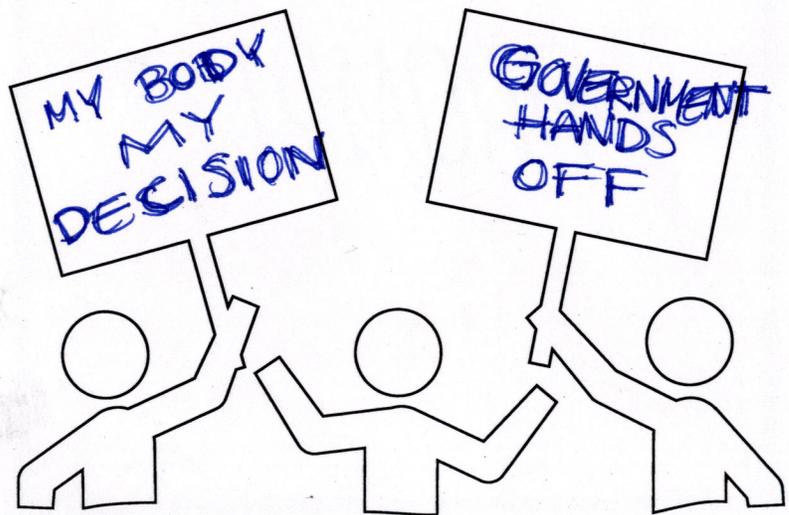
+10%

Graffiti
You know it's a controversial when municipal buildings get covered in graffiti...

Special Report
Make a short news cast o

MARYE
SUBSCRIPT
DECLINE
SURER HUM
IS SURER
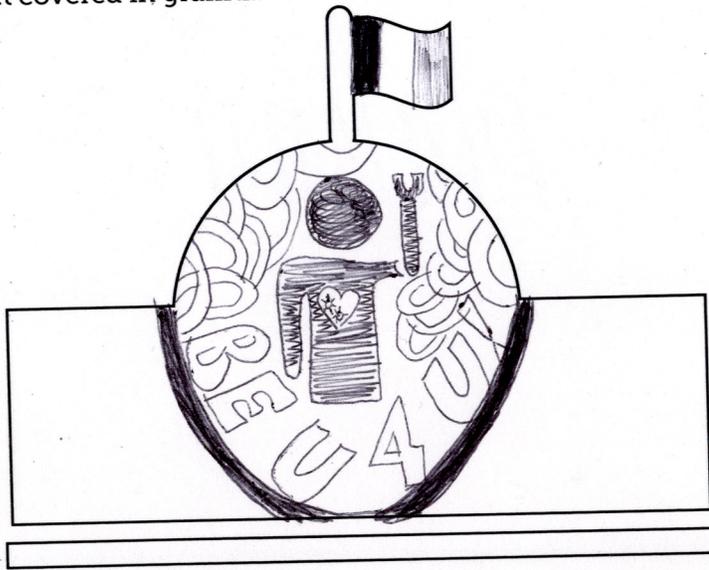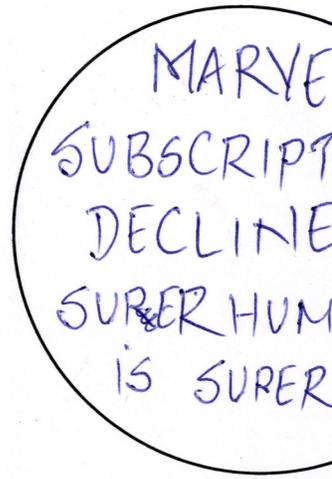
2 VOTES

Protesters
What do those passionate protesters have on their signs thiiis time?

BIONIC BODS FOR ALL! FREE!

GOD MADE US PERFECT AS WE ARE! NO BIONICS!

Political Poetry
Write and read a short po
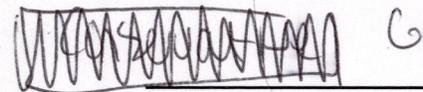
5 My body is
7 But it maybe tru
5 Change is

5 My body is
7 But it is tr
5 Change is do

n the issue.

ON
S!
AN
BORING

OPINION

Pros and Cons
What are the good, bad, and ugly sides to the issue?

Live Longer
~~HELP WITH~~
Longevity

Reduced
Health Care
Cost

Medical
Advancement

V.S.

