

COMMUNITY-CENTERED DESIGN IN A HYBRID CULTURE:  
DESIGNING FOR HUMAN CONNECTION AND COMMUNITY  
BUILDING BY UTILIZING LOCAL ASSETS,  
SHARED RESOURCES AND CO-BENEFITS

by

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of the requirements for the degree of  
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## **DEDICATION**

I dedicate this thesis to my loving parents for the life they gifted to me and their ongoing support throughout my ten years of education. Thank you for showing me your work ethics and kindness for our community, which I have carried within my life and work. To my sister, thank you so much for being there with our parents while I'm far away. To my grandparents, thank you for always keeping me close to your heart.



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## I. INTRODUCTION

### A. Statement of Objective: Design for Human Connection

In recent years, designers have created social media apps to connect people and cultivate relationships and virtual communities. This social media connectivity allows users to broaden their networks while eliminating the fundamentals of face-to-face communication, such as vocal and facial expressions. In 2019, 90% of the U.S. aged from 18 to 29 and 82% of the U.S. aged from 30 to 49 had social media accounts.<sup>1</sup> The U.S., which is leading in the development of social innovation, social technology and devices that are created to connect people, has become one of top loneliest countries in the world. According to the cross-country survey conducted by the Kaiser Family Foundation and the *Economist* in 2018, one in five American adults experience loneliness and social isolation.<sup>2</sup> Social technology was invented to help users make more connections, but are we really more connected? The objective of this thesis is to explore the communication designer's role in designing for human connection and community building in today's hybrid communication culture — a coexistence of digital and physical communication platforms in response to the emergence of online social media.

*Can visual communication designers take on the challenge?*

Traditionally, the field of communication design encompassed branding, typography, publication design, information design and advertising. Communication design is increasingly understood as a human-centered field as solutions are tailored to clients' and users' needs. From designing logos, packaging, magazines and signage to

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<sup>1</sup> Bianca DiJullo, Liz Hamel, Cailey Munana, Mollyann Brodie. "Loneliness and Social Isolation in the United States, the United Kingdom, and Japan: An International Survey," KFF, the Kaiser Family Foundation, The Economist, August 30, 2018, <https://bit.ly/2Gi5ntm>.

<sup>2</sup> "Social Media Fact Sheet," Pew Research Center: Internet & Technology, June 12, 2018, <https://pewrsr.ch/2S7box5>

websites, mobile apps and kiosk interfaces, visual designers' work not only executes the art of visual storytelling, but it also delivers anticipated experiences that the clients and audiences can associate with. The Interaction Design Foundation, a user experience and user interface (UX/UI) design school, stated in their published article "How to Change your Career from Graphic Design to UX Design," that visual designers have the ability to communicate emotionally through typography, color and images to shape emotional responses from users. Furthermore, they have critical and creative thinking and prototyping skills, which make them suitable for user UX/UI projects.<sup>3</sup> These skillsets broaden the opportunities for visual designers to emerge in other design practices such as service design and civically engaged design. Some design processes and methodologies, such as design thinking, participatory design and human-centered design have been popularized as they provide a unique approach to the research insights and needs of the different communities that the design serves or engages.

Originally, the practice of design thinking was adopted during the rapid changes in the design field, especially in product or industrial design during the '50s and '60s. According to Jo Szczepanska's *Medium* article, design thinking began with Massachusetts Institute of Technology's Professor Buckminster Fuller who created a design team comprised of experts from across disciplines to tackle systemic failures, including engineers, industrial designers, material scientists and chemists. In 1972, Rittel and Weber addressed the application of design methodologies in tackling these "wicked problems," a term they developed for complex or multi-dimensional problems. Around the same time, cooperative design was developed and used in Scandinavian countries in

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<sup>3</sup> Teo Yu Siang, "How to Change Your Career from Graphic Design to UX Design," 2020, <https://bit.ly/2SuxCrv>.

the '70s. This practice asserts that every worker “has the right and duty to participate in decisions concerning” what systems are developed and how they are designed to improve the working environment for workers. The design practice focused on: “knowing with the users,” “giving the users a voice,” “learning together by doing,” “scenarios, acting it out,” and “exploratory research and development.”<sup>4</sup> Cooperative design marked the beginning of what is known as participatory design or co-design today. Participatory design collaboratively engages users throughout the design process from research to implementation, while design thinking puts emphasis on creative problem-solving, testing assumption and seeking for unexpected solutions from a multidisciplinary perspective.

Much like participatory design, human-center design aims to create solutions that meet users' needs to maximize usability. However, human-centered design does not always involve the users in co-creating the solution. A historical example of a human-centered approach is the schematic transport map of the London Underground designed by Harry Beck in 1931. From Beck's observation, because the previously used map captured the London underground system as 100% scale, it was challenging for the users to identify their locations and how to get from one station to another.<sup>5</sup> (fig 1.1) Beck established a simple design system that highlights the information the users' need. His map consists of vertical, horizontal and 45-degree angle lines structurally placed on a plotted grid.<sup>6</sup> (fig 1.2) Although the new map does not tell the distance and geographical

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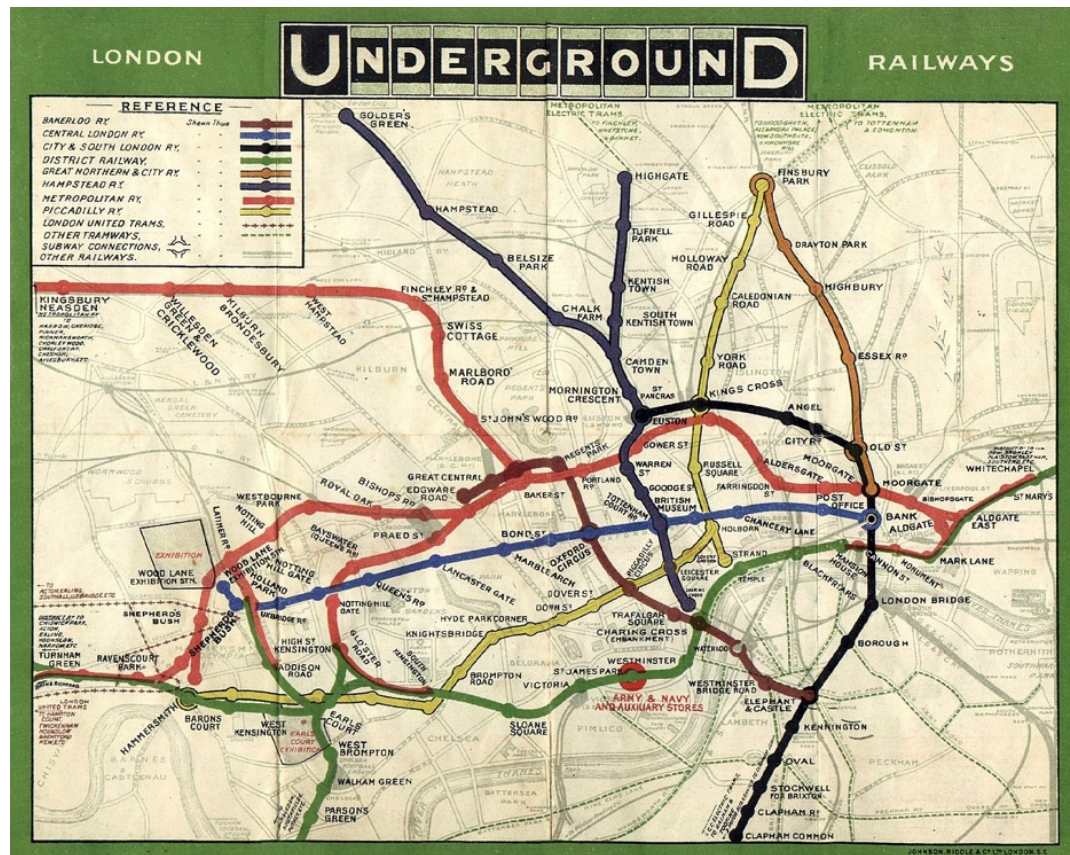
<sup>4</sup> Jo Szczepanska, “Design thinking origin story plus some of the people who made it all happen,” *medium* (blog). January 3, 2017. Accessed June 14, 2010. <https://bit.ly/338N56F>.

<sup>5</sup> July 14, 2008, *Wikipedia*, July 14, 2008, [https://en.wikipedia.org/wiki/Tube\\_map#/media/File:Tube\\_map\\_1908-2.jpg](https://en.wikipedia.org/wiki/Tube_map#/media/File:Tube_map_1908-2.jpg).

<sup>6</sup> *BBC NEWS*, accessed June 6, 2020, [http://www.bbc.co.uk/london/travel/downloads/tube\\_map.html](http://www.bbc.co.uk/london/travel/downloads/tube_map.html).

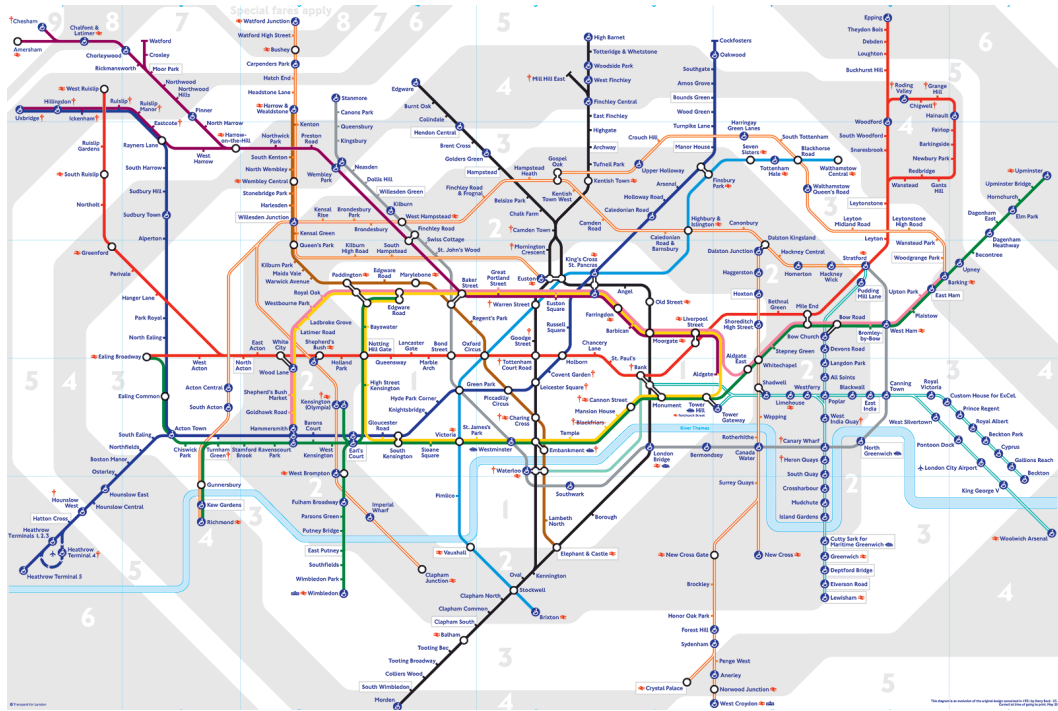


location precisely, it serves the purpose of human-centered design by prioritizing the travelers' needs of getting from place to place. After the first test run of 500 copies that were distributed to a few stations in 1932, 700,000 copies of the map were printed in 1933. The visual system of the London Underground Tube Map was later adopted by many airlines, train maps and bus guides.<sup>7</sup>



**Fig 1.1. Map of Underground Lines, 1908.** SOURCE: “Map of Underground Line, 1908.” Digital Image. Wikipedia. Accessed June 10, 2020. [https://en.wikipedia.org/wiki/Tube\\_map#/media/File:Tube\\_map\\_1908-2.jpg](https://en.wikipedia.org/wiki/Tube_map#/media/File:Tube_map_1908-2.jpg)

<sup>7</sup> Jonathan Glancey, “The London Underground map: The design that shaped a city,” BBC Culture, BBC, July 20, 2015. <https://bbc.in/3kSOcgQ>.



**Fig 1.2. London Underground Map.** SOURCE: “London Underground Map.” Digital Image. BBC. Accessed June 10, 2020. [http://www.bbc.co.uk/london/travel/downloads/tube\\_map.html](http://www.bbc.co.uk/london/travel/downloads/tube_map.html).

Besides the London Underground Tube Map project, which uses human-centered design and visual design to address a navigation challenge, there are other design projects created to alleviate complex issues in society, such as tools to facilitate conversation, creativity, connection, engagement and platforms to empower people and their communities and provide emotional value to one’s wellbeing. For example, the What is Affordable Housing? toolkit was designed by the Center for Urban Pedagogy (CUP) to empower local voices through civic engagement.<sup>8</sup> They created a simple, accessible, visual explanation for community members who live in rent-stabilized apartments and experience pressure to vacate as property values increase. The project, written in multiple languages, promotes transparency in policy to non-English speakers by educating

<sup>8</sup> “What Is Affordable Housing?,” CUP (Center for Urban Pedagogy), accessed June 18, 2020, <https://bit.ly/2HGe15B>.

community members about affordable housing issues and helping tenants understand their rights. The team conducted workshops in classroom, community and organization meetings for people to participate, including advocates, policymakers and design professionals, translating complicated issues and systems into useful visual information that is accessible to community members. The design solution is also feasible and affordable for organizations who advocate for positive changes with a limited budget.<sup>9</sup> The What is Affordable Housing? project employs human-centered and participatory design processes to address wicked problems and create solutions that helps tenants stay in their neighborhoods.

This thesis will follow the fundamental philosophies of human-centered by Fuller and Rittel by looking at organizational challenges from a multidisciplinary perspective, including but not limited to psychology, neuroscience, anthropology and design to identify the challenges and explore potential design concepts. The thesis will focus on a neighborhood case study that utilizes a human-centered design process by bringing in the voices of community researchers, community organizers and members to shape a solution that is important to their needs. Throughout the process, the designer will explore what it means to design with a community to create a neighborhood that people want to live in. This design approach will be referred to as community-centered design. Similar to the human-centered design process, community-center design requires designers to work with the users from research to implementation and aims for solutions that are built upon an understanding between the designer and community members, taking into consideration their daily activities and living conditions. However, with a community-

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<sup>9</sup> "What Is Affordable Housing?," CUP (Center for Urban Pedagogy), accessed June 18, 2020, <https://bit.ly/2HGe15B>.

centered mindset, the designer must consider the users' needs in relation to others in the community, taking into consideration their interactions and relationships with other community members and the environment, both physically and virtually. This model proposes the community's potential growth by establishing a sustainable network where prosperity and resources are shared equally among members.

## **B. Design Thinking Frameworks and Methodologies**

The design process this thesis follows is the British Council's Double Diamond Design Process (2005) and adopts the philosophy of human-centered design from a community-centered perspective. The four phases, Discover, Define, Develop and Deliver, capture how designers think and work with people.<sup>10</sup> This design process appears to be a linear structure, however, there is room for the designer's interpretation by using different tactics to discover and define the challenges, brainstorm ideas and execute the solution. Since the thesis aims to facilitate human connections within community, working directly with a specific community will be the primary approach. The thesis also considers the Hasso-Plattner Institute of Design at Stanford's (d.school) five-stage design thinking model, which replaces the Discover phase with an Empathize phase and prioritizes the users' needs and challenges above the designer's and researcher's assumptions.<sup>11</sup> (fig 1.3)

When choosing to work with a community, the designer plays the role of a facilitator providing a platform, informing and empowering community members to create changes

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<sup>10</sup> "What Is the Framework for Innovation? Design Council's Evolved Double Diamond," Design Council (Design Council, September 10, 2019), <https://bit.ly/3cEH1Wy>.

<sup>11</sup> *Design Council*, accessed June 14, 2020, <https://bit.ly/34pah04>.

in their communities. To do so, the designer must be engaged and create spaces for collaboration by listening with appreciation, empathy and a willingness to learn from the community members. Cynthia E. Smith highlights in her book, *By the People: Designing a Better America*, fifteen principles of design that can benefit a community, improve people's lives and address complex and systemic issues in the U.S. Six of those principles — Engaging People, Sharing Spaces, Learning Every Day, Regenerating Community, Making Local and Designing Opportunities — are influential approaches for this thesis project.<sup>12</sup> First, designers must engage experts and community members in the conversation because they have lived the experience within the community. They are the most knowledgeable about the issues and ways to fix them. Second, designers should provide an inviting space for members from different social sectors to share their experiences, exchange ideas, participate in the co-making process, and generate equitable solutions. Third, designers must come into a community with an open mind and heart to learn and listen with passion and empathy. Designers should explore alternative ways to learn about the community in their everyday lives. Fourth, when brainstorming a solution concept, designers should consider what type of community resources will be generated after to ensure a sustainable future of the community. Lastly, a design solution should give ownership and agency back to the community for future improvement or redesigns

Following this framework, this thesis's design process includes three main phases: Discovery and Define, Develop and Validate, and Implementation. (fig 1.4) The Discover and Define phase is divided into three steps: Discovery, Define and Redefine.

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<sup>12</sup> Cynthia E. Smith, "Designing An America of The People, By The People, and for The People," in *By the People Designing a Better America* (Berlin: Gestalten, 2016), pp. 13-25.

The Discovery step, also known as secondary research, aims to help designers understand the subject in different contexts, including the psychology of social human behaviors and connection, the neuroscience of the social brain's functionalities and the anthropology of cultural and social development. The Define step aims to identify the users' needs, challenges and design opportunities. After that, the designer will redefine a root cause — the core challenge of an issue — that potentially leads to organizational changes. To do so, the designer will conduct primary research, including a survey and interviews with four constituencies: community members who have lived in a neighborhood, community researchers, organizers and leaders. Face-to-face interaction and engagement are necessary as it helps the designer understand how people are connected with others and the roles of community leaders in facilitating connection among community members.

