Our Ideas Co-Designing a Community Belongerement Fund Here

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It takes a village



Our Ideas Belong Here: Co-Designing a Community Investment Fund

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A thesis submitted to the School of Design, Carnegie Mellon University, for the degree of Master of Design in Design for Interactions

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Community-Based Design Case Study: Sto-Rox Street Interview Submitted and approved by the Institutional Review Board at Carnegie Mellon University

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Abstract

Dear fellow designers,

This thesis is about a year-long Participatory Capital pilot project I designed with the community members of Stowe Township and McKees Rocks Borough, located near Pittsburgh, PA. What is Participatory Capital? Simply put, it is a type of funding that is democratically decided and distributed. With the community's input, its distribution process and outcomes reflect and serve its true value and needs.

The pilot project's goal was to help local businesses by finding an innovative way to distribute a twenty thousand dollar donation. Community leaders and I invited five community members to be our co-designers. I designed and facilitated four workshops to listen to their opinions and guide them through collective decision-making. We discussed community values, the local economy, and the funding distribution program. The Community Pay-It-Forward framework they created as a final culmination was wonderfully authentic and innovative.

On the other hand, this is also the story about how a beginner designer went into the community, built relationships, learned, and grew so much from the process. I shared my personal feelings and thoughts at the end of every chapter, so check that out.

When the local non-profit director asked me, a design student looking for a community co-design opportunity, I jumped in right away to join the project. I am so glad I did. It was truly a fantastic journey to be part of. I saw how co-design allowed a group of individuals to overcome existing power dynamics and barriers to become a collective. With all the learnings, I am creating a co-design starter kit, Our Ideas Belong Here (OIBH), so anyone can experience the power of co-design and be inspired to become a catalyst of social innovations in their community.

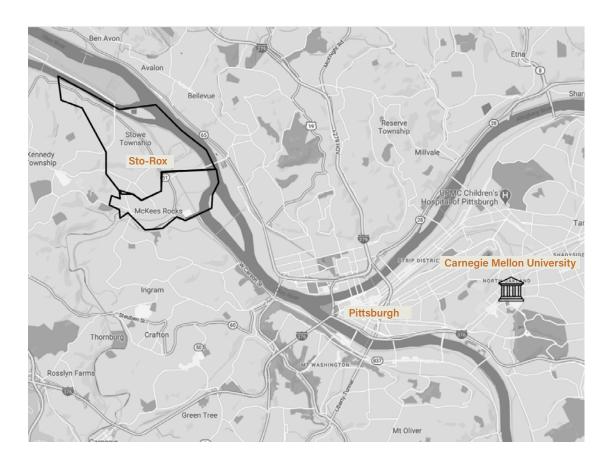


Photo 1.0: Stowe Township and McKees Rocks Borough are shown on the map of Allegheny County, PA. The local people call two towns as Sto-Rox for short.

Process

Sep 2020: Thesis direction

Starting out the thesis, I had one clear goal—to work with the local community. I merged my community-based design interest with something that had worldly relevance; financial wellbeing.

Oct 2020: Partnership

Through an introduction from Kristin, I was connected with multiple projects looking into financial wellbeing and social innovation. Serendipitously, New Sun Rising (NSR) recently received a donation to help local businesses and was looking for ways to distribute the money using a participatory community process. I shared my research and interest in co-design methodology and design workshop case studies with them. Scott, Director of NSR, supported the direction and sought a community that could participate. He introduced me to Sto-Rox community leaders.

Nov 2020: Gathering co-designers

Community leaders, Scott, and I talked about the overall vision for the project and how to gather co-designers from Sto-Rox's community. I conducted generative research through secondary literature and street survey in Sto-Rox. Using my research and recommendation, community leaders nominated individuals and send out the invitations.

Jan 2021: Designing workshop

Out of many formats of co-designing, I leaned on workshop format. In making a decision together, the group has to conduct a series of meeting. The workshop was acting as meetings that were hands-on and discussion-based. I designed the structure, booklet, and facilitation plan with guidance from Kristin, my thesis advisor, and Scott, director of New Sun Rising. Five Co-Designers got on board.