~~Super Humans~~

Vanity

Discrimination

Public Funding

Gov't Intervention
Federal
Regs + Policy.

---

em that argues for one side

overnment Regulation

mine

sometimes that

dangerous

mine,

sometimes that,

gerous

SCANDAL

Family History
You've decided to expose the true identity of bad apple on your opponent's family tree...

My opponent has completely changed his identity and commits crimes due to his change in appearance.

He gets away with these because he changes his finger print.

We now accept plastic surgery as a choice, which is a freedom, therefore bionic body mods are the logical next step and should remain a choice and a freedom.

3 VOTES

Special Report
Make a short news cast on the issue.

CALIFORNIA WOMAN GETS BUTT IMPLANTS. NOW SHE CAN NO LONGER USE PUBLIC TRANPORTATION AND HAS TO RELY ON NEIGHBORS FLAT BED

Timeline
Fill out time line that sh_
over the past ten years.

this is a w_
and I plan t_
committee to_
earliest confi_
people do_

2030 stopping_
us (gov)_
the ino._
pay fo_

+15%

Text Book
20 years from now, what will the text books say about this issue?

The Issue of upgrading body parts has captured the entire social landscape.

Anti-activists have swarmed the streets, using disfigured Barbies as their method of communication.

Bumper Sticker
Wow, that bumper stick_
everywhere these days..._

Engineer_
You_

ows how the issue has evolved

+10%

ry delicate issue
to issue a sentesut
look into this at my
liance
what they want
them is not for
to decide. it is
com. that have to
this.

2040

---

2 VOTES

Bumper Sticker

Wow, that bumper sticker that super supporters have is everywhere these days...

WHY BE YOU,
WHEN YOU CAN BE

NEW!

(Draw/Sticker)

---

+15%

r that super supporters have is

r
Sphere.

Go Bionic.

OPINION

+20%

Political Cartoon

This controversial political cartoon has gone viral!

gun arm

dead
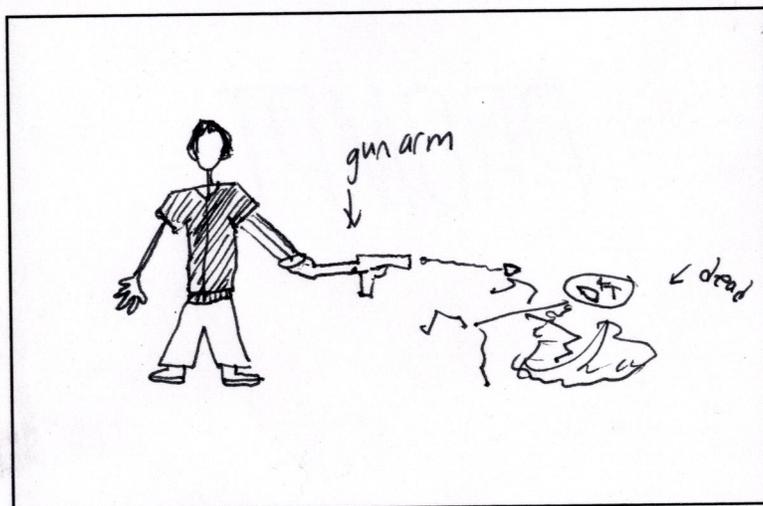
Political Cartoon

This controversial political cartoon has gone viral!

Dinoldnd fun fun fun
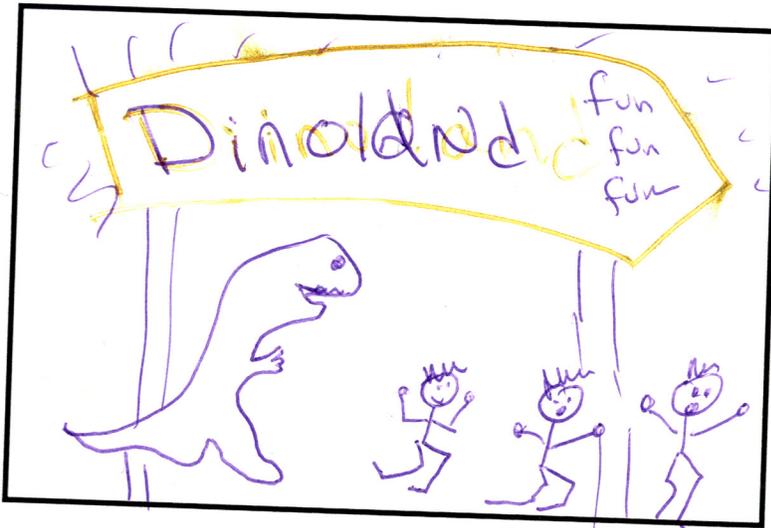
(Draw/Sticker)

Political Poetry

Write and read a short poem t

Why b

When

be Ne

Fact Check

What is that fact you just uncovered, which only supports your opinion, again?