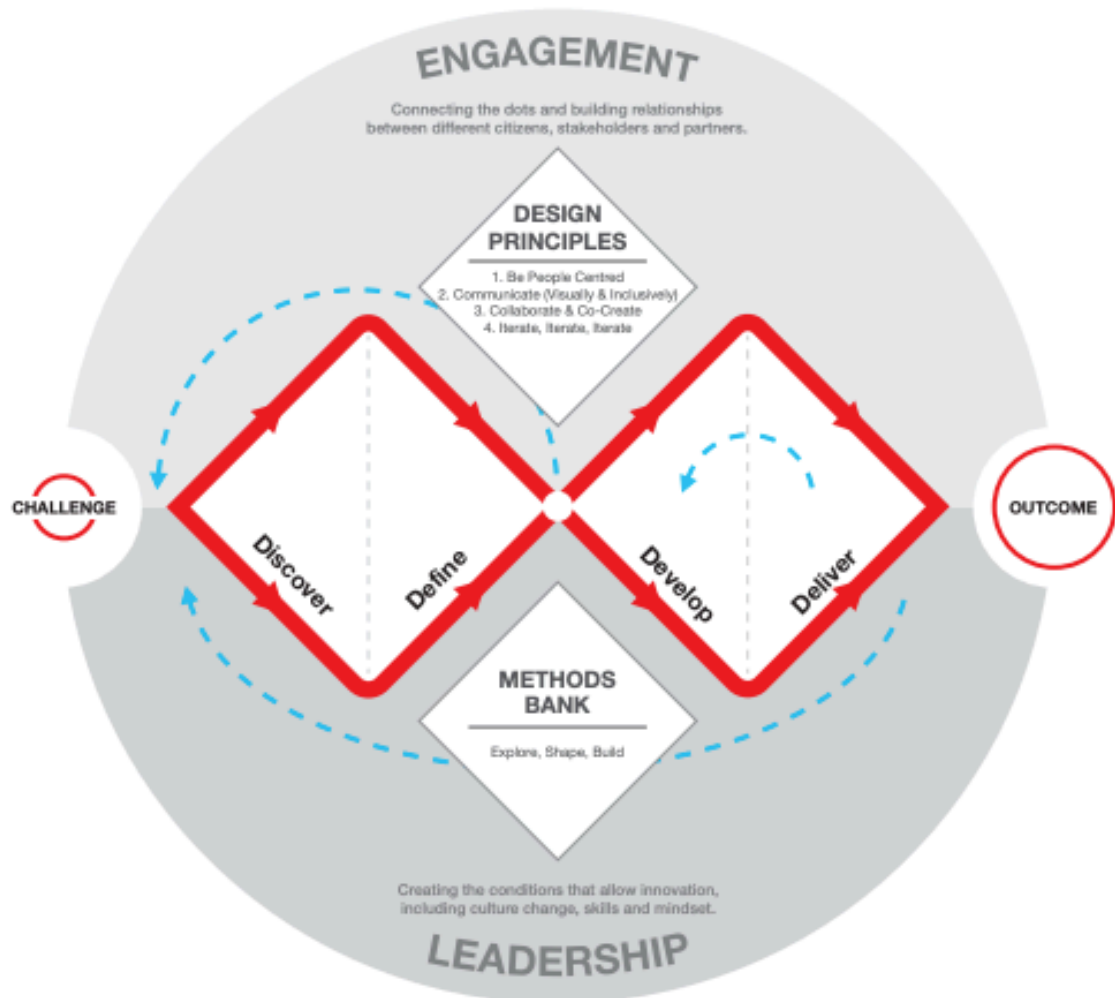
The Develop and Validate phase is divided into four steps: Ideate and Build, Test, Rebuild, Retest, and Feedback. The objective of the Ideate and Build step is to create a low-fidelity prototype to quickly identify early design flaws before building a Minimum Viable Prototype (MVP) for user testing.

The last phase, Implementation, involves reviewing and analyzing users' feedback on the design tactics, contents and materials, and acknowledging design possibilities and restraints. Upon completion, the final prototype shall be tested again with more users before making the final product.

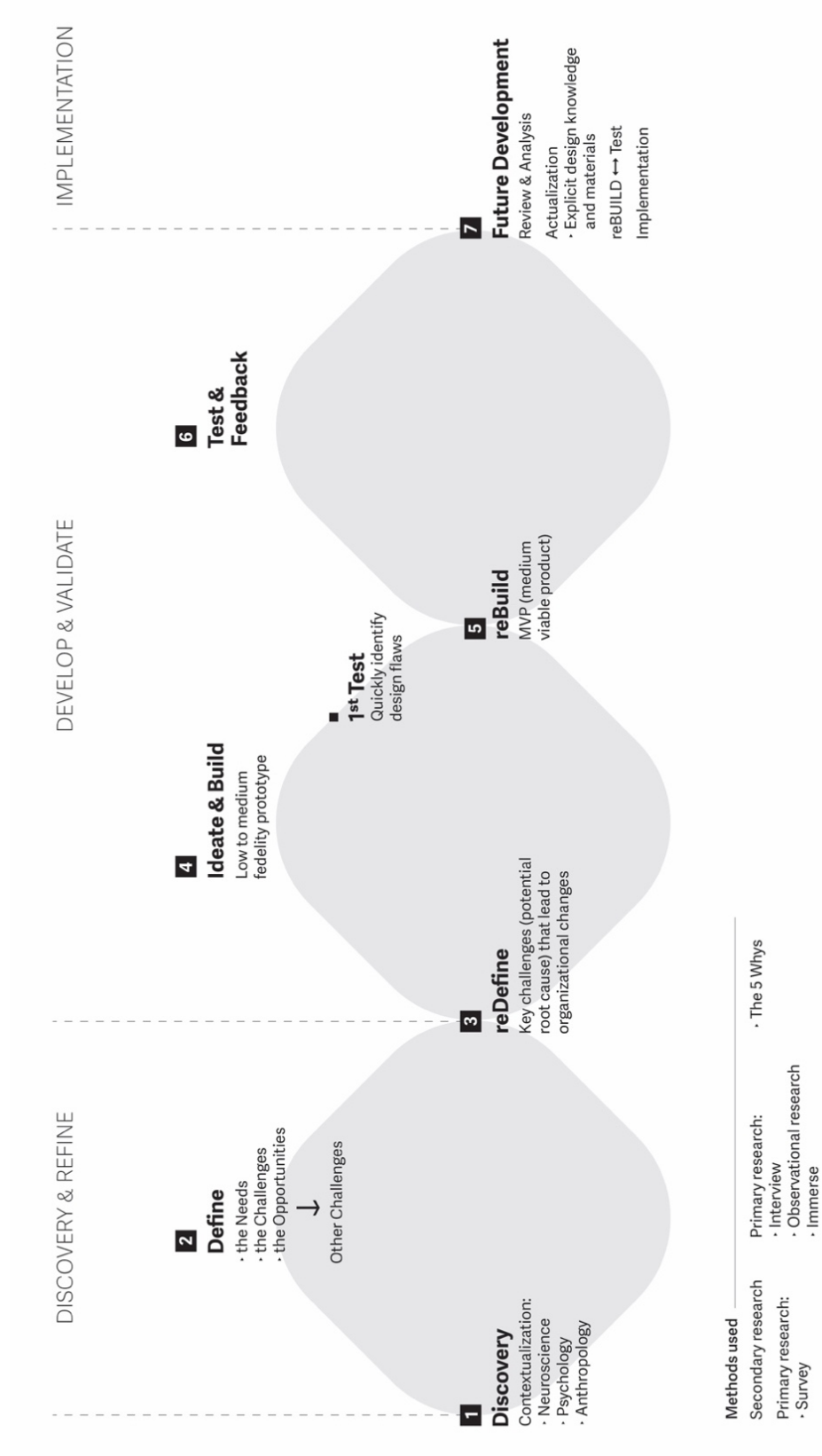
Visual design artifacts like branding, advertising campaigns, editorial and packaging design influence how information and stories are told. However, to tell a story that inspires change in people and community, the designer should be informed by other practices and disciplines such as community psychology, design for public space and



socially engaged and experience design during ideation and prototyping so that the design solution is adaptive and relatable to the community that it serves.



**Figure 1.3. Double Diamond Model.** SOURCE: “The Design Council’s Double Diamond Design Process.” Digital Illustration. Design Council. Accessed June 15, 2020. <https://bit.ly/34paho4>.



**Figure 1.4. Thesis Project Design Process.** Author's own illustration.



### C. The Importance of Human Connection and Community Building

Donna Pisacano Brown, a writer and community advocate on mental health and wellness in New York, defines human connection as a “comforting feeling [like] when we are physically embraced — feeling heard, emotionally understood, and supported by another human being. It has the power to deepen the moment, inspire change, and build trust.”<sup>13</sup> Some describe human connection as a social connection in which people feel like they belong to a social group or connected to others. Mathew D. Liberman’s book, *Why Our Brains Are Wired to Connect*, explains social connection from a cognitive neuroscientific standpoint. He believes that humans are created with a desire to connect with others that often links to their wellbeing physically and emotionally. People can interact strategically with others because of the ability of the prefrontal cortex or the social brain. This part of the neocortex allows them to have compassion, emotions, spatial consciousness, focus, judgment and planning.<sup>14</sup> Liberman also mentions Robin Dunbar’s evolutionary theory that the human’s neocortex grew larger so that primates could live in larger groups and be more actively social.<sup>15</sup> The neocortex can take up to 76% of the entire brain, suggesting that building social and human connections is a default cognition of human beings.<sup>16</sup>

Human connection is the foundation of any social relationship whether between parents and children, students and teachers, siblings, friends, colleagues, coworkers,

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<sup>13</sup> Donna Pisacano Brown, “The Power of Human Connection,” L.I HERALD (Herald Community Newspapers, April 27, 2018), <https://bit.ly/3jc83XP>.

<sup>14</sup> Matthew D. Liberman, *Social: Why Our Brains Are Wired to Connect* (Oxford (GB), New York: Oxford University Press, 2015). p#.

<sup>15</sup> Liberman. p#.

<sup>16</sup> “Neocortex,” Wikipedia (Wikimedia Foundation, September 3, 2020), <https://en.wikipedia.org/wiki/Neocortex>.

neighbors, members of an organization, or residents in a city, state and country. Human connection happens when one feels connected to another person physically or emotionally. Those connections can be formed through shared activities or experiences, deep listening, and making physical contact with one another. Human connection among many individuals creates a community. These connections are profound in any relationship and are linked to happiness. Robert Waldinger, a psychologist and a professor at Harvard University, continued a 75-year study of adult development to find out what contributes to a longer and happier life. After the research team conducted interviews, collected their medical records, talked to their children and family members, they came to a conclusion: embracing community and having good relationships keeps people happier and healthier. The study concluded that people who are more socially connected to family, friends and communities are happier, physically healthier and live longer than those who are less connected.<sup>17</sup>

The City Observatory, an online archive of city data, policies, urban research and innovative ideas to strengthen communities based in Portland, Oregon, published an essay, “City Report: Less in Common,” that chronicles a set of indicators of the decline in public realm functions in the United States over the past several decades, including how Americans live and spend their time, and how that affects their relations with others. The research stated, “In recent years, people spend more time alone or isolated by technologies as diverse as the private automobile and personal headphones.”<sup>18</sup> People tend to interact with others on social media more often than face-to-face because of the

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<sup>17</sup> Liz Mineo, “Over Nearly 80 Years, Harvard Study Has Been Showing How to Live a Healthy and Happy Life,” *Harvard Gazette* (Harvard Gazette, April 11, 2017), <https://bit.ly/338SquP>.

<sup>18</sup> Joe Cortright (Portland, June 5, 2015). 2.

convenience of digital communication, including email, social media, text message and video call. It takes more time and effort to see someone in person than seeing them on the phone.

When meeting someone face-to-face, people need to be intentional by paying attention throughout the conversation and interaction; however, they are often distracted by notifications from their phones, Facebook timelines, the “likes” and comments on social media, and text messages. Social media, unlike face-to-face interactions, does not require any of these efforts and attention. One click can give users many options, including access to photos of friends, family members, even strangers and life updates, including what people eat and where they travel. Another advantage to online communication is the ability to send text messages between daily tasks. There is no requirement to be fully engaged in this type of communication. Since people feel accomplished when getting more things done, some will participate in an online conversation while logging into other social media apps. This ease of access allows people to acquire more connections; however, they lack meaningful connections because of the limited forms of communication. Online communication is limited to text, emoji and video filtered through distractions of ads, nearby events, suggested feeds and other people to follow. In the same Citi Observatory’s essay, “Less in Common,” it is concluded that “technology has been a mixed blessing. While better communications can facilitate networking, many technologies, such as television, headphones and smartphones enable people to cocoon themselves in their own audio environments. Even

in an age of “social” media, Americans have arguably become more disconnected from one another in many aspects of daily life.”<sup>19</sup>

#### **D. The Influences of Social Technology on the Perceptions of a Physical Community**

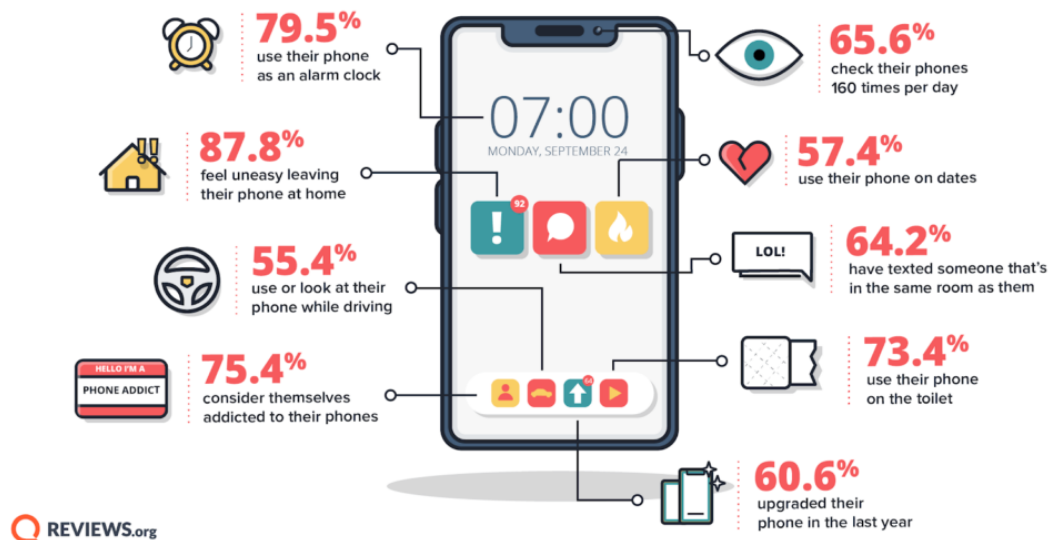
Since the launch of social network services such as Six Degrees (1997), Friendster (2002), Yahoo, Myspace (2002), Facebook (2004), YouTube (2005), Twitter (2006), Instagram (2010), Snapchat (2011) and dating apps such as Match.com (1995), eHarmony (2000), OkCupid (2004), Tinder (2012) and Bumble (2014), people can meet others with diverse personalities, with similar interests despite their geographical distances. Users can send and receive messages in a timely manner. This instant gratification has led to people becoming increasingly dependent on social technology to communicate, form and maintain personal and social connections with others. A survey conducted by Tyler Abbott, a mobile and wireless expert from reviews.org, suggests that people are highly attached to their phone during their daily tasks, which leads to the co-existence and invasion of virtual space in the physical space. The survey collected 500 anonymous responses of adults aged eighteen and above about their cellphone usage and habits and how they spent time with their phones compared to other activities.<sup>20</sup> (fig 1.5) The result shows that 75% of those participants consider themselves as addicted to their phones, 55% use or look at their phones while driving, 65.6% check their phones up to 160 times per day, 57.4% say they use their phone on dates, 65.7% sleep with their phones on at

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<sup>19</sup> Joe Cortright, “Pdf” (Portland, June 5, 2015). 2.

<sup>20</sup> Tyler Abbott, *Infographic of Users’ Time Spend on Their Phones*, February 11, 2020, *REVIEWS.org*, February 11, 2020, <https://www.reviews.org/mobile/cell-phone-addiction/>.

night, 32.7% spend more time on their phones than with their significant other and 17.3% of parents said they spend more time on their phones than with their children.<sup>21</sup> Cellphone users spend so much time online that they slowly detach from their physical environments and communities.



**Figure 1.5. Infographic of Users' Time Spend on Their Phones.** SOURCE: Tyler Abbott. "Smartphone Addiction Statistic." Digital Illustration. REVIEW.org. Feb 11, 2020. Accessed June 28, 2020. <https://www.reviews.org/mobile/cell-phone-addiction/>

Although 90% of the U.S. aged from 18 to 29 who have social media accounts to enrich their social life (2020),<sup>22</sup> 46% of that population feels lonely.<sup>23</sup> Having access to social technology and devices created to connect people does not prevent users from experiencing loneliness. The overuse of social applications is the cause of loneliness and social isolation due to the lack of quality of communication. Matthew Liberman, a

<sup>21</sup> Tyler Abbott, "Cell Phone Behavior Survey: Are People Addicted to Their Phones?," reviews.org, February 11, 2020, <https://www.reviews.org/mobile/cell-phone-addiction/>.

<sup>22</sup> Paige Cooper, "140+ Social Media Statistics That Matter to Marketers in 2020," Social Media Marketing & Management Dashboard, February 20, 2020, <https://bit.ly/3jHcHox>.

<sup>23</sup> "2018 Cigna US Loneliness Index," Cigna (Cigna, Ipsos, 2018), <https://prn.to/34fVLY8>.

psychology professor and the director of the Social Cognitive Neuroscience Lab at University of California, Los Angeles, stated in his book, *Why Our Brains are Wired to Connect*, that the prefrontal cortex of the human brain—the social brain—is dedicated to thinking about self and relationships with others and it is responsible for personality expression and moderating social behaviors.<sup>24</sup> However, people abandon the social brain when utilizing virtual communication tools, which cannot communicate the eight distinct emotions such as anger, fear, disgust, love, gratitude, sympathy, happiness and sadness. These emotional languages are important clues to help us understand the context of conversations and allow us to analyze others' feelings in order to provide appropriate responses. Research shows that we can perceive emotions with 78% accuracy in face-to-face communications.<sup>25</sup> Specifically, "those with the most use of social media have difficulty reading human emotions, including their own."<sup>26</sup> Although online communication is more efficient in connecting people with similarities, the lack of physical contact and emotional language also makes it less efficient by eliminating self-disclosure and physical cues.

Alison Attrill's *The Manipulation of Online Self-Presentation* pointed out the negative influences of social media on personal identity and impression, including impression management, the ways people try to manage others' perceptions and interpretations of themselves and the struggles with identifying and differentiating their virtual and physical identities. As a result, social media users create a manipulated

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<sup>24</sup> Lieberman. 187, 221.

<sup>25</sup> Bestsy App et al., "Nonverbal Channel Use in Communication of Emotion: How May Depend on Why," ResearchGate (American Psychological Association, 2011), <https://bit.ly/3jsbTfO>.