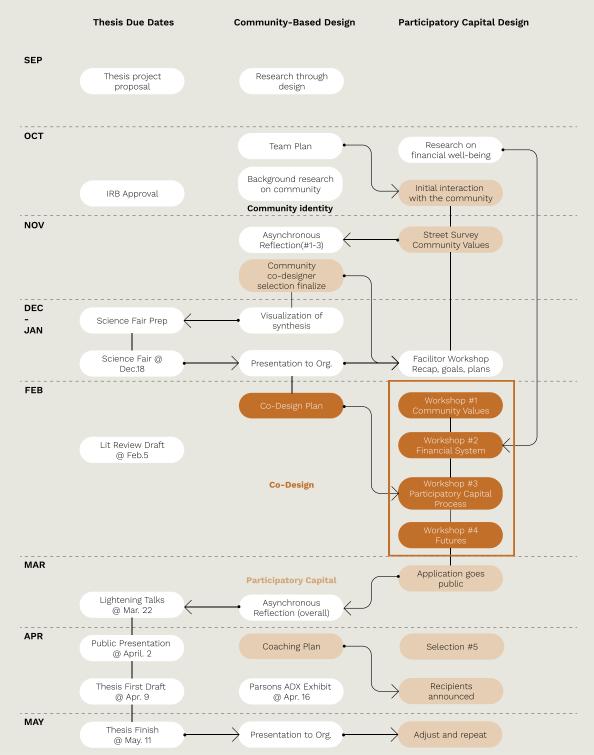
Feb-Mar 2021: Co-design workshop

I designed and facilitated four weekly co-design workshops. Through the workshop series, co-designers discussed and designed Sto-Rox's very first participatory capital process.

Apr-May 2021: Execution

After the workshop series, co-designers and community leaders had enough framework to move forward to do a first pilot run of the participatory capital process. I reflected and wrote my thesis.

Initial thesis plan





14 What is Co-Design?

What is Co-Design?



Photo: Co-designers and community leaders discussing project logo, March 2021

The concept of co-design has existed for as long as society has been in existence in humanity. However, the term 'co-design' comes from 'cooperative design' developed in Scandinavia in the 1970s (Bodker, 1996, p. 218). Since then, there has been much development and branching of ideas into action research, participatory design, actualized democracy, and many other terms. These terms span different focuses and contexts; however, they hold the idea of bringing different perspectives and iterating to develop a more harmonious perspective.

My simple definition of co-design¹ is a methodology where all stakeholders decide and take intentional actions to change their surroundings according to the shared values. I reached this conclusion after reading through many pieces of literature, including ones from Paulo Freire, Ezio Manzini, Kelly Ann McKercher, Kat Holmes, and Fathali M. Moghaddam. These thought leaders had different names for co-design, but they all had largely common three principles.

1. Include all stakeholders

Even well-intended decision-makers such as philanthropy directors, designers, or community leaders often fail to consider the stakeholders who would be impacted by the decision simply because some stakeholders are more likely to be outside of media purview or our social circle. Worse yet, our hyperproductive society tends to exclude people who are not used to making decisions due to their position, education, or abilities, assuming they would not be able to decide on matters that would impact their lives efficiently. We underestimate the value of lived experiences and overestimate experts' knowledge.

Any solution designed to help the community is most effective when designed with people who have first-hand lived experience of the community and built with shared values among all stakeholders (McKercher, 2020, p. 14). Kat Holmes writes that the key to making inclusive solutions is to include excluded communities' expertise. "These community members are so used to existing design solutions mismatching their abilities and environment; they have a wealth of ideas about solving it (Holmes, 2020, p. 76)". We must elevate the traditionally overlooked stakeholders and include unsuspecting perspectives to provoke a new direction to the conversation. This will serve all stakeholders but also can promote their emotional buy-in in the implementation process. Including all stakeholders can bring outcomes that would not be possible with just particular stakeholders by acquiring a diverse set of knowledge and community buy-in (Manzini, 2015).

2. Start with understanding the past

Antionette Carroll from Reaction Lab tells designers that we need to understand that all design solutions constantly react to something that already exists. She calls herself a 're-designer,' acknowledging that there is always an existing system and history we are designing into. We are consistently bringing our previous experiences and biases into our design.

When designing a solution that is resilient, we need to have a resilient understanding of the current situation. What do I mean by 'resilient understanding²'? It means that the account could be valid through different perspectives, cultures, or times. To gain resilient understanding, we must listen to multiple perspectives, redrawing the cause and effect of past events and systems that led to the current situation.