" TEENAGERS
KIDS HAVE SELLING
THEIR VOTES FOR SUPPORT
TO
THE WACKYFOR IOBACKY
AMERICA LOBBY. "

-From somewhere marginally more reliable than Wikipedia...

Bill Board

Someone must have cared a l
billboard...

WHAT'S N
ZOOS WITH
PEOPLE!
RE

hat argues for one side

e you

you can

w?

Interview

You interviewed someone about this, who were they and what did they think?

Mom, don't you think I should be allowed to vote?

You can't figure out how to run the washing machine or toaster and you want to run the country?

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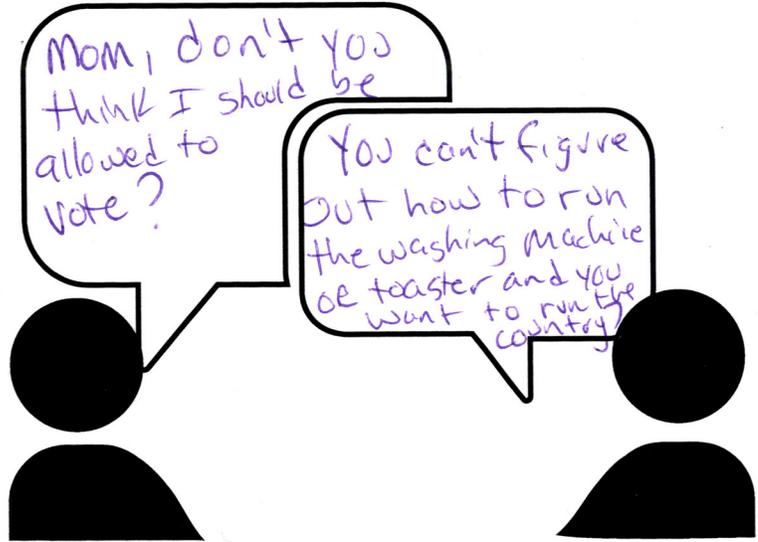
ot to have buy space on that

NEXT???

PREHISTORIC SAY NO TO NEANDERTHAL EPOPULATION!

Breaking News

Report the headline and main story about the issue

TRIBBLES ARE FALLING TO EARTH, SPLATTING LIKE WATER BALLOONS — OH THE HUMANITY!!
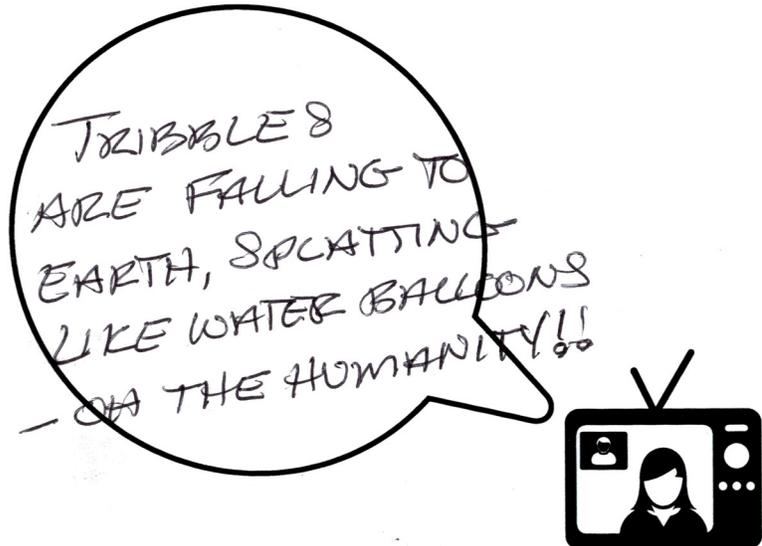
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