<sup>26</sup> Sherry Turkle, *Reclaiming Conversation: the Power of Talk in a Digital Age* (NY, NY: Penguin Books, an imprint of Penguin Random House LLC, 2016), 25.

version of themselves in a way that enhances and provokes instant responses to meet their needs for belonging.<sup>27</sup> On the other hand, when social media doesn't fulfill those needs, users tend to experience loneliness, social anxiety and low self-esteem, which has a negative impact on their psychological health and leads to behavioral changes. Other negative effects of social technology include egocentrism through which social media users seek self-validation, experience "the fear of missing out" (also known as FOMO), and become more addicted to the instant gratification of technology and eventually withdraw from their physical community.

Briefly, social technology and online communities have created new social fabric characteristics that influence how community members interact among themselves. This communication platform limits human capacity to develop emotional connections with others as well as expressing their thoughts and feeling. As a result, it can cause more conflict than it can connect people. A long-term dependency on social technology can result in a withdrawal of an authentic self—shaping users' views and behaviors in their physical communities and presenting a misinterpretation of sense of connection, community and belonging.

### **E. Opportunities for Designing Human Connection in a Place-Based Community — the Neighborhood**

Designers, entrepreneurs and app developers have created many mobile applications to help people connect more. The hybrid approach of this online and face-to-

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<sup>27</sup> Alison Attrill, *The Manipulation of Online Self-Presentation* (Basingstoke, UK: Palgrave Macmillan, 2015), 6-7.

face platform encourages users to broaden their networks online and deepen their connections at social gatherings. However, there is a lack of retention from the participants due to an increase access in their social networks. There are more options, such as events, groups, communities and experiences to choose from, with less commitment required. For instance, Meetup, a mobile application that allows users to meet others who share interests in similar hobbies or activities such as theater, reading, hiking, writing, art and social gatherings, get positive reviews from the users on their efficiency in broadening their networks. The majority of the customer reviews state that they use the app to socialize with people when moving to a new place, meet like-minded people or people from different backgrounds and simply have a fun time. However, the downside of this social meetup app is that there are fake profiles, irresponsible organizers, or groups that only focus on popular hobbies, and less on social connections. Some say that there are more and more promotional events and clubs posted on the app, which has taken away the community-cultivated social culture.<sup>28</sup>

One of the most used applications to connect people with their neighbors is Nextdoor. Users can discuss community issues, ask for recommendations and organize events. Nextdoor's CEO, Sarah Friar, states that neighborhoods can rebuild authentic connections and increase happiness. She emphasized that neighborhoods could fight increasing isolation, polarization and lack of community engagement — demonstrating that we have the power to help each other in meaningful ways.<sup>29</sup> Unlike other social apps, which allow users to broaden their network and community, Nextdoor helps people

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<sup>28</sup> "Meetup: Local Groups & Events Ratings and Reviews," App Store Preview (Apple Inc.), accessed April 2019, <https://apps.apple.com/us/app/meetup/id375990038#see-all/reviews>.

<sup>29</sup> Sarah Friar, "How Neighborhood Connections Are Helping Combat Social Isolation and Loneliness," Thrive Global, July 22, 2019, <https://bit.ly/3oyHpkJ>.



acknowledge the communities that they already have access to. In the 2020 pandemic known as COVID-19, the Nextdoor app was overwhelmed with posts from community members sharing hand sanitizer, meals, masks, dog and cat food. (fig 1.6) Some residents offered free grocery delivery and medicine pick-up services to the seniors and those who are at high risk of the virus. According to the New York Times, as of March, the user engagement on Nextdoor app has doubled since the pandemic.<sup>30</sup>

During a crisis where everything is closed down and people have to stay home, the neighborhood becomes a place of appreciation, comfort, security and even entertainment. Neighbors decorate their fences to show their gratitude to the heroes, the healthcare and essential workers.<sup>31</sup> (fig 1.7) The chalk walk challenge becomes a popular activity for parents and children. They decorate sidewalks with well-wishes to their neighbors or instructions for a workout routine for those who pass by.



**Figure 1.6. Neighborhood Members’ Post on Nextdoor App.** SOURCE: Screenshot. Digital Image. Nextdoor App. Accessed March 19, 2020.

<sup>30</sup> John Herrman, “Neighbors Are Reaching Out on Nextdoor,” *The New York Times*, March 25, 2020, <https://nyti.ms/3inMgeE>.

<sup>31</sup> “Neighborhood members’ post on Nextdoor app.” Nextdoor App. Accessed March 19, 2020.



**Figure 1.7. A Neighbor's House During The 2019 Pandemic.** SOURCE: Author's own photograph, taken in the neighborhood.

#### **F. Thesis Statement and Anticipated Outcome**

Inspiring people to connect with their neighbors lies in acknowledging the shared resources, assets and co-benefits with other community members. To do so, each community needs an organizer or a leader who reaches out, engages and facilitates collaboration among community members. Strengthening connections in neighborhoods not only increases trust, but it also encourages individuals to work with each other, participate in civic activities, and build a sustainable community.

Building connections and communities does not require driving miles to meet up with someone on the other side of town. It starts right in the neighborhood—front yards,

stoops and neighborhood parks. If design can educate community members about the shared resources, including assets and places and the co-benefits among neighbors, it can activate them to reach out and connect with others.

The anticipated outcome of this thesis is to help people learn about the importance of a place-based community so that they can make an effort to connect with other community members. The thesis aims to create a tool for people to partake in the creation of their community. The preliminary steps involve interviewing community researchers, organizers and members to understand the challenges of building connections in a place-based community. Next, based on the research insights, the designer identifies opportunities where design can facilitate conversations among community members, provide tools and allow the people to build their own community. In addition, this thesis's objectives include exploring new ways to conduct research and creating interventional experiences and solutions for both the designer and participants.

## II. NEIGHBORHOOD CHALLENGES

### A. Design and Human Connection in Neighborhoods

The neighborhood consists of members from different professional backgrounds, cultures, ages and religions. A healthy neighborhood provides a sense of belonging, trust, and safety and has a significant impact on childhood development, physical and mental health, socialization, caregiving, and longevity.<sup>32</sup> As individuals, we seek connections and a sense of belonging in different places and communities but have yet to consider our neighbors in the community building process. Community researchers and organizers like Hugh Weber and Beth Foulds, who were interviewed for this thesis, agree that to build a community we need to facilitate finding commonalities such as shared activities, goals, values, tools, resources and responsibilities. However, as co-founder of Nextdoor Nirav Toila points out, “We don’t have to force you to have something in common with your neighbors; you already do by definition.”<sup>33</sup>

Previous research has found that physical places are primary components in terms of facilitating a sense of community and belonging. For example, the Project for Public Spaces, a nonprofit in New York, dedicated to creating and sustaining public space that builds healthy communities through placemaking, emphasizes the importance of public space in maximizing the shared values of community members. Most importantly, an accessible public space will invite and engage community members in different activities and social interactions.<sup>34</sup>

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<sup>32</sup> Leila Mahmoudi Farahani, “The Value of the Sense of Community and Neighbouring,” *Housing, Theory and Society* 33, no. 3 (2016): pp. 357-376, <https://doi.org/10.1080/14036096.2016.1155480>.

<sup>33</sup> Linda Poon, “Why Won't You Be My Neighbor?,” *Bloomberg CityLab*, August 19, 2015, <https://bloom.bg/3lfsuE7>.

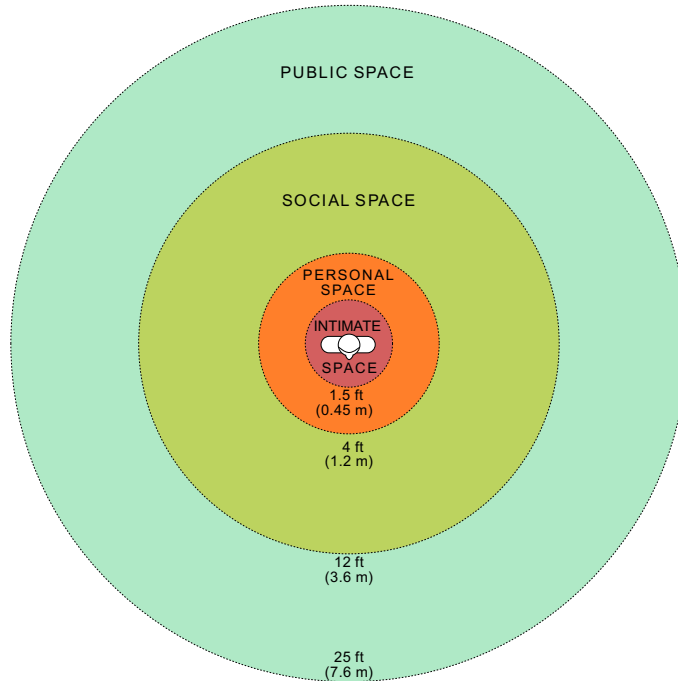
<sup>34</sup> “What Makes a Successful Place?,” Project for Public Spaces, accessed February 2020, <https://www.pps.org/article/grplacefeat>.

Edward T. Hall, a cultural anthropologist, adopts the term *proxemics* to cover “the interrelated observations and theories of man’s use of space as a specialized elaboration of culture.” Hall began his observational research with a question, “How many distances do human beings have and how do we distinguish them?” He detected a series of ranges of physical distance from “very close” (three to six feet apart) to “stretching the limits of distance” (twenty to twenty-four feet indoor and up to 100 feet outdoor). As a result, there are four distinct spaces that everyone has access to: intimate, personal, social and public.<sup>35</sup> In these four spaces, human interactions occur more often in a social and personal space than in a public or intimate space.<sup>36</sup> (fig. 2.1) First, physical-social spaces create opportunities for people to find commonalities in one another. For example, a social space like a dog park gathers people who share an interest in dogs, but they also care about dog rescue, service dogs, companionship and even animal rights. Community organizations are places to meet like-minded people who not only share an interest but also care about a cause because it aligns with their values. These social settings make it more comfortable for community members to share thoughts, express their personalities and emotions, and invite interactions among community members. On the other hand, it is harder to facilitate social spaces and community ownership online since there is a vast distinction between personal content and public content. Users can access all public content, even from a community that they are not part of. It is also harder for the users to measure the quality of their interaction with each other base on the limit quantity of reactions such as clicking like, posting emojis, tagging friends or commenting on a post.

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<sup>35</sup> Ashley Montagu and Floyd W. Matson, *The Human Connection* (Toronto, on: McGraw-Hill Book, 1979), 4–5.

<sup>36</sup> Edward T Hall, March 8, 2009, *Wikipedia*, March 8, 2009, [https://commons.wikimedia.org/wiki/File:Personal\\_Space.svg](https://commons.wikimedia.org/wiki/File:Personal_Space.svg).



**Figure 2.1. Edward T. Hall’s Chart of Proxemic Behavior.** SOURCE: “Personal Space.” Digital Image. Wikipedia. Accessed April 10, 2020. [https://commons.wikimedia.org/wiki/File:Personal\\_Space.svg](https://commons.wikimedia.org/wiki/File:Personal_Space.svg)

Social spaces where people gather and interact, including parks and recreational areas, often already exist in neighborhoods. However, they are not always utilized to their full potential due to safety and maintenance concerns and accessibility issues for low-income neighborhoods or communities of color. In a report, Investing in Equitable Urban Park System, the group of authors, Matt Eldridge, Kimberly Burrowes and Patrick Spauster, mentioned several barriers that limit public access to community parks, which consist of a lack of programed activities that match the communities’ interests, limited play areas for children, perceptions of crime, the dirtiness of the park and its surroundings, poor street connectivity and traffic and a suboptimal land-use mix in the

surrounding.<sup>37</sup> The authors emphasize the disparity in the creation of social space like community parks particularly in low-income or disinvested communities, which has impacted the potential economic growth of those neighborhoods and regaining market strength. Without community redevelopment in those neighborhoods, longtime residents may face the threat of being displaced or priced out as the neighborhood transforms.<sup>38</sup>

Another challenge, as an effect of gentrification, is the on-going displacement of neighborhood communities. For example, Austin, Texas, a city with an increasing number of big tech companies, is attracting more and more investors, higher-income residents and adopting new economic development plans. Neighborhood residents are forced to sell their homes due to rising property taxes to make way for new buildings and offices. Changes in a physical place, such as new houses, coffee shops, and restaurants, are replacing old residents' households and local businesses, thus affecting the identity of the entire community. The loss of the physical and social character of a neighborhood is a key characteristic of gentrification.

Heather Way, Elizabeth Mueller and Jake Wegmann at the University of Texas studied the relationship between gentrification and community displacement, which happens to the most vulnerable residents living in central east and southwest of Austin. A vulnerable population falls under these five categories: renters, people of color, people twenty-five and older with no bachelor degree, children in poverty, people making less than 80% of median family income.<sup>39</sup> These neighborhoods are gradually being replaced

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<sup>37</sup> Matt Eldridge, Kimberly Burrowes, and Patrick Spauster, "Investing in Equitable Urban Park Systems Emerging Funding Strategies and Tools" (URBAN INSTITUTE, July 2019), <https://urban.is/2HUbHli>, 3.

<sup>38</sup> Matt Eldridge, Kimberly Burrowes, and Patrick Spauster, 5.

<sup>39</sup> Heather Way, Elizabeth Muller, and Jake Wegmann, "Austin Gentrification and Displacement Indicators," [arcgis.com](https://arcgis.com), accessed March 2020, <https://bit.ly/36rqEf7>.

with residents who are twenty-five and older with bachelor's degrees and higher median income. This radical change in homeownership and the dominance of a white population in the gentrified area results in a less mixed income neighborhood.<sup>40</sup> Gentrification results in the loss of community of residents, the loss of features, and social meanings in a neighborhood and causes cultural displacement, which changes the way people interact with the physical surrounding and other community member. The study emphasizes, "as the scale of residential change advances, and shops and services shift to focus on new residents, remaining residents may feel a sense of dislocation despite physically remaining in the neighborhood."<sup>41</sup>

*Less in Common*, an article on City Observatory's website, pointed out a few reasons that people nowadays are less connected with their physical community. First, Americans spend significantly less time with their neighbors. Economist Joe Cortright, who used data from the *General Social Survey* to write the City Observatory report, writes, "In the 1970s, nearly 30 percent of Americans frequently spent time with neighbors and only 20 percent had no interactions with them. Today, those proportions are reversed."<sup>42</sup> Second, the survey also lists that "By 1997, it was estimated that there were more than 20,000 gated community developments of 3,000 or more residents. By design, gated communities restrict access and carefully control who is allowed into a community, separate residents from outsiders."<sup>43</sup>

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<sup>40</sup> Way, "Austin Gentrification and Displacement Indicators,"

<sup>41</sup> Way, "Austin Gentrification and Displacement Indicators,"

<sup>42</sup> Cortright, 6.

<sup>43</sup> Cortright, 11.



Furthermore, Cortright mentions the economic segregation trends upward as middle-income neighborhoods decline—another side effect of gentrification. He elaborates, “High-income and low-income Americans have become more geographically separated within metropolitan areas. Between 1970 and 2009, the proportion of families living either in predominantly poor or predominantly affluent neighborhoods doubles from fifteen percent to thirty-three percent.”<sup>44</sup> The consequence of economic segregation is the wealthy get wealthier, and the poor fall behind, which leads to higher rates of health and social problems, public service accessibility, public place livability, social and political conflicts and a lower level of economic growth. Mixed-income neighborhoods reduce tension among community members from different religions, beliefs, and values by giving more exposure to underrepresented groups, communities that people usually don’t have access to. By creating opportunities for mutual social and cultural understanding with one another, mixed-income neighborhoods can build a resilient community that drives positive social changes and benefits more community members.

## **B. Challenges Facing a Neighborhood Community**

### *1. The Loss of Physical Communities*

Leila Mahmoudi Farahani, a Research Fellow at Centre for Urban Research who studies how a neighborhood’s build environment and physical structure’s impacts its livability, sense of community and the social life of residents, wrote an article on the value of community and neighboring. In the essay, she mentions that the concept of “communities lost” began after the rapid transformation of urbanized industrial societies,

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<sup>44</sup> Cortright, 7.

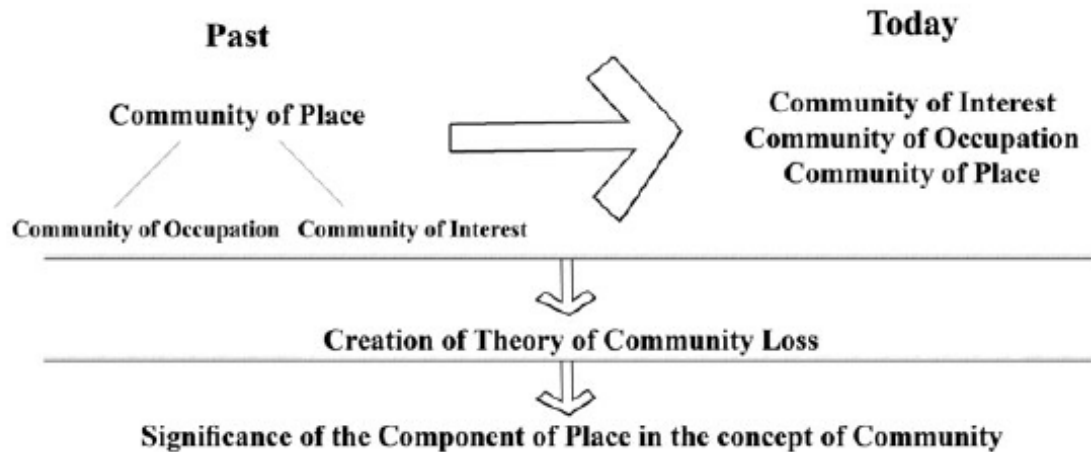
in which social relationships in the contemporary are free from local and spatial confinements. Transportation and new communication platforms have reduced the dependence of individuals on their neighborhoods.<sup>45</sup> The term “local” nowadays means “city-wide” and is not limited to the neighborhood. Farahani further explains the structural difference between place-based community and place-less community based on three components: a community of place, a community of occupation and a community of interest.<sup>46</sup> (fig 2.2) In the past, all types of communities existed within the boundaries of neighborhoods causing the place to be an inseparable part of community definition. Neighborhood residents were constrained to either work very close to where they had chosen to live or live very close to where they had chosen to work. There was a similar trend for communities of interests such as religious communities. People were usually active members of their religious society through their local churches, mosques or other religious edifices in neighborhood centers. Therefore, communities in the past were not limited to local communities; rather communities of interests were forming inside local communities.<sup>47</sup>

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<sup>45</sup> Farahani, 359.

<sup>46</sup> Leila Mahmoudi Farahani, *The Creation of Theory of Community Lost*, digital image, *The Value of Sense of Community and Neighboring*, vol. 33 (The Institute for Housing and Urban Research, 2016), p. 360, The Institute for Housing and Urban Research, <https://doi.org/10.1080/14036096.2016.1155480>.

<sup>47</sup> Farahani, 360.



**Figure 2.2. The Creation of Theory of Community Lost.** SOURCE: Leila Mahmoudi Farahani, “The Creation of Theory of Community Lost.” Digital Image. The Value of the Sense of Community and Neighbouring, 2016. Accessed May 20, 2020.

However, the explosion of social media apps makes it easier to access non-local and virtual communities. Communities of interest and occupation replace the role of a place-based community like the neighborhood. A different study in 2002 mentioned in Farahani’s essay stated that although cyberspace is a new enhanced means of communication, it cannot substitute for the neighborhood in the creation of communities.<sup>48</sup>

In 2018, Allison Ross, Craig A. Talmage and Mark Searle, professors from Arizona State University, conducted a survey with 502 adults aged eighteen and over who live in a private residence to understand the connection between relationship, happiness, sense of community and neighborhood. The study’s outcome suggests that happy people are more connected to their neighborhood. Also, income and education aren’t significant indicators that affect the sense of community in a neighborhood. However, most younger

<sup>48</sup> Farahani, 362.

individuals may not exhibit a heightened sense of community within the neighborhood because other forms of a community such as schools, workplaces and virtual communities may be more prevalent and powerful in their lives.<sup>49</sup> The majority of those surveyed for this thesis were millennials and did not suggest that a neighborhood is a desirable resource to build a sense of community. Instead, they prefer making connections with others in an organization, at social events and public places in comparison to social media and mobile applications

## 2. *Lack Awareness of Community Assets and Shared Resources*

Another reason people do not consider their neighborhoods as a potential network is due to the acknowledgment of the shared resources among neighborhood members. The Center for a New American Dream partnered with SHAREABLE, a non-profit that helps leaders build healthy communities through collaboration and engagement, to create a community toolkit called *A Guide to Sharing: Exchanging Stuff, Time, Skill and Space*. The toolkit includes activities that people can organize in the neighborhood, such as a clothing swap day and neighborhood market. Other shared-resources platforms include a tool library and a community timebank that allow people to lock in their hours working on neighborhood projects like community parks or gardens.<sup>50</sup> These activities provide opportunities for people to meet their neighbors and create a platform for sharing ownership of goods, services, skills and talents. For example, in a neighborhood that has

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<sup>49</sup> Allison Ross, Craig A. Talmage, and Mark Searle, "Toward a Flourishing Neighborhood: the Association of Happiness and Sense of Community," *Applied Research in Quality of Life* 14, no. 5 (2018): pp. 1333-1352, <https://doi.org/10.1007/s11482-018-9656-6>.

<sup>50</sup> "A Guide to Sharing: Exchanging Stuff, Time, Skill, and Space.," NewDream (The Center for a New American Dream), accessed June 5, 2020, <https://newdream.org/resources/guide-to-sharing>.

many people interested in gardening, a tool library can be an excellent resource for members to borrow tools, equipment and share gardening tips. A homeschool library can be a place where parents exchange teaching materials, books, activities kits and share their teaching experience with others. A civic library can be where residents share reliable information and ways to engage in civic activities. These shared-tool libraries are not often seen in neighborhoods as they take a lot of planning and collaboration among community members who might not even know their neighbor's name.

Community members who live in neighborhoods share resources and needs, but they also face similar challenges, such as lack of access to public amenities such as public parks, public transportation, libraries, grocery stores, schools and hospitals. Living in low to average amenity areas affects the sense of neighborhood satisfaction among community members. According to the American Enterprise Institute (AEI) Survey on Community and Society in 2018, Americans who live near neighborhood amenities have a stronger affinity for their neighborhood and express a greater desire to stay.<sup>51</sup> Specifically, 37% of Americans in urban areas and 47% of Americans in the suburbs with a high number of neighborhood amenities report that their community is an excellent place to live. 71% of Americans in high-amenities neighborhood say they are likely to be still living in their community five years from now.<sup>52</sup> In addition, people who live in neighborhoods with more amenities have a greater sense of community. They often mention the neighborhood in conversations with friends. 47% of high-amenities residents said that they are more willing to lend a hand to a neighbor. 56% of them say people can

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<sup>51</sup> Daniel A Cox and Ryan Streeter, "AEI," AEI (American Enterprise Institute, May 20, 2019), <https://bit.ly/2StgEcV>, 4.

<sup>52</sup> Cox, 5.

generally be trusted. In comparison to those living in low-amenity neighborhoods: only 16% say they are willing to help out their neighbor, 22% say they can trust other people.<sup>53</sup> Also, the higher-amenity community tends to have residents who feel more socially connected and less isolated.<sup>54</sup> Families, schools, workplaces and community hubs create more opportunities for social interactions and help people maintain their social health, interpersonal skills, and overall wellbeing. Both neighborhood-generated resources, like community gardens and libraries and neighborhood co-op resources, such as amenities, are shared resources among neighborhood members. Maintaining these resources not only indicates the level of neighborhood satisfaction but it also generates a feeling of trust in the community and government and creates social connection and a sense of belonging.

### *3. The Need for Design to Facilitate Community Building in the Neighborhood*

The importance of a neighborhood's shared resources is to generate co-benefits for its members, including tangible value in the form of physical tools and public accessibility, as well as intangible benefits such as the sense of trust, belonging, and social wellbeing. It begins with a vision and through consistent engagement with other community members. TEDx Talks shares a story of Shani Graham, a neighborhood member who lives on Hulbert Street, Australia, and how she transformed her neighborhood into a sustainable-living revolution through strong neighborly relationships.<sup>55</sup> Graham decided to become a facilitator and wanted to inspire people to

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<sup>53</sup> Cox, 6.

<sup>54</sup> Cox, 8.

<sup>55</sup> Shani Graham. "Take a street and build a community: Shani Graham at TEDxPerth." TEDx Talks. YouTube video. Posted January 2014. <https://youtu.be/C1WSkXWSJac>.

live sustainably by sharing engaging conversations with her neighbors. Instead of sharing what she does to live sustainably, she started the journey by building good relationships to influence others. This included exchanging contact information with her neighbors, talking about the news over a cup of tea, sharing her talents and resources, and doing activities together. Neighbors of Hulbert Street began to host many events, including community movie nights, garage sales, and potluck dinners, and eventually becomes a community hub. They also started a sustainable community garden that later turned into a The Hulbert Street Sustainability Fiesta. Graham emphasized, “the fiesta is not about the stores, foods, music and entertainment. It’s about inspiring, educating and celebrating sustainable living.”<sup>56</sup> The way Graham connected with her neighbors is an excellent example of a resilient and robust community. It included many conversations, activities, and volunteer work that cultivated connections and generated more resources for the neighborhood. The connections and relationships that the neighborhood members created allowed the community to achieve more than they could on their own. As a result, they have created a sustainable, resilient, and robust community. Graham is an example of a community leader who creates tools and platforms for people to share conversations and ideas, who reaches out, collects feedback and continuously engages in the community to redesign how neighbors connect.

The act of reimagining and rebuilding connections is also known as Assets Based Community Development (ABCD). This concept was pioneered by John McKnight and Jody Kretzmann of the ABCD Institute at DePaul University, formally at Northwestern

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<sup>56</sup> Shani Graham. “Take a street and build a community: Shani Graham at TEDxPerth.” TEDx Talks. YouTube video, 17:45. Posted January 2014. <https://youtu.be/C1WSkXWSJac>.

University.<sup>57</sup> ABCD is a method that explores three aspects of community building and community-driven development, including asset-based, internally focused and relationship-driven development. First, a neighborhood asset map consists of individuals' assets including skills, talents, and capacities of each resident, and the community's assets, including household, and family, associations (recreational, educational and religious communities in the neighborhood), and formal institutions (schools, hospitals, libraries, parks, police stations, and social service agencies). This asset-based approach helps community members acknowledge and embrace the local traditions, identities and resources that they share with others. It is also a valuable source of inspiration and guidance to community organizers and leaders to facilitate internal focused changes in the local community. McKnight and Kretzmann state that "if a community development process is to be asset-based and internally focused, it will be 'relationship-driven.' Therefore, one of the central challenges for asset-based community developers is to continually build and rebuild the relationships between and among residents, local associations and local institutions."<sup>58</sup>

Furthermore, a place-based community, as opposed to a place-less community such as Facebook, meetup and Instagram groups, provides viable resources that benefit its members in various ways. It recognizes individuals' skills, talents, and goals within a community's shared resources, identities and cultures. It builds a community from the inside out and is relationship-driven. Designing for human connection and community building should start within a place-based community, like the neighborhood, where

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<sup>57</sup> John P. Kretzman and John L McKnight, "Building Communities from the inside out: a Path toward Finding and Mobilizing a Community's Assets," in *Building Communities from the inside out: a Path toward Finding and Mobilizing a Community's Assets* (Chicago, IL: ACTA Publications, 1993), pp. 1-11, <https://bit.ly/3oxFeoU>.

<sup>58</sup> Kretzman.



people have access to local resources and the capability to inspire, influence one another, collaborate and evolve ideas into tangible values.

### III. FIELDWORK RESEARCH

#### A. Interviews

##### 1. *Community Researcher*

###### a. The Importance of Community Building

As part of the exploratory research, an interview was conducted with community researcher and designer Hugh Weber. He is currently a national board member of the American Institute of Graphic Arts (AIGA), managing director of the Great Discontent, a design advocate and a community organizer. He believes the foundation of community is acknowledgment, trust and mutual respect across the barrier of heritages, beliefs and differences. Weber was interviewed for this thesis to further understand his TEDxSiouxFalls talk that discussed designing community in modern day. He said, “technology has promised us a world more connected than ever before while culture reflects a more extreme sense of disconnection in values, politics and community.”<sup>59</sup> Weber articulates, “Humans are wired to connect. They do so with their stories. Humans are wired to live in the community. They do so through shared value, and aspiration.”<sup>60</sup> In the interview, Weber’s explicit stories help us to rethink what an act of listening really means. Listening to others’ stories develops empathy for the people in your community. Stories also unfold similar challenges that different community members are facing. It reveals many aspects of a person’s life and allows people to find commonalities in each other.

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<sup>59</sup> Hugh Weber. Personal Interview. 29 Aug. 2019.

<sup>60</sup> Hugh Weber. “Designing. Community. Hugh Weber. TEDxSiouxFalls.” TEDx Talks. YouTube video, 10:02. Posted April 16, 2019. <https://youtu.be/7TGng2Xuu9w>.

Weber places emphasis on the Relationship of Influence (ROI) in a community — a concept grounded in network theory and sense of community psychology that was named through his shared work with Marshall Pollard, a marketplace designer and educator based in Washington, D.C. who he serendipitously met on a bus of community organizers in Switzerland. ROI suggests building a community based on value exchange networks when everyone can contribute and receive influences from one another. This shared-value concept takes place in any organizational structure in which people receive a compensation for their time and effort. For example, grocery store workers receive an income for helping customers. Volunteers receive joy when helping others with special needs, which is called transcendence value.

#### b. Community Challenges and Possible Approaches

In a neighborhood or a place-based community, ROI is reflected through people exchanging ideas and contributing their resources to the community goods. As mentioned in Chapter II, personal assets and resources, such as stories, talents, expertise, and skills are part of the community's that other members shall also have access to. But first and foremost, people must acknowledge who their community is and act on it intentionally. Weber encourages people to open their curious minds and create space to connect with others so that we not only design our lives and work but also “a community that is much bigger, bolder and more beautiful than we ever dreamed.”<sup>61</sup>

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<sup>61</sup> Weber, “Designing. Community. Hugh Weber. TEDxSiouxFalls,” 16:33.

## 2. *Community Member and Community Organizer*

### a. The Importance of Community Building

Margot Shields, a former neighborhood board member and community member in Austin, Texas, stated “Community is what you make it.” She added, “A neighborhood provides a sense of security when I know the people around me. You care about your neighbors a bit more, and they care about you a bit more.”<sup>62</sup> When asked how the neighborhood has changed in the past ten to twenty years, she replied, “Back then, people depended on their neighbors. They needed each other to survive, exchanging resources and produce. Your neighbors have the strength that you lack in the community.”<sup>63</sup> The conversation with Shields raises a question about how designers can help community members identity strengths in each other and build a local shared resource.

In another interview, when talking with the founder and program manager of Generation Serve, a nonprofit that organizes volunteer events for Austin communities, Beth Foulds said the majority of members are made up of friends. There is a sense of mutual trust which they wouldn’t find online. She explicated, “We connect people through productivity and shared experience. Since most activities are community volunteer work, retention comes from the shared values among community members. Most parents join Generation Serve because they want to contribute to the community, spend more time with the family, and teach their kid about volunteer work.”<sup>64</sup> What makes Generation Serve a successful organization is that they provide both the organizers and community members all the tools they need to focus on the tasks. Beth expressed that

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<sup>62</sup> Margot Shields, Personal Interview, 12 Sep. 2019.

<sup>63</sup> Shields.

<sup>64</sup> Beth Foulds, Personal Interview, 3 Oct. 2019.

many kids have been volunteering here for years and now become community organizers. Some started their own volunteer groups. More importantly, people join Generation Serve because they want to connect with the communities that they usually don't have access to, such as the homeless, children in the hospital, or the elder in nursing homes. When asking how to find your community, Beth said, "Everyone has a community. Sometimes, you forget you have one."<sup>65</sup>

#### b. Community Challenges and Possible Approaches

Finding and sustaining a community is not an easy task. Shields said, "there are always a few people doing all the work. Community leaders and organizers lose their energy and passion over time. It has been two years that they don't have a neighborhood meeting."<sup>66</sup> Shields's biggest concern are working-class people who work multiple jobs and do not have time to share with their community. She emphasized, "Nobody has the luxury (time) to volunteer."<sup>67</sup> They have enough emotional capital to sustain their families. Another, there is also a cultural factor that shapes how people form their communities. Shields emphasized that many Americans think individualism is more powerful than collectivism. But an extreme individual is selfish. In other words, the community is not as important as themselves.

As a community member, when being asked for the best way is to get involved in a community, Shields suggested volunteering. She expresses, "When you volunteer, you

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<sup>65</sup> Foulds.

<sup>66</sup> Shields.

<sup>67</sup> Shields.

feed off the energy and spirit. It comes back to you.”<sup>68</sup> Being a part of the volunteer community is a beautiful thing. More importantly, people must make an effort to greet their neighbors. It is the simplest way to start building a sense of connection with the people around them. Shields emphasizes that a need for community changes over time, depending on what happens to a person. People bond as a community when they go through similar experiences and challenges.

Foulds shared five pieces of advice for community organizers to connect with community members. The first is Similarity: Give people a common cause so that they can find similarities in each other. The second is Productivity: Create an opportunity for people to make something together. The third is Social Experiences: Encourage interaction among different social groups. The fourth is Reflection: Help people reflect on their experiences after each activity. The last is Community Capacity Building: Provide participants the tools that strengthen individuals’ skills and the community’s resources to adapt and change.<sup>69</sup>

Designing for human connection is about community building and civic responsibility of community members in society. In order to collectively create a place called community, every member must contribute. Therefore, how can design cultivate a culture for individuals to grow and contribute in relation with other people?

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<sup>68</sup> Shields.

<sup>69</sup> Foulds.

## B. Observational Research

One of the most popular platforms for cultivating a neighborhood's shared resources is the community garden. According to *The Trust for Public Land* organization, "The number of garden plots in city parks has increased 44% since 2012. Today there are more than 29,000 garden plots in city parks in just the 100 largest U.S. cities—up 22% from just a year ago."<sup>70</sup> Community gardens allow community members to contribute their time in exchange for co-benefits, such as grown produce, gardening skills, time spent with family, social interactions and connection or developed sense of community. In order to understand how the community garden concept has been working in many neighborhoods, the designer conducted an observational research by attending a community garden volunteer day. The observational research shows that people who are strangers are more than likely to interact with others when they work on the same task or gather in the same area. Most community garden volunteers at the site were in their mid-thirties or above and not many are millennials or Gen. (fig 2.3) Lauren, the facilitator of a volunteer group, said that she spent most of her time talking to community members, sharing her expertise on gardening and teaching children about different plants, and how to take care of them. Community organizers like Lauren don't usually perform the activity for the participants but help them understand the importance of their volunteer work.

At another community volunteer event, multiple families cooked dinner for children patients and families who stay in the hospital long term. The kitchen set up with an island in the middle surrounded by countertops that creates a single flow floor pattern

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<sup>70</sup> "Here's the Dirt on Park Trends: Community Gardens Are Growing," *THE TRUST FOR PUBLIC LAND* (blog), accessed June 12, 2020, <https://bit.ly/3d096Y>

allowing more interaction among participants. Participants also share tools with others, such as recipes and kitchen wares. These tools function as conversation starters for those who don't know each other before. Compared to the community garden event, working in different areas limits chances for social interaction among members. It can be seen that spatial design plays a significant role in creating social space for public interaction, while tools and objects enhance the chance for interaction.



Situation		Date	Time	
Description of the situation				
<b>Activities</b>	<b>Environment</b>	<b>Interaction</b>	<b>Objects</b>	<b>Users</b>
What are they doing?	What is the character and function of individual, shared and overall spaces?	What interactions are occurring with people, objects, environments, systems, or services?	What are the things people are using?	What are we observing?
What are they engaged in?	How would you describe them?	What appeared routine and what appeared usual?	What objects and devices do people have in their environments, and how they related to activities?	What are the roles and relationships?
What are the specific processes they go through?				What are the values and perceptions?
<b>Comments</b>				

**Figure 3.I. Observational Research Worksheet.** SOURCE: Stacy Benjamin. “Observational Research Worksheet.” Print. Design for America Summit 2019. Accessed August 10, 2020.

## IV. EXPLORATORY RESEARCH: COMMUNITY-CENTERED DESIGN

### A. Principles for Human Connection and Community Building

#### 1. *Elements of Sense of Community*

David W. McMillan and David M. Chavez, professors at George Peabody College of Vanderbilt University, developed the *Elements of Sense of Community* model in 1983. The model identifies four elements for a definition and theory of creating a sense of community.<sup>71</sup> (fig 4.1) The first element of community is Membership, which has five attributes: boundaries, emotional safety, a sense of belonging and identification, personal investment, and a common symbol system. McMillan and Chavis imply, “Boundaries are particularly relevant to a neighborhood community.”<sup>72</sup> Boundaries are the spatial, ethnic, and socioeconomic relations among residents, which define who is part of the community and who is not. Boundaries are the physical characteristics of a community, while the sense of belonging reflects a person’s emotional association with a community or a feeling of acceptance by the group. Personal investment is the most crucial factor to establish membership in a community. It requires personal investment, which adds meanings and values in their memberships, and develops an emotional connection through the ownership of individual and group’ achievement. McMillan and Chavis refer to psychologist Carl Jung’s definition of a neighborhood’s common symbol system, which resides in the neighborhood’s name, landmark, logo, architectural style — the basis archetype unite humankind.<sup>73</sup>

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<sup>71</sup> David W. McMillan and David M. Chavis, “Sense of Community: A Definition and Theory,” *Journal of Community Psychology* 14, no. 1 (January 1986): pp. 6-23, [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::aid-jcop2290140103>3.0.co;2-i](https://doi.org/10.1002/1520-6629(198601)14:1<6::aid-jcop2290140103>3.0.co;2-i).

<sup>72</sup> McMillan, 10.

<sup>73</sup> McMillan, 11.

The second element is Influence. It is the notion of being influenced by other members or what the community does. Influence in building a community means appreciating individual differences and responding to their needs and fostering a sense of collective efficacy. The third element is the Integration and Fulfillment of Needs, which is reflected through togetherness and reward. A direct approach to togetherness and reward is finding the shared values among community members. Cohan, Doolittle and MacDonald state that when people who share values come together, they will find similar needs, priorities and goals. Thus, it fosters the belief that by joining together, they might be better able to satisfy these needs and obtain the reinforcement they seek.<sup>74</sup> McMillan and Chavis conclude that reinforcement and need fulfillment are primary functions of a strong community.

Finally, Shared Emotional Connection is the most challenging aspect of building human connection and community because it is built upon seven principles of human connection. First, Contact Hypothesis is the constant engagement, or the more people interact, the more they become close. Second is the Quality of Interaction, positive experience of the interaction, and relationship. The third is Shared valent event hypothesis, experience similar emotion or crisis together. Forth is Investment. If a member contributes more time and energy to their community, they are more emotionally involved. Lastly, Spiritual Bond is a spiritual connection among community members, which Bernard called it “community of spirit.” Bernard compare it to the spiritual bond

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<sup>74</sup> McMillan, 13.

within the black community that drive their music, dance, styles, which cannot be found in other communities.<sup>75</sup>

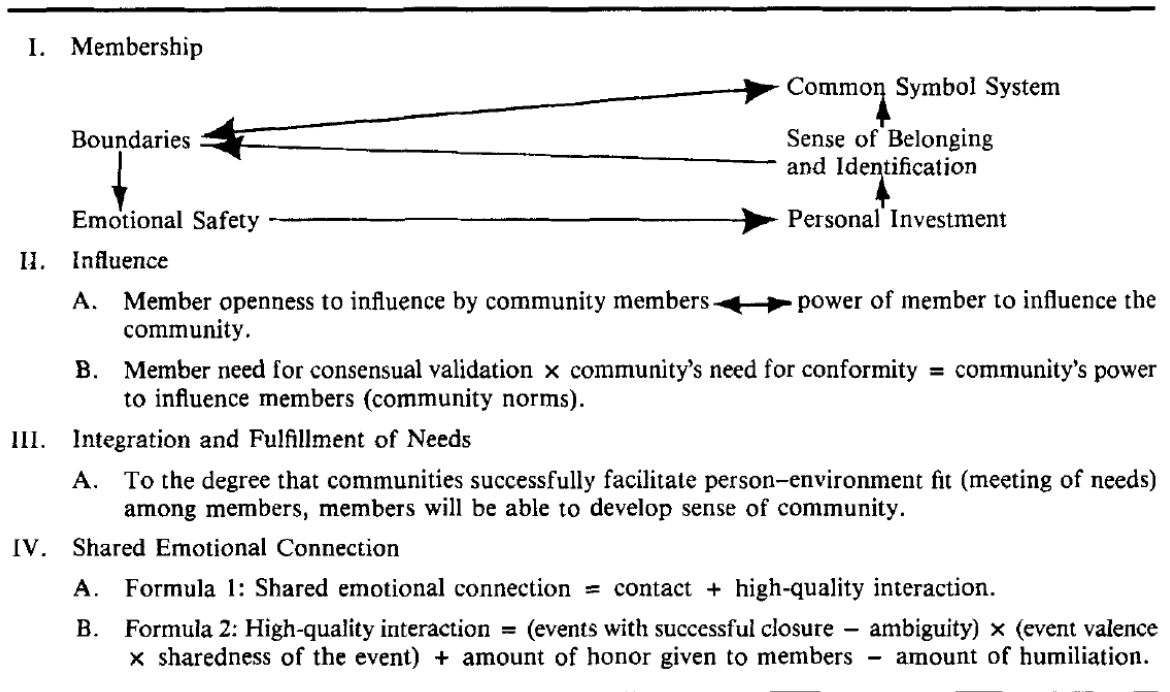
The research by McMillan and Chavez proves that it takes work to build a community, which requires both physical and emotional connections among members. First of all, members must acknowledge who is part of the community by considering the spatial, ethnic and socioeconomic relationships with other members. When designing with a community in mind, it's important to create a welcoming space for personal empowerment and contribution. Those individuals who invest, make changes and develop an emotional connection with their community become the source of influences that drives common goal and shared values among others. McMillan and Chavez's theory of Sense of Community sparks a lot of questions on what designers must ask when working with a community.

- How can design help community members understand their spatial, ethnic and socioeconomic relationships with others?
- How can design help community members develop emotional connection and ownership with their community?
- How can design facilitate a welcoming space that encourages collaboration among community members?
- How can design empower community members to become a source of influence in their community?
- How can design help community members understand shared values?
- How can design help community members identify common goals and needs?

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<sup>75</sup> McMillan, 14.

- How can design encourage constant engagement among community members?
- How can design create positive experience of the interaction among community members?
- How can design foster a community spirit?



**Figure 4.1. Elements of Sense of Community and Their Hypothesized Relationships.**  
 SOURCE: Table from David W. McMillan and David M. Chavis, “Sense of Community: A Definition and Theory,” *Journal of Community Psychology* 14, no. 1 (January 1986): 15, [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::aid-jcop2290140103>3.0.co;2-i](https://doi.org/10.1002/1520-6629(198601)14:1<6::aid-jcop2290140103>3.0.co;2-i).

## 2. Principles for Building a “Beloved Community”

Doug Shipman, a president and CEO at The Woodruff Arts Center, defines community as an act of “love thy neighbor” in his talk at TEDxAtlanta. He quoted from Dr. Martin Luther King, “In an interconnected world, the only way that we would develop the empathy required to solve our problems across our differences was by

building the beloved community.”<sup>76</sup> To answer the question: How do you build your capacity to be a neighbor? He said, “A combination of a mindset — the notion of a ‘beloved community’<sup>77</sup> and a certain skill set.”<sup>78</sup> He breaks it down into five attributes that community members can develop over time. The first is true respect to otherness in the neighborhood for their authenticity and the expression of yourself. The second is to develop the ability to listen with the heart to engage people who are very different from us. The third is having the flexibility of behavior. For example, if community members acknowledge cultural differences and adapt with an open mind, they create a space to invite people. Fourth is to have a tolerance for ambiguity, especially when entering a new community. Having ambiguity allows room for intimate conversation that is not about one party but provides an opportunity for different voices and positive exchange. Lastly, one needs to overcome the fear of accidental offense despite the differences in race, culture, age and social status. As creator of Mister Rogers’ Neighborhood, Fred Rogers said, “Love isn’t a state of perfect caring. It is an active noun like struggle. To love someone is to strive to accept that person exactly the way he or she is, right there and now.”<sup>79</sup> Shipman emphasizes on the transformative power of “love thy neighbor” when talking about social issues. Any challenge in different societal sectors such as economics, environment, human rights, poverty, is communal. The only way to address these communal problems is by pursuing human connection within the community, but most importantly, the neighbors.

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<sup>76</sup> Doug Shipman, “The secret to creating the beloved community: Doug Shipman at TEDxAtlanta. TEDx Talks. *Youtube video*, 1:55. Posted Mar 20, 2012. <https://youtu.be/cP5PAul3H4E>.

<sup>77</sup> The term “beloved community” was first used by the philosopher-theologian Josiah Royce, and was popularized by Dr. Martin Luther King, Jr.. “The King Philosophy,” accessed October 28, 2020, <https://thekingcenter.org/king-philosophy/>.

<sup>78</sup> Shipman, 8:12.

<sup>79</sup> Shipman, 16:55.

Shipman's principles of building a "beloved community" suggest what to consider when designing with a community. It is to reassure that the design solution should provide space for individuality and authenticity. The design solution must not aim to solve a person's problem but facilitate room for observation, conversation and trust among community members.

## **B. Modern Approaches in Designing Human Connection and Community Building through Design**

### *1. Design Trust for Public Space: Community Education Through Design*

Design Trust for Public Space is a non-profit that uses social justice and environmental sustainability to guide public space design. One of the programs of Design Trust is called Neighborhood Revitalization, which focuses on place-based community challenges through maintaining sufficient mixed-income housing availability, appropriate density, parks and public open spaces. To design a space that is vital, well-used, and managed for the community, they collaborate with community groups, city agencies, and private sector experts to ensure that neighborhoods are dynamic, livable and sustainable for New York residences.

Diego Beekman Houses (1996), part of Design Trust's *Improving Quality of Life through Design* project, aims to create a solution for Bronx-based public housing addressing decaying physical, social and economic conditions in the area. Design Trust's team facilitated a workshop for over forty tenants, architects, urban planners and developers. It also diversified management to formulate a set of design interventions to revive the quality of life in the Bronx neighborhood. The biggest challenge of public housing lies in the lack of funding for affordable housing for low-income tenants while providing proper living conditions for tenants, including facility maintenance, public safety, urban environment and social services. Design Trust's approach to the challenge was through collaboration with experts from different social sectors and especially the Beekman tenants.



The key success of the project is embedded in community education. The Design Trust team educates residents about community empowerment and resilience to take charge of making their neighborhood's improvements. They formed a tenant-led association, Tenants United for Better Living, that directly negotiates with the federal Department of Housing and Urban Development to prevent foreclosure and ensure the rehabilitation of the Beekman House. Instead of studying the issues and giving the tenants a design proposal, the design team works directly with them. They led a month-long project charrette to help them address the issues, understand the strengths and weaknesses of their community and develop design guidelines to shape their future renovations at the Diego Beekman Houses. At the end of the project, the Beekman tenants finalized a deal with the federal Department of Housing and Urban Development to take control of their sprawling development's 38 buildings and 1,200 apartments.<sup>80</sup>

## 2. *Participatory Community-Centered Design*

Participatory design, also known as cooperative design, was first used in Scandinavian countries in the 1960s. Judith Gregory, co-director of the Values in Design Laboratory at UC-Irvine, stated in her article *Scandinavian Approaches to Participatory Design* that the method allows people to improve their knowledge of an issue and the system in which they live in and increase democracy by giving community members to participate in the decisions that affect their lives and work.<sup>81</sup> Gregory included Morten Kyng's observation on Scandinavian participatory design, which is an experimental

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<sup>80</sup> "Diego Beekman Houses," Design Trust for Public Space, 1996, <http://designtrust.org/projects/diego-beekman/>.

<sup>81</sup> Judith Gregory, "Scandinavian Approaches to Participatory Design," *International Journal of Engineering Education* 19 (2003): pp. 67-74.

inquiry process and learning process that is broadly shared among groups of collaborators such as designers, users, experts and community organizer.<sup>82</sup> A present-day example by the Center for Urban Pedagogy (CUP) includes *Project in City Studies*, a program and series of visual guidebooks to educate and engage constituencies in civic matters. A CUP project team often includes a teaching artist, a teacher, a community coordinator and students. *Project in City Studies* requires participants to immerse themselves in the community, learn and share about the issues and co-create with the artist on the final outcome.<sup>83</sup> In this case, participatory design is an educational workshop, in which the designer and participants learn about the challenge and create the outcome together. CUP's participatory design provides a unique learning experience for both the designer and community members.<sup>84</sup> (fig 4.2, 4.3)

Sometimes, the design team reintroduces participatory design in the prototype brainstorming session to foster a sense of ownership with the community members and reassures a desirable, meaningful and usable outcome for the end users. As a result, a participatory design solution tends to be more impacting. For example, Open Space Studio collaborates with community hospital staff and the local neighborhoods in King, Thailand, to redesign their future hospital.<sup>85</sup> Community members are invited to build their dream hospital with familiar prototype materials such as clay, figures, cutout images, drawings and woodcraft sticks.<sup>86</sup> (fig. 4.4) Throughout the process, they not only

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<sup>82</sup> Gregory, 63.

<sup>83</sup> "City Studies," CUP, accessed October 5, 2020, <http://welcometocup.org/Projects/CityStudies>.

<sup>84</sup> *The Center for Urban Pedagogy*, accessed June 12, 2020, <http://welcometocup.org/Projects/CityStudies>HelloMyNameIsMinimumWage>.

<sup>85</sup> "King's Community Hospitals: Had Samran Hospital," Openspace, accessed June 5, 2020, <https://www.openspacebkk.com/kings-community-hospitals-had-samran>.

<sup>86</sup> 2017, *Openspace*, 2017, <https://www.openspacebkk.com/kings-community-hospitals-had-samran>.

produce effectual solutions but also build relationships with community members through shared social experience, conversation and interaction.

Project examples from CUP and Open Space Studio improve the design process and user participation by making complex information accessible to the users who drive the design outcome. This method tends to take a longer time than a non-participatory process because it requires more planning and choosing the right activity and materials that can generate insightful results. However, if design wants to honor and amplify a community, it must represent all members' voices throughout the process to make the design not only useful but also equitable.



**Figure 4.2: A Student Interviews A Neighbor as Part of CUP's Projects.** SOURCE: A student interviews a neighbor to find out her opinion on increasing minimum wage. Digital Image. CUP. "Hello, My Name is Minimum Wage." Accessed May, 2020. <http://welcometocup.org/Projects/CityStudies/HelloMyNameIsMinimumWage>.



**Figure 4.3: Students Create Illustrations During CUP’s Project in City Studies Program.** SOURCE: “Students create puppets as illustrations for the project.” Digital Image. CUP. Hello, My Name is Minimum Wage. Accessed May 2020. <http://welcometocup.org/Projects/CityStudies/HelloMyNameIsMinimumWage>.



**Figure 4.4: King’s Hospital Project Using Participatory Process with Local Community.** SOURCE: “King’s community hospitals: Had Samran hospital in Trang.” Openspace. Accessed June 5, 2020. <https://www.openspacebkk.com/kings-community-hospitals-had-samran>.

### 3. *Transition Street Movement: Building A Community Through a Grassroots Movement*

Transition Street Movement is an organization based in Australia whose mission focuses on improving neighborhood livability and a sustainable lifestyle. One of their project, Transition Newcastle—Creating Local Sustainability, aims to bring a community together to reimagine and rebuild the world as stated in its slogan: “How to change the world, one street at a time.”<sup>87</sup> According to Transition Newcastle website, the goals are to promote environmental and social sustainability within neighborhoods, build strong, connected communities, value relationship and quality of life over wealth and material goods and conserve the World’s finite resources.<sup>88</sup>

Communities within Transition Street are built using a project-based approach, which focuses on environmental sustainability. Working on a local project together help neighbors develop relationship with others, understand their responsibility in building a community they want to live in and showing them how to respond to significant environmental challenges. Part of the Transition Street movement is providing a step-by-step workbook to educate people about subjects of water, energy, food, transport, waste and consumption. Each chapter of the workbook explains the importance of living sustainably using concise infographic and include multiple worksheets and checklists that make it easier for participants to follow.<sup>89</sup> (fig 4.5, 4.6) It also instructs community leaders to organize discussion sessions, collaborate as a group, collect and evaluate data on energy usage and document the process.

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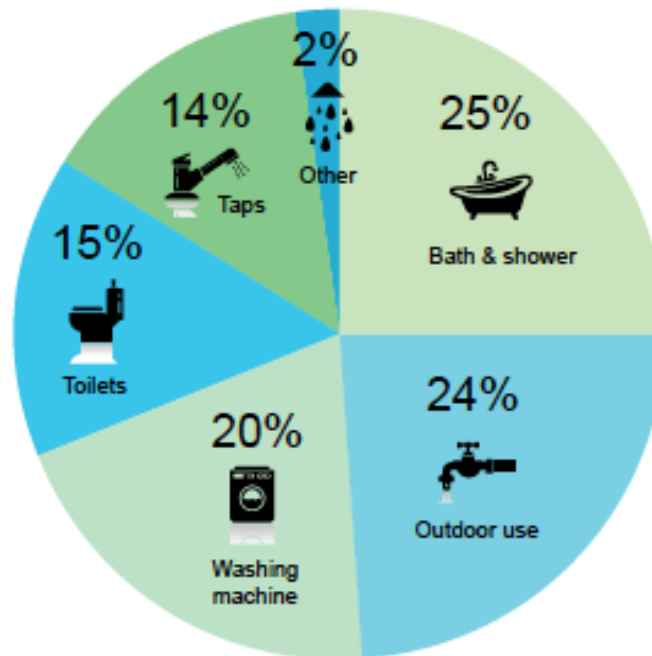
<sup>87</sup> “Transition Street: How to Change the World, One Street at a Time,” Transition Newcastle (Transition Street, March 2015), <https://bit.ly/3oE8u6e>.

<sup>88</sup> “Transition Newcastle Inc,” Transition Newcastle Inc, accessed May 5, 2020, <https://transitionnewcastle.org.au/>.

<sup>89</sup> Aaron Hodgson et al., *Water Used at Home*, 2015, *Transition Newcastle*, 2015, <https://bit.ly/3oE8u6e>.



Transition Street is an example of sustainable practice through building a resilient community of interest. By emphasizing co-creation among community members and addressing and improving neighborhood living conditions, Transition Street has become a platform for community members to contribute their voices and visions through building their own homes and communities. It also creates a social space for members to influence one another by sharing and learning skills and building relationships through regular meetings with the neighbors. Participating in locally based projects not only empower community members to lead, it also helps people understand the positive influences of a neighborhood's collective efforts by highlighting things that people cannot do alone through community education and active engagement.



**Figure 4.5: Water Used in The Home.** Illustration from the Transition Street's workbook. SOURCE: "Water Used in The Home." Digital Illustration. Transition Newcastle. <https://bit.ly/3oE8u6e>. 20.

my kitchen action plan		Will do	Have Done	N/A
FREE	Don't rinse dishes under running tap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FREE	Catch water while waiting for hot water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$-\$	Install tap aerators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FREE	Use dishwasher only when full	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$\$\$	Buy water-efficient dishwasher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other ideas: _____				
_____				

**Figure 4.6: Kitchen Action Plan.** Illustration from the Transition Street’s workbook. SOURCE: “Kitchen action plan to reduce water consumption.” Digital Illustration. Transition Newcastle. <https://bit.ly/3oE8u6e>. 26.

#### 4. *Street Debater: A Community-Centered Design Intervention*

Tomo Kihara designed a tool called *Street Debater* that is used by the homeless to ask for money from strangers. His invention breaks the social barrier and connects people by generating public discourse through conversation among people with differences, in this case, the homeless and pedestrians. The homeless are given a physical wooden scale with a drawable board where they can write questions or opinions about a particular topic.<sup>90</sup> (fig 4.7, 4.8) Pedestrians place coins to tip the scale. The experiment fosters competition, motivates participation and encourages discussion among strangers in public places. The research aims to show that conversation can lead to mutual connection and respect among people we don’t usually see themselves as equals.<sup>91</sup>

<sup>90</sup> Tomo Kihara, November 5, 2017, *Tomo Kihara*, November 5, 2017, <https://medium.com/@kihapper/street-debater-designing-social-alternative-to-begging-485db4afcc89>.

<sup>91</sup> Tomo Kihara “Street Debater,” 2017, <https://www.streetdebater.com/>.

Kihara's original approach to the project was to help the homeless overcome their under-representation of social status and make more money on the street. His interviews proved that the homeless' biggest challenge is not entirely about the act of begging for money, "they are throwing away their dignity in exchange for a few coins," Kihara highlighted.<sup>92</sup> Thus, the project now aims to reconnect the homeless equally to the society using an alternative persuasion approach. He collaborates with the homeless to come up with several prototypes and testing in public. The pedestrians are led to a chain of emotional reactions to the prompt, ignoring the differences in their unequal classes.

Kihara's case study is an excellent example of rectifying social polarization. People from different backgrounds can have positive conversations and interactions with other community members by shifting the design objective from helping the user perform a task sufficiently to fulfill their emotional value, in this case, self-expression, entertainment and social experience. The project also suggests that a design artifact as a facilitator can create a social space and opportunities for interaction among community members.

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<sup>92</sup> Tomo Kihara, "Street Debater—Designing social alternative to begging." *Medium* (blog). Nov 5, 2017. <https://bit.ly/3oBfeBQ>.





**Figure 4.7. Lead Debater in Amsterdam.** A homeless uses the street debater tool to prompt questions about social issues for a public conversation with strangers. SOURCE: Tomo Kihara. “Lead Street Debater of Amsterdam.” Digital Image. Medium. Accessed June 2020. <https://bit.ly/30BfeBQ>



**Figure 4.8. Street Debater Tool.** A homeless person in a street of Amsterdam. SOURCE: Tomo Kihara. Digital Image. Medium. Accessed June 2020. <https://bit.ly/30BfeBQ>

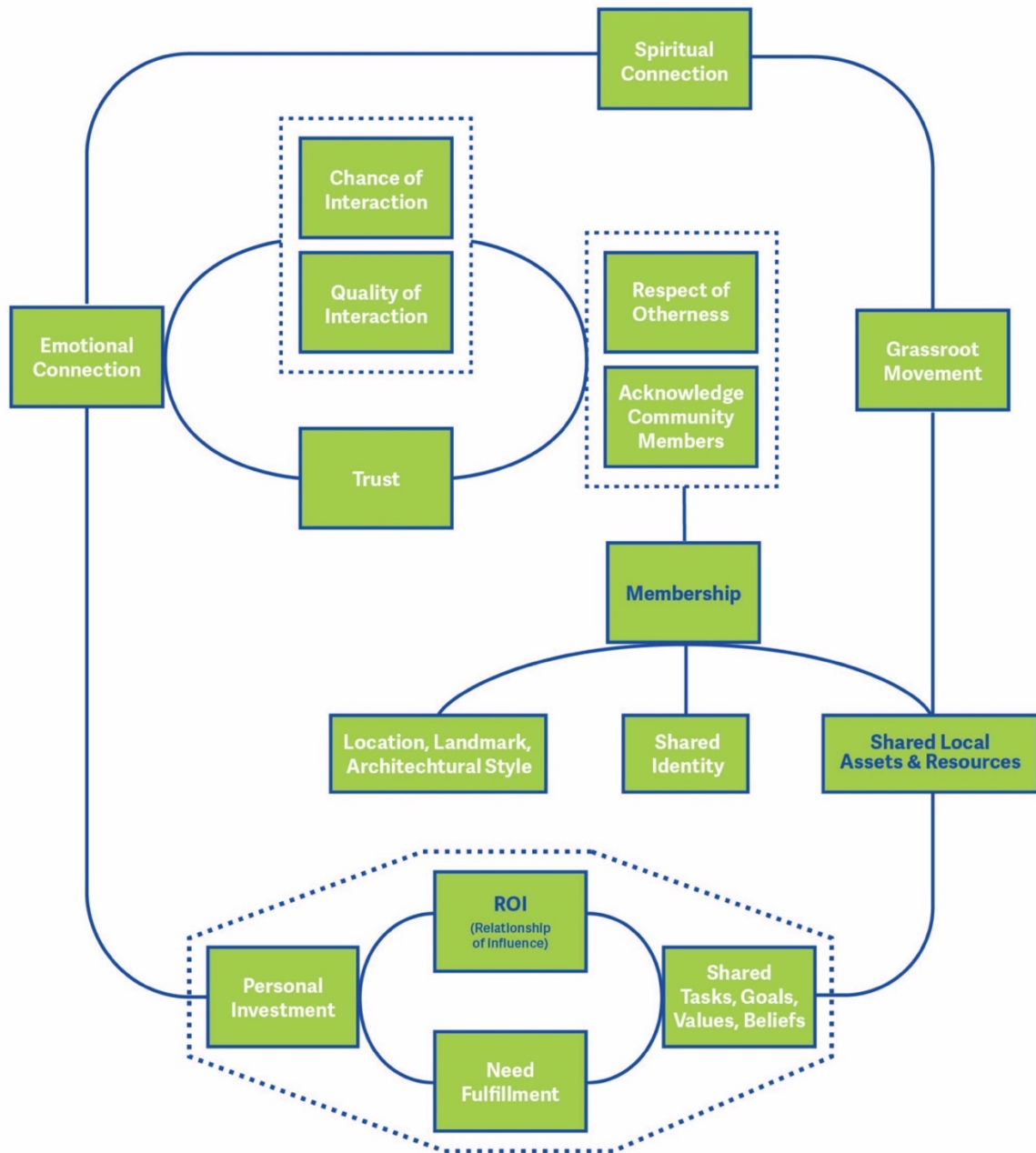
## **V. DESIGN AND IMPLEMENTATION**

### **A. The Design Concept**

#### *1. The Design Challenge and Objectives*

A Community's Path of Impact Diagram (fig 5.1) was developed to document the key components of a community throughout the primary and secondary research including interviews with community researcher, members and organizers, observational research and theories of community building and modern practices. The diagram shows the correlations between different elements of a community and identifies the areas that can use design to influence how a community is built. Throughout the research, the recurrent themes that neighborhood communities lack are Membership and Relationship of Influences (ROI). Membership can be established through the awareness of community members' shared identity and individualities. A neighborhood's shared identity includes the location, landmark, architectural style, shared local assets and resources. The individual identities of each member are achieved through community members' acknowledgement and respect for otherness, including the demographic, social and cultural characteristics that distinguish one member from another.

The other vital component that influences community building, ROI, requires personal investment and must provide needs fulfillment to members. Although the community's Membership and ROI are constructed of different attributes, they have a common characteristic, which are the shared values, beliefs, goals and tasks.



**Figure 5.1. Community's Path of Impact.** SOURCE: Author

The design objective is to inform neighborhood members about different attributes of their memberships and ROI, including acknowledging their communities, understanding the shared resources and assets, identifying common goals, challenges and tasks so that they feel empowered to connect with other neighborhood members and contribute to the collective efficacy.

## *2. Design Concept — Know Your Neighbor*

*Know Your Neighbor* is an educational board game that can be played within family, friend, and neighborhood communities at gathering occasions. It takes players on a journey of what it is like to be a neighborhood member. Throughout the game, players can get to know and connect with other players as their neighbors, learn about the functionalities, shared assets and resources of a neighborhood. The game instructs players to interact, perform daily neighborhood activities with other players, such as volunteer work, community tasks, discussing local issues, collaborating, and being rewarded for their contribution. The boardgame combines education and entertainment, which aims to inspire action and encourage players to take what they learn and apply to their daily interactions with the community.

To organize the game's interaction, here is a list of fundamental components to make up the game mechanics.

*The Game Loop:* Each player will choose a character with assigned profession, secret skills, resources, house and income. While players take turns traveling around their neighborhood using the spinner, they collect resources such as food, produces, garden tools, books, money and draw action cards that require them to interact and collaborate

with their neighbors on community tasks. Players can exchange their tools, discuss and vote on policies, build community amenities and facilities such as a hospital, school, community garden, playground, skate park and local businesses.

*Tension:* Tension of the game is built up when players are required to negotiate and with other players to come up with a solution that may affects everyone in the neighborhood such as spending more money on patrols, building a new school, hospital, budgeting for community park and improving the property.

*Obstacle:* Some action cards include new policies and changes that affect a few players but benefit others.

*Resources:* The game resources include money, action cards, property cards, tool cards, occupations and community building award and Ask My Neighbor cards.

*Victory Condition:* All the resources and community building awards that are counted by point at the end of the game. The winner has the highest point.

*Player Interaction:* Players persuade their neighbors to exchange the tools they need to complete their quests. All players must be able to compromise on certain decisions that affect the game. Players also have a chance to get to know other players through the Ask My Neighbors card deck.

*Participatory and Co-Creation:* The game includes a set of blank Wish Fulfilled cards that allow players to contribute to the game content. For example, they can write new action cards, suggest new properties, occupations, new policies and tools.

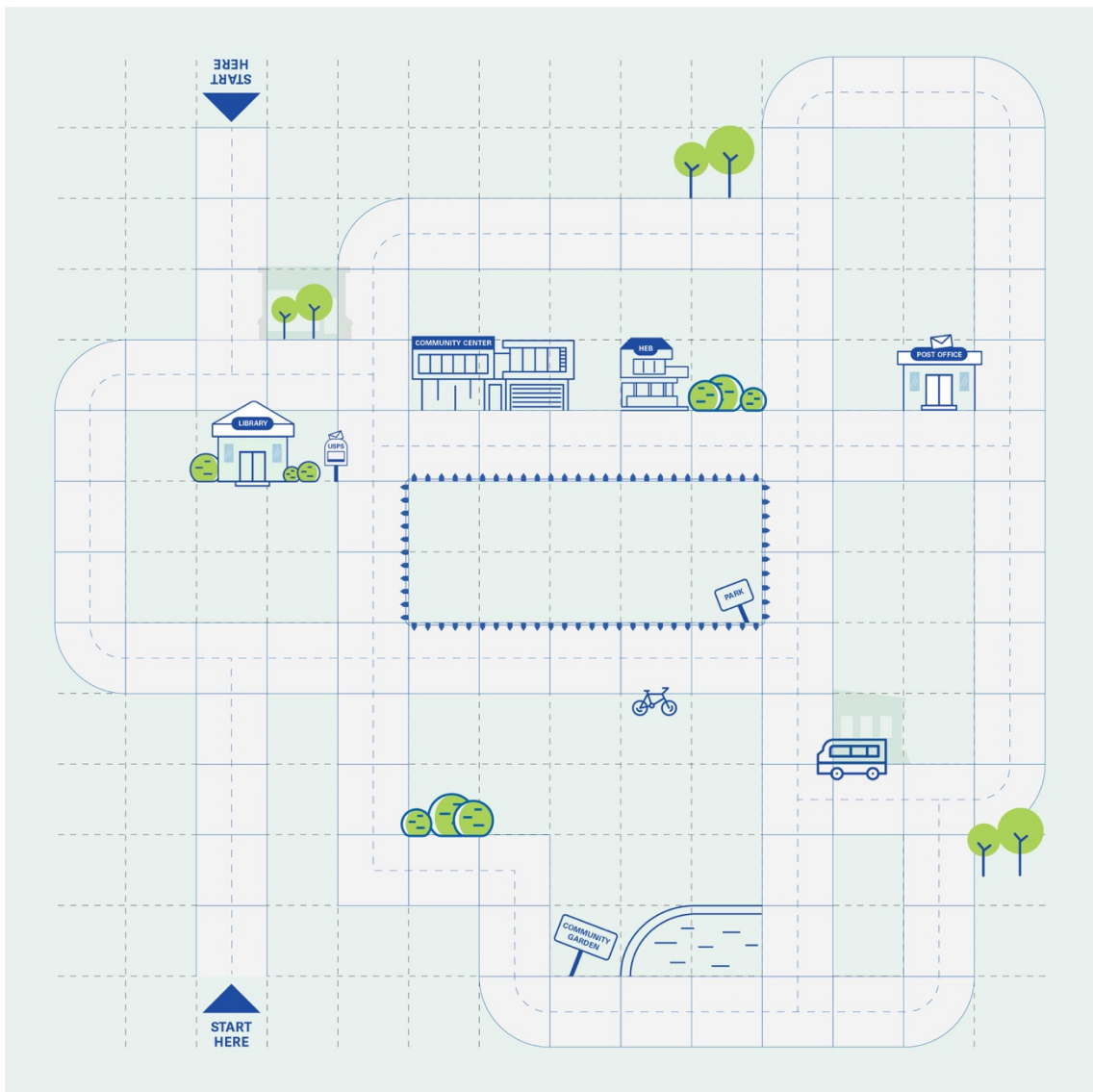
*Equity Design:* The game reinforces the idea of equity-centered design that requires players to listen and recognize the needs of each neighbors and act upon the community interest over personal benefit.

*Content:* The game's content covers a variety of topics from real-world examples such as zoning, placemaking, public safety, public health, policymaking, budgeting, transportation and infrastructure so that the players can walk away with a better understanding of their neighborhoods and apply these practices in their daily interactions with other neighborhood members.

## B. Prototype Building and Testing

### 1. The Design Elements and Prototype

The game board, a neighborhood map, includes designated areas for residents, public properties and amenities. To make sure these public areas are accessible to all community members, residential housing is located with equal distances. That means it should take players a similar amount of time or turns to get from their home to a desired public destination.



**Figure 5.2. The Boardgame Neighborhood Map.** SOURCE: Author

*Player Characters:* All characters have diverse cultural and socioeconomic backgrounds, professions, ages, incomes, religion, gender and sexual identities to reflect all members in the community. Blank cards are included for player to create their own characters.



**Peggy**

:: Retired  
:: Salary: \$1300/month



**Dana**

:: Photographer + Artist  
:: Salary: \$3200/month  
:: Single



**J.R.**

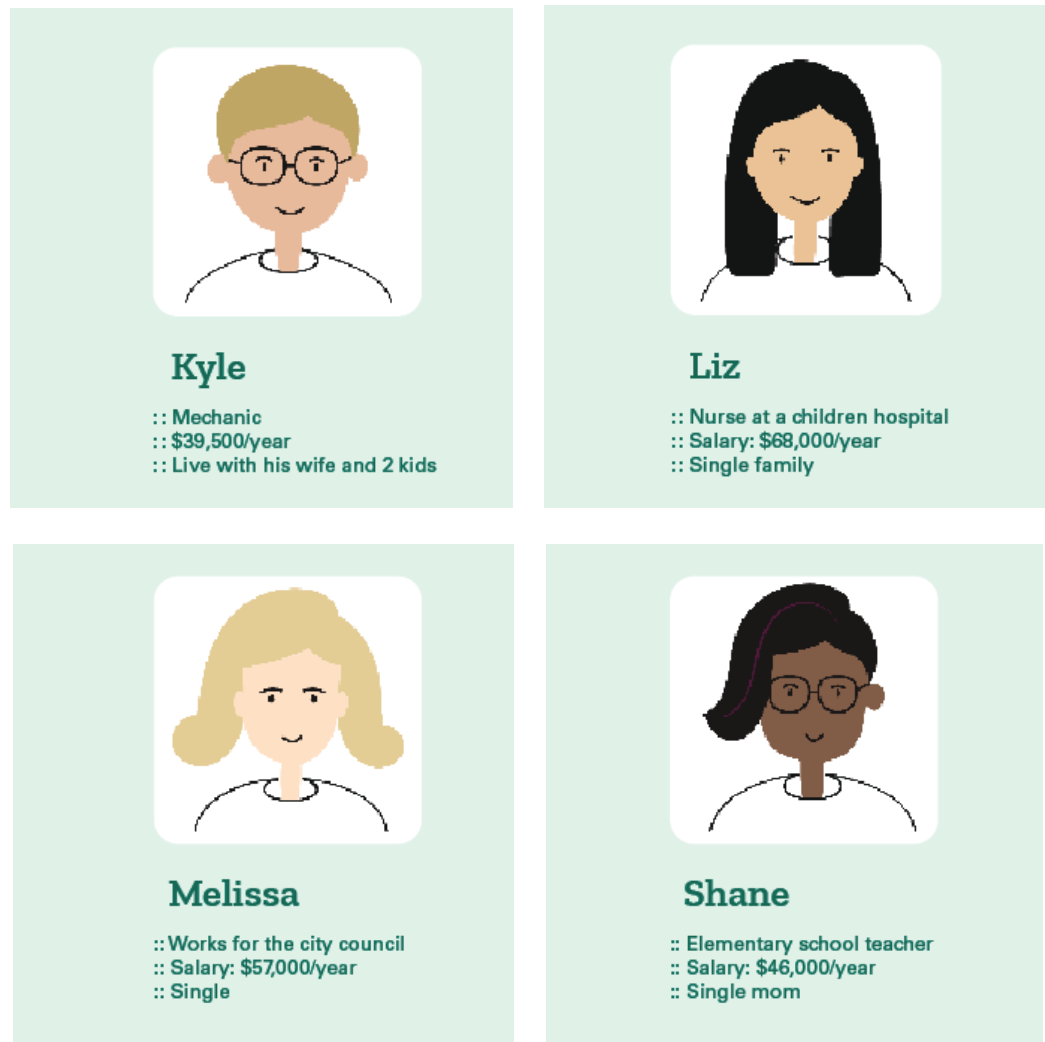
:: Business consultant  
:: Salary: \$5600/month  
:: Live with his wife.



**Joshua**

:: High school student  
:: Part-time worker  
:: Salary \$850/month





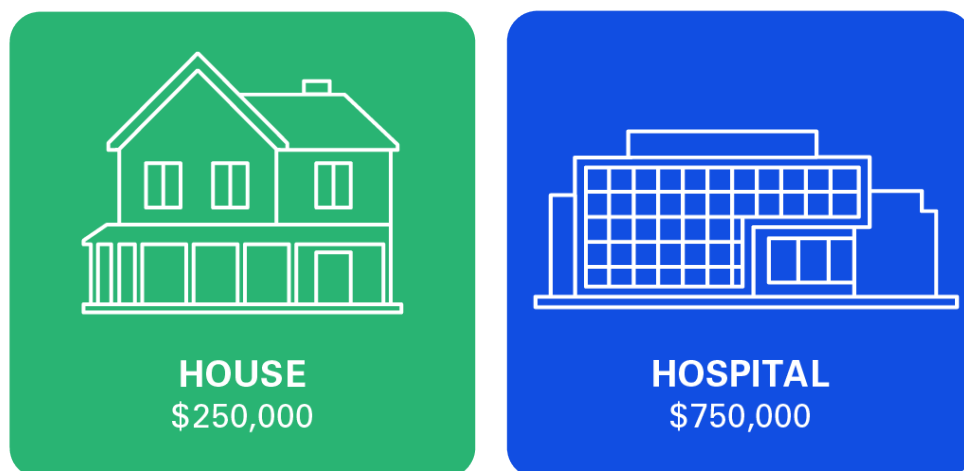
**Figure 5.3. Character Cards.** SOURCE: Author.

*Action Cards* suggest simple tasks that people can complete with and for their neighbors in real life. This educational content helps players understand what it's like to be a good neighbor through fun activities and shared responsibilities. Some action cards require players to collaborate with others on a community task. The game finishes when all the action cards are used.



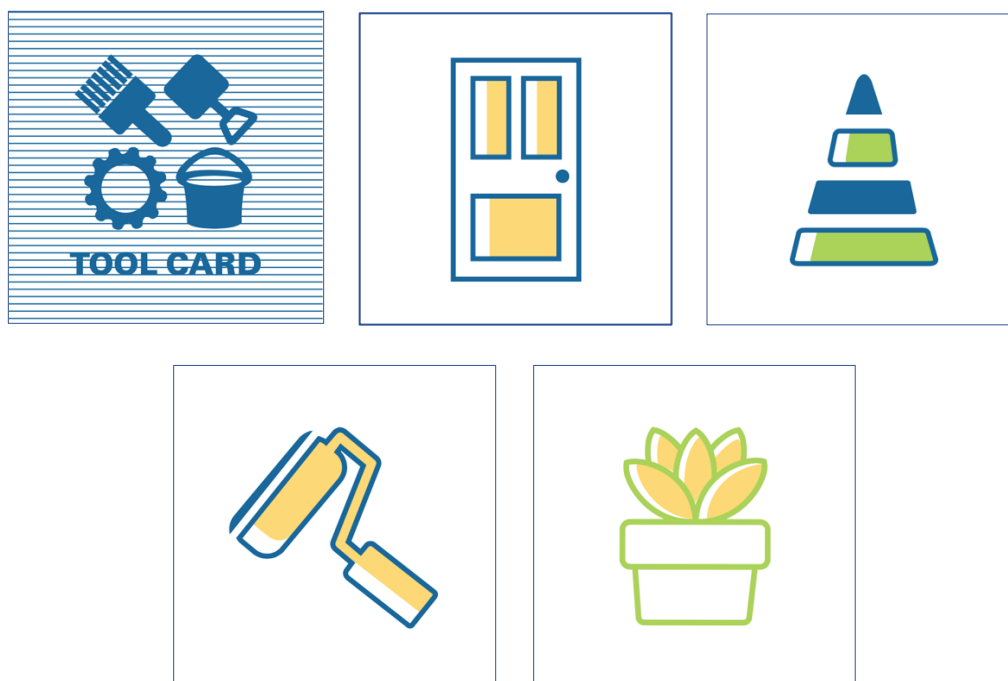
**Figure 5.4. Action Cards.** SOURCE: Author.

*Property Cards* cover the fundamentals of public properties and amenities that every neighborhood should have access to such as schools, hospitals, green spaces, post offices, bike infrastructure, public transportation and grocery stores. The deck also includes local businesses to propose the idea of financial investment in sustaining local wellbeing as well as promote equal business opportunities for all community members.



**Figure 5.5. Property Cards.** SOURCE: Author.

*Tool Cards* are used as another source of currency of the game besides money. Tool Cards convey the idea that a community's shared resources don't limited to a bill, but they can come from unique talents and skill set of each neighborhood member.



**Figure 5.6. Tool cards.** SOURCE: Author.

*Community Building Points* are given to players when they help a neighbor or make a contribution to the community or a good cause.



**Figure 5.7. Community Building Awards.** SOURCE: Author.

*Instruction manual:* includes game objectives, rules and game contents.

*Ask My Neighbor* is a question deck that facilitates conversation between players, encourages people to share their points of view, stories and simply get to know each other better.



**Figure 5.8. Ask My Neighbor Question Cards.** SOURCE: Author.

## *2. User Testing and Feedback*

The objective of this testing is to understand if the board game could be an educational toolkit that helps people acknowledge their neighborhood community and understand the shared resources and ways to establish their membership through contributing, influencing and being influenced by other community members. The testing protocol process includes: the user examines and describes the game without being given any instruction, the user reads the instruction and gives feedback on the game mechanics, the user follows one game loop and gives feedback on the content, user flow, and interaction among players in the game.

The majority of feedback addresses the game content and mechanics. First, the user suggests adding unique skillsets to each character card to solve the quests from the action cards or specific neighborhood problems that other characters don't have the right skill set or tool to do so. Highlighting personal assets and strengths not only implies the shared resources that neighbors can gain from each other, but it also creates a competitive yet collaborative atmosphere for the players. Second, it's important for the user to know when the game ends and how to win, which needs to be clarified in the instructions. Lastly, choosing a focus group of audiences, who will be interested in playing the boardgame, will determine the game mechanics.



Figure 5.9. The Prototype. SOURCE: Author's own photograph.

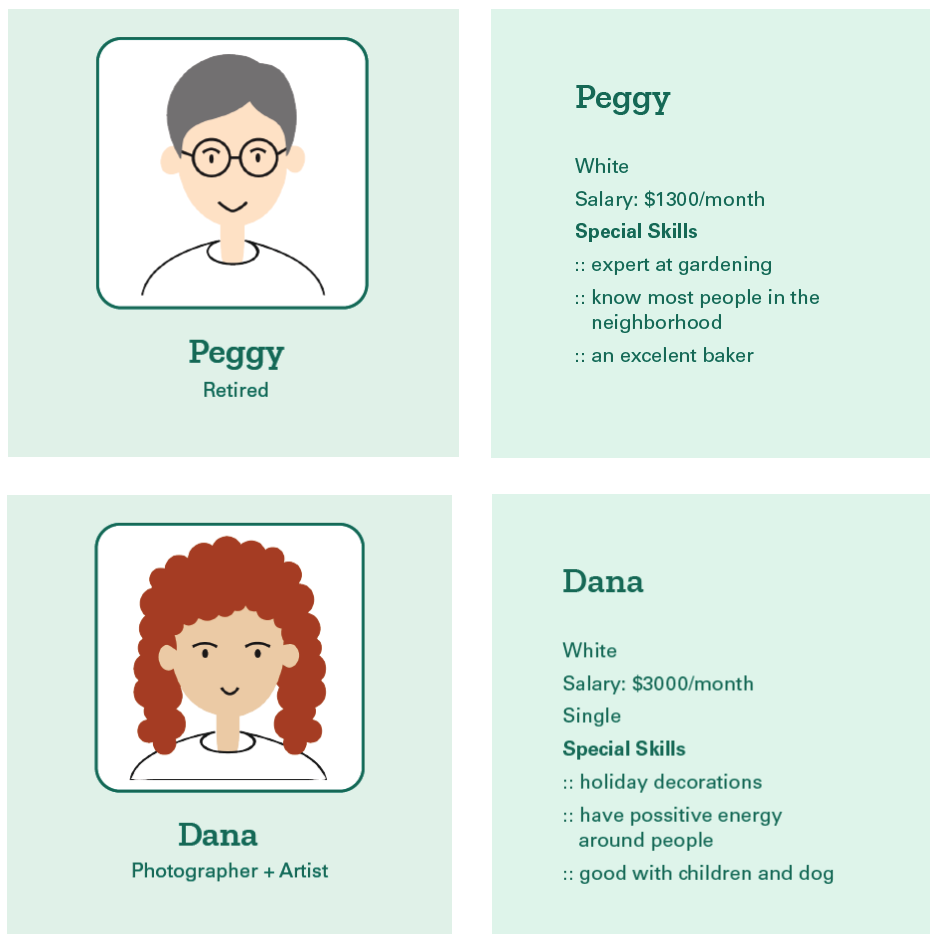




**Figure 5.10. User Testing with a Medium Fidelity Prototype.** SOURCE: Author's own photograph.

### 3. Revision

The revised prototype continues to be designed for friends, families, and neighbors at casual gatherings. Each character's card will include a tool set and special skill outside of their professional expertise. Since the goal is to create an educational tool to teach people about their relationship with the community without sacrificing the entertainment value, one part of the game is to facilitate an opportunity for people to enjoy each other's company and build friendship through storytelling. The other half of the content revolves around the idea of building community engagement and resilience through discussions and action learning. The next user test will be conducted with an updated prototype before making the final product.







**J.R.**

Lawyer at a local firm

**J.R.**

Latino

Salary: \$8200/month

Live with his wife

**Special Skills**

:: knowledgeable about  
finance, laws and policies

:: a great host and speaker



**Joshua**

High school student  
Part-time grocery store worker

**Joshua**

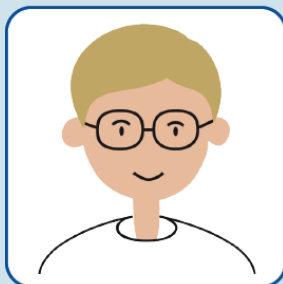
Latino and Black

Salary \$850/month

**Special Skills**

:: good at science and outdoor  
sports

:: understand environmental  
issues and food sustainability



**Kyle**

Mechanic

**Kyle**

White Latino

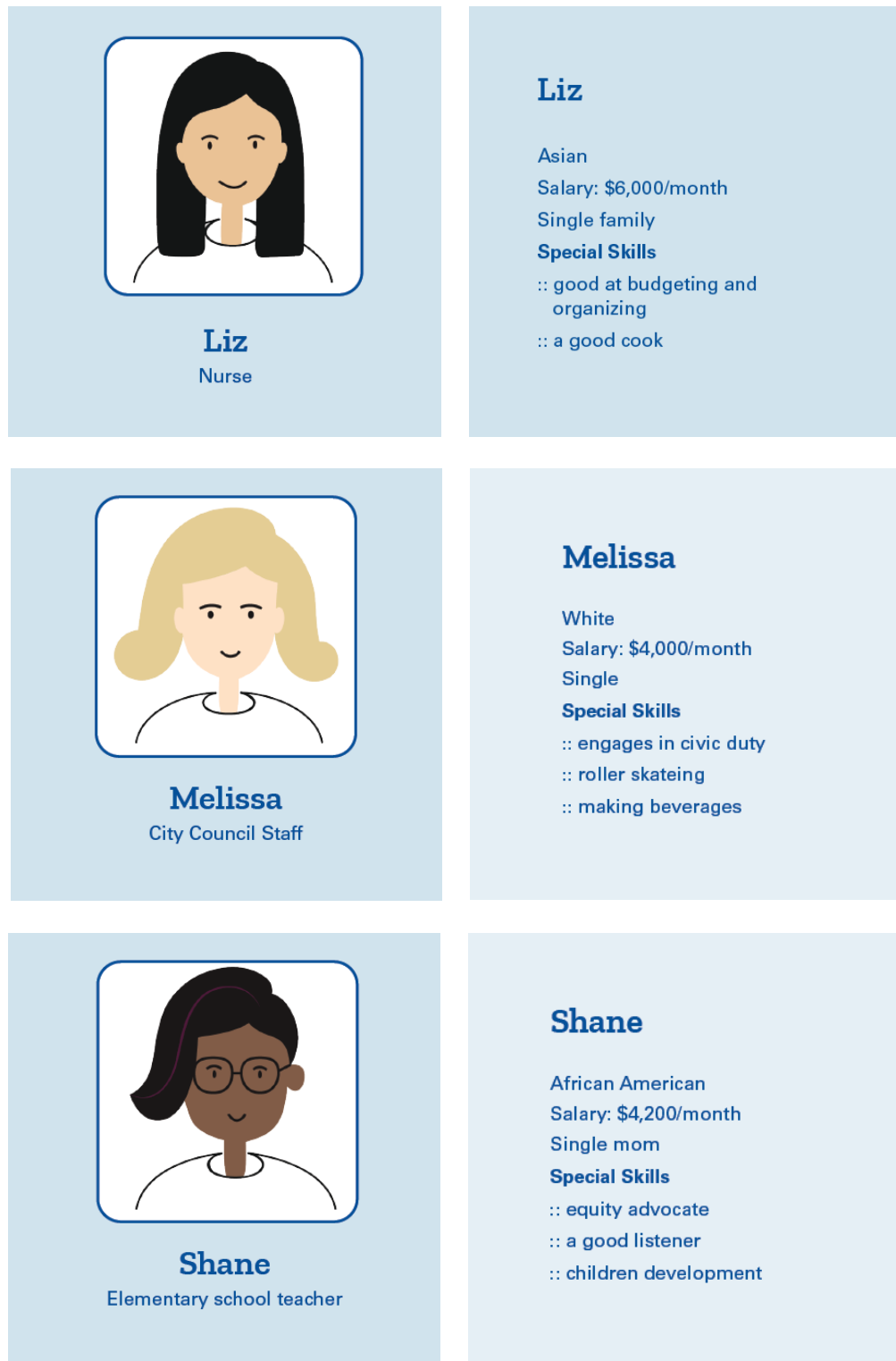
\$2,700/month

Live with his wife and 2 kids

**Special Skills**

:: building and fixing machines  
and furnitures

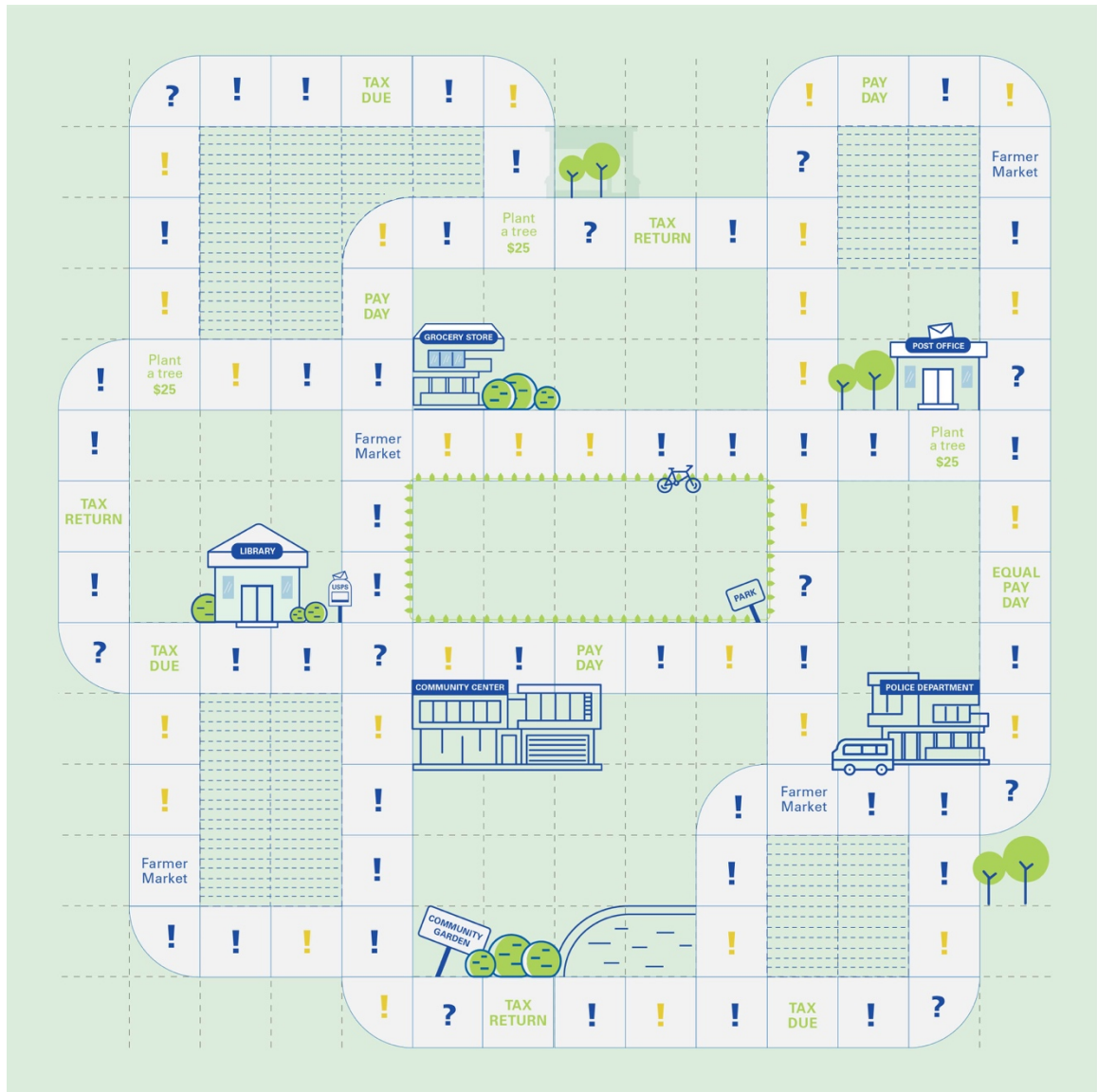
:: play music



**Figure 5.11. Revised Character Cards.** Character cards include each person's specialties such as skills and tools. SOURCE: Author.



**Figure 5.12. Revised Action Cards.** Action cards focus on two type of contents: public policy and community activities. SOURCE: Author's own photograph.



**Figure 5.13. Revised Neighborhood Map.** The map is simplified by using visual icons and action phrases on each block that indicated what card to draw. Residential areas are marked with horizontal patterns. SOURCE: Author.











**Figure 5.14. Revised Prototype.** SOURCE: Author's own photographs.







**Figure 5.15. Know Your Neighbor Board Game Digital Mockup.**  
SOURCE: Author.

## **VI. CONCLUSION**

### **A. Conclusion**

There is no doubt that social technology and mobile apps allow people to broaden their networks while impairing the concept of a community and its functionalities in relation to other members. Social media proposes the possibility of people being global citizens and part of diverse online cultures and subcultures. Because there are no boundaries or physical characteristics that define who is part of the community and who is not, it is hard for the users to understand the type of memberships they have in an online community as well as to acknowledge other online community members. To mitigate the challenge, there are many grassroot movements that utilize an online platform to build communities of shared resources, goals, values, tasks and facilitate a space for people to influence one another. However, virtual communities lack many key elements of a community, such as quality of interactions, emotional connection, trust and lack membership. These are also the big challenges when designing for human connection and community building online — increase quality of interactions, help people build emotional connection and trust and create space for them to listen with the heart and respect for otherness.

On the other hand, chance and quality of interactions, emotional connection, trust, and lack of membership can be facilitated in a physical community. However, a physical community where people live in close proximity experience and face similar challenges. Therefore, to build a sustainable and resilient physical community, people must acknowledge the local shared resources, the common challenges, goals, tasks and act on them intentionally and through personal investment.

The thesis research drawn from neuroscience, psychology and anthropology emphasizes the human's need to connect and belong whether it is desirable or not. Although the emergence of online social platforms makes it easier to connect with people despite their distances, virtual communities cannot replace physical communities. The thesis's case study on the neighborhood reveals potential areas that visual design can influence people to partake in the creation of their community as shown in the *Community Path of Impact* diagram. Although the diagram highlights different courses of action that community members, leaders and organizations can pursue to form and strengthen their communities, the project aims to revive existing resources that neighborhood members already have the ownership of, including their membership and relationship of influence through the shared resources, assets, challenges and goals.

The *Know Your Neighbors* board game is an educational tool to inform people about their existing communities, the shared resources and co-benefits among community members. The boardgame takes players on a journey of what it is like to be a neighbor, to agree or disagree, take part in the collaborative processes and actions for the changes they want to see in the neighborhood. Throughout the game, players have an opportunity to learn more about each other, to listen, have conversations and make friends. Combining both education and entertainment values, *Know Your Neighbor* makes learning about community fun, engaging and informative so that players can walk away asking themselves three questions: Who is in your community? What does your relationship with the community look like? In what ways has your community influenced you and vice versa.

The biggest obstacles of the thesis project are reframing the challenges and designing for human connection and community building. To understand the feasibility of the project and potential areas where a design solution can be applied, the designer chose to work within the context of a neighborhood, a community that is accessible to the designer as a member. To avoid intangible design outcomes that cannot be executed or measured, the thesis project is confined to the intersection of visual design and human-centered design, including design for social good and design research. For this reason, the designer established three framework questions for the project: How can the project guides future creative practices? How can the project contribute to the field of visual communication design and design education? How can the project inspire changes in the community and society?

In addition, the thesis proposes that visual communication design is not limited to traditional forms such as designing a brand, logo, poster, campaign, website or mobile app. What if visual design can build friendships, connections, parenthood, trust, community and policy?

### *1. What Does It Mean to Design with A Community in Mind?*

When putting the community at the center of a design project, designers should reimagine what kind of community and society people want to build together, not only for themselves but also for the teachers, the single parents, the healthcare workers, the teenagers, the architects and the school principals who live in the same neighborhood. Community-centered design can promise an equitable outcome as it not only brings together diverse voices of all members from different socioeconomic backgrounds, but it

also encourages people to bring in their personal assets and resources. In comparison to user-centered design, it tends to benefit a specific group of consumers who share social status, come from a similar income household, or live in a certain part of a city, especially in segregated cities.

When coming up with the design concept, from a community-centered perspective, the questions asked replace singular pronouns like he, she and them with ‘community members.’ Below is the list of questions used in the process of generating the boardgame’s contents:

1. What is the community persona? Demographic, income, cultural and socioeconomic background
2. What type of personal assets/resources that the community have access?
3. What type of local assets/resources that the community have access?
4. What type of resources that the community wish to have access to? And why?
5. List some important personal beliefs or values of all community members?
6. What are the common beliefs or values shared by community members?
7. What are the challenges community members facing?
8. What are the challenges the community as a whole is facing?
9. How do you envision the changes in the community in the near future?

## *2. What Does It Take for A Designer to Build a Community?*

Building a “beloved community” is hard, tiring and sometimes discouraging. It requires a lot of energy, time and effort. Because each community has its own social fabrics and characteristics, it is vital that the designers step outside of the studio to make

connections and build relationships with the community members. Although designers are known as creators, they can't build a community. But with their skillsets, a curious mind, a vision and creativity, designers can inform, inspire and influence people to build the future communities and society they want to see. Most importantly, designers must have a passion for working with people and their communities.

### **B. Future Investigations**

Although the feedback from the first user test on the prototype was positive, *Know Your Neighbor* game's content and the mechanics can be improved to emphasize the interactions and relationships among all characters and their roles and contributions to the neighborhood community. One key consideration in future development is conducting a second user test with the neighborhood members using the revised prototype. The second user test aims to engage the users in the content co-creation process, such as adding community shared tasks, resources and new policies of different social sectors. The final prototype of *Know Your Neighbor* will be set up in a public space such as a public library, community park, or public square with a signage to invite the community members to participate and provide feedback. If the game will be mass produced, a website will be created for neighborhood members to purchase online and submit new content for the action cards, characters, and properties that resonate with local resources, challenges and demographics. Participants will have the opportunity to customize the neighborhood map to reflect their geographical location. Hopefully, the educational board game will become a resource for neighborhood members to consider leading local community-building projects.

Within visual design education, the design process used in the thesis, community-centered design, can be implemented in the classroom. Community-centered design creates a solution based on a community persona instead of a user persona. In this case, the key question should be, What kind of community do people want to build? instead of, What does the user need? This approach encourages students to use their design skills to work on social matters, connect with the communities and create equitable outcomes. It also opens opportunities for visual communication students to work in public, civic and community sectors besides branding, advertising, interactive, UX/UI and publication fields. Besides, visual communication design solutions can be explorative and experimental so that both the teachers and students can reinvigorate what visual design can do when it lives beyond the traditional platforms.

The research provides a Community Path of Impact diagram, which can be used for other community-engaged projects. The diagram is designed to help project leaders foresee the direct and indirect impact of a solution based on existing elements in their community. It can also help them identify missing elements to achieve the community's goal. For example, suppose social technology wishes to establish a sense of community membership. In that case, it must first establish the three attributes of community membership, including a shared identity, social fabric and online shared resources. If social technology aims to build trust, it needs to consider creating a solution that facilitates quality interaction and emotional connection among community members, helps people acknowledge their online community members and creates space to respect otherness. Because these five attributes: trust, chances of interaction, quality of interaction, community member acknowledgment and respect of otherness are closely

connected, working toward one attribute in this group can create organizational changes.

Using the diagram in community projects can help people plan it better and reach feasible goals.



## **APPENDIX SECTION**

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## **Appendix A: Evaluating User's Social-Technology Relation and in the Social-Physical Environment Survey Questions**

1. What is your age group?
  - Baby boomer (born between 1944 and 1964)
  - Gen X (born between 1965 and 1979)
  - Gen Y/Millennial (born between 1980 and 1994)
  - Gen Z (born after 1994)
2. Where do you live? (check all that apply)
  - City Central
  - Suburban Area
  - City Outskirts
  - Small Town
  - Large City
  - Medium City
  - Gentrified Neighborhood
  - Apartment Complex
  - Condo
  - House
3. What is your employment status? (check all that apply)
  - Full-time
  - Part-time
  - Self-employed
  - Work from the office
  - Work from office
  - Not currently working
4. Rank the type of people you interact with the most in person with 1 being the most interaction to 5 being the least interaction.
  - Family members
  - Coworkers
  - Close friends
  - Acquaintances
  - Strangers in public places
5. Rank where you spend most of your time outside of your home with 1 being the most to 10 being the least.
  - A park closed to my neighbor
  - Coffee shop

- The gym
  - Trail
  - Restaurant
  - Public library
  - Downtown
  - Shopping area
  - At a friend's house
  - At public transportation station
  - Others (please specify) ...
6. Rank the type of people you interact with the most online with 1 being the most interaction to 5 being the least interaction.
- Family members
  - Coworkers
  - Close friends
  - Acquaintances
  - Strangers in public places
7. How often do you have contact with your family and friends using online platforms such as social media, texting apps, etc.?
- Once a week or more
  - A couple times a month
  - Once every other month
  - Once a year or less
  - Never
8. How often do you have contact with your family and friends in person?
- Once a week or more
  - A couple times a month
  - Once every other month
  - Once a year or less
  - Never
9. How satisfied you are with the relationships you form or maintain online?
- Very much
  - Satisfied
  - Some sort
  - Not satisfied
  - Disappointed

10. How satisfied you are with the relationships you form in person?
- Very much
  - Satisfied
  - Some sort
  - Not satisfied
  - Disappointed
11. How much does social technology *negatively impact* your personal relationships, personal health, and community connections?
- Very much
  - Moderate
  - Somewhat
  - Not very much
  - Not at all
12. How much does social technology *positively impact* your personal relationships, personal health, and community connections?
- Very much
  - Moderate
  - Somewhat
  - Not very much
  - Not at all
13. In which of the following environments do you make the strongest connections with other people?
- Through an app (Meetup, Bumble, Tinder, etc.)
  - Social media
  - Text message
  - At a public place (park, coffee shop, public library, trail. grocery store, etc.)
  - Social event
  - In a community club or organization
14. What do you value the most when making connection with others?
- Sharing things in common
  - Doing similar activities
  - Learning about different point of view/perspective
  - Sense of community and belonging
  - Physical interaction (eye contact, touch, etc.)
  - Being able to understand others in a deeper level
  - Being understood by others
  - Intimacy
  - Happiness
  - Others (please specify)...

15. What is your opinion on using social technology (apps, online messaging tools) to make connections with other?
16. What is your opinion on making connections in a physical environment, as opposed to on a digital platform?
17. Would you prefer making connections with others through a digital space or a physical space?
  - Digital space
  - Physical space
  - Both
18. How do you prefer to communicate through digital platforms? (check all that apply)
  - Text
  - Emoji
  - Gif
  - Picture of yourself
  - Video
  - Recording your voice
19. Which of the following interactions do you most frequently perform online?
  - Click a Like button
  - Share a post
  - Comment on a post
  - Create a post
20. What is the most frequent interaction you perform when talking to someone in a public space?
  - Greeting them
  - Smile
  - Commenting on their outfits or accessories
  - Start a conversation
  - Making eye contact
  - Avoid conversation with strangers
21. What advice do you have for deepening your personal connections to others online?
22. What advice do you have to deepening your personal connections to others in public space?

## **Appendix B: Sense of Community and the Roles of Community Organizers in Facilitating Community Engagement and Connection Interview Questions**

### **Section 1**

1. How often do you interact with your neighbor? In which way?
2. Do you get involve in neighborhood events, planning and budgeting?
3. What is the biggest challenge when it comes to getting involves in the neighborhood community?
4. How can we make it easier for people to participate?
5. What do you like about your neighborhood?
6. What are some benefits when people get involved in the neighborhood?
7. Why is it important to be part of and engage in the neighborhood activities?
8. In what scenario that people develop connection with their community?

### **Section 2**

1. Why are you passionate about community building?
2. What is the role of storytelling in building connection and community?
3. What are some key elements of a community?
4. We're living a hybrid culture. Social tech exits in our physical spaces every moment. How do you think that affect the way we connect with others and find our communities?
5. Base on the challenges you address, what are some approach es for us to build our community?
6. How can we sustain our community?

## Appendix C: Prototype Testing Questions and Feedback

1. **Do you think the boardgame is a good education toolkit that helps community members to acknowledge their existing community — the neighborhood they live in and the shared resources among community members?**

Yes and no. The Yes: It's a really fantastic idea. The boardgame is the perfect format for creating an informal and fun setting for interaction among diverse groups of people—the kind of setting where people who normally don't "hang out" can have some reason and ground rules for interacting together. The kind of setting where people are able to unpretentiously “come as they are,” meet as equals, and are more likely to let their guard down because everyone is relaxed and laughing. Content that alternately educates people about the things they may not know about (e.g. Night Out) or encourages people to imagine themselves in situations where they need to be engaged with their community (e.g. returning a lost wallet).

I especially like the idea of getting people to brainstorm about creating some kind of neighborhood-oriented project out of their imagination. In my experience, that's something people generally have very little real-life experience within the context of their community. The initiative that spurs agency begins with imagination. Creating a low-stakes environment where people can exercise out-of-the-box, entrepreneurial thinking to begin can help lay the groundwork for people taking action in real life.

The no: I'll reiterate that the boardgame mechanics are still a bit all over the map. There is so much education and community building that you are trying to achieve are admirable, but it must be secondary to the actual game mechanics.

Boardgames must have clear rules, objectives, beginning and ending. Every element and artifact of game play must have a clearly defined purpose and role. There should be tension and balance between the various elements and artifacts as well. A very basic example of this kind of tension and balance would be the rock-paper-scissors game. Creating a well-balanced boardgame is very challenging. At the end of the day, if the boardgame is unplayable in a practical sense, your wonderful educational objectives cannot be realized.

**2. Do you think the player may apply the things they learn from the board game in their daily interactions with their neighbors and get more involved in the community?**

Absolutely. I think role playing how you would, for instance, go about trying to build a community garden space in your local park could translate to people taking the tentative first steps to doing that sort of thing in real life. It's a bit tricky because everything municipality will vary on the kind of hoops the neighborhood would jump through, but I think there is definitely enough commonality to make it widely applicable. For instance, creating a social media campaign, organizing a neighborhood association, petitioning your representative, going to City Hall, fundraising, and dealing with code compliance are all different things that people can do in the game that, in turn, can help demystify what at first glance seems an overwhelming task IRL. Or on a smaller scale, helping return a lost cat to its owner in the game can help a person feel less shy or intimidated about taking those same steps in real life.



You may have already come across it, but I strongly encourage you to read up a little on Albert Bandura's Social Learning Theory. I could be wrong, but his work seems to underly your projects premise—the idea that new behaviors can be learned by modeling it from others.

I should also probably add your phrasing "may apply" is pretty key. While I absolute believe many people *would* be more disposed to get more involved with their community as a result of playing this game, I also suspect that those who are positively influenced are those people that are already close to the tipping-point. By tipping-point I mean people who just need a good nudge to take action. Socially recalcitrant individuals would probably be unaffected.

### **3. Who do you think would be interested in playing the game?**

Anyone who likes boardgames is potentially interested. Hard-core gameboard players are always up for trying out a new game. This particular audience will have discriminating tastes, however, and will be unforgiving sticklers for internally logical game mechanics and a good of balance of tension.

That input aside, as it stands now, you don't have a clear audience. You first need to iron out the mechanics of gameplay. There's a lot going on in your game that requires higher orders of thinking and communication—which is great—but that begins to rule out certain age groups who lake the patience and intellect to grapple with.

I think you also need to think about setting. You mentioned how you would love to see it just lying around in a park ready for strangers to use it on a whim—which is a lovely idea and vision—but that invites a host of its own complexities. I

would need to be simple enough for them to be very few rules and you couldn't have a lot of small playing pieces that are easily stolen or lost.

It's a important goal for you that this game is an opportunity for strangers to interact—also fantastic—but that means that it's not necessarily geared for family game night where, generally speaking, the same small handful of people would be playing it now and then.

In your boardgame's current manifestation and trajectory, along with the type of social and behavioral objectives outside of the game play you have in mind, I think the ideal setting might be a community-centered type place. Places like the YMCA or the library, recreation centers at parks, and commons area in places like dormitories.

**4. For someone who hasn't involved in their neighborhood community, would they be interested in playing the game?**

Oh yeah, definitely. People who like to play boardgames, in general, are not going to decide whether or not to play any given boardgame based on thematic content. I'm married to a big-time boardgame nerd and some of his best friends are big boardgame nerds, too. Together, we've played games that are thematically oriented around spaceships, deep sea adventures, haunted houses, feeding pandas, cutting gemstones, Roman conquest, fairies, zeppelins. Boardgames can be about anything. The thematic content of a boardgame is pure window-dressing. The core of a boardgame is the mechanics of the game play itself. People will love or hate a boardgame based on the mechanics. That said, the window dressing is important, a gameboard should look visually appealing as well. And the choice of thematic content can make a game more charming and endearing.

In my mind, the brilliance of your project is that people will play the boardgame simply because it's fun to play it. They won't even necessarily be conscious of the fact that they are also building wonderful behavioral habits with regards to community building along the way. Playing a game is its own sort of flow-state of mind. I haven't read the science on it but I suspect it's the sort of heightened mind state where it's easier to unconsciously learn new things.

I would be careful not to be too overt in the educational objectives because it can easily come across as pedantic. No one likes to hit over the head in a dogmatic way. If people feel like they are being forced to be good neighbors and actively engaged citizens, I think they will be turned off. I mentioned this before, but as of right now there is so much you are trying to get people to think about and learn about. It's a little overwhelming and I think you might find more success if things were simplified more. Just focus on the most important message.

**5. What are other things players learn after playing the board game?**

It's hard to say at this stage because you still need to get the game mechanics and your audience nailed down. I will reiterate a suggestion that I had made during our meeting. I really like the idea of your boardgame being one of those kinds of game where everyone either wins together or loses together. I like this because games like this by their nature encourage cooperation and communication, building alliances and making compromises. Poetically, it also echoes the reality—building a thriving healthy community. In real life, it is building a community where everyone wins.

**6. Do you have any other comments and suggestions?**

There was a lot of emphasis on how much money different characters made in your game play and although this certainly reflects reality, I think differences in wealth are things that often divides communities. I also think it sends a wrong message about what character attributes are valuable and important in community building. Being good with empathy or leadership or negotiation or teaching, these are things that matter. If you are only going to give your characters three or four descriptors, I don't think yearly income should be one. Even listing occupations can be dicey because 99% of people will not be represented in the set. I would only include yearly income and job occupation if and only if it is central to your game play mechanics.

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