Paulo Freire goes even further and urges people working with the underserved community³ to question how we are 'interpreting' the current situation. We are quick to blame the poor and underserved. However, we do not stop to ask what puts them in that situation. Freire argues only after in-depth social inquiry and dialogue, and we realized that the environment they are placed in limits their options, actions, and eventually their autonomous thinking. This 'limit situation' and 'limit action' inevitably drives them to make seemingly helpless decisions and remain in the oppressed position.

Going back to the first principle, giving people a platform and autonomy to tell diverse stories about their perspectives will allow us to access a more comprehensive, more resilient understanding of the current situation.

3. Acknowledge your positionality and role as a designer

After inviting everyone to the table and drawing a comprehensive picture of the past and present, we are ready to co-design. Going into the process, the designer must ask, what are we, an outside designer, bringing to the table?

Initially, I was confused when I first read the title of Ezio Manzini's book, 'Design, When Everybody Designs.' Manzini tells designers that designing is a natural human activity because design is any action that one takes to solve a problem. So how can expert designers "design when everybody designs"? Especially for me who is, directly and indirectly, reinforcing the oppressive system, I feared that I might bring reservations about my privileges into the process rather than my creativity.

Manzini lists different kinds of designs on 2-axis spectrum. Expert design to diffuse design on one axis and problem-solving and sense-making on another axis (2015, p. 40). (See diagram 1) In the co-design process, the expert designer plays the role of 'trigger' (introducing ideas and visions to feed and orient the conversation within the coalition) and of facilitator (helping the other participants in the coalition to make the best use of their design skills and augment them)' by visualizing process and creating artifacts along the way (Manzini, 2015, p. 52). This helped me understand my role, the relationship I am building with the co-designers as collaborative designers.

3. Underserved community:

According to Presidential Executive Order 12898 signed in 1994, "underserved population" is defined as a broad category that includes minority and low-income populations but may also include many other categories that face challenges engaging with the public and private resources and reaping equitable benefits, such as children, the elderly, and the disabled (Ezike et al., 2020, p. 5). This definition has been widely used by government agencies and research institute such as Urban Institute. This term is most appropriate when discussing systematic challenges because the word 'underserved' shifts onus to society that is not serving these communities.

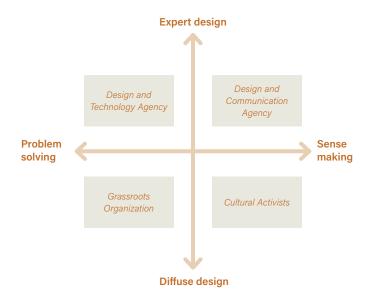
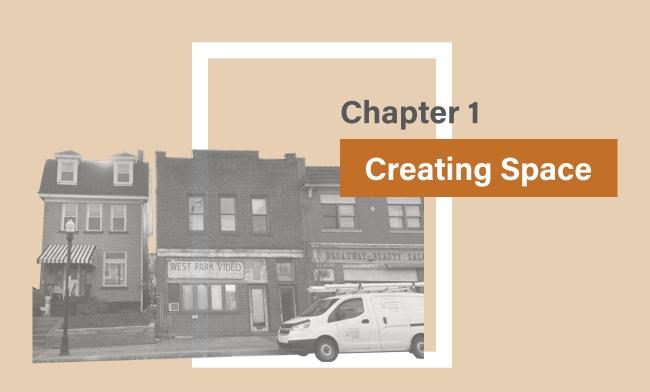


Diagram 1. Ezio Manzini's design mode Map: There is always a role that expert designers can play within community co-design project. (2015, p. 40 Figure 2.1)

I also found it helpful to think about my positionality when reading the *Pedagogy of the Oppressed* (Freire, 2018). Freire talks about the role of the revolutionary leaders who might have come from the oppressor's society. Through the praxis of bringing the oppressed together, problem-posing education, and fighting the oppressive systems, revolutionary leaders can support liberation. However, leaders must realize that the action ultimately has to come from the community and that the liberation movement cannot exist without the community moving it forward. This guided me through finding my role in the co-design process. Designers must elevate the stories from the people and assist people in uncovering wicked problems⁴ of the current system.

4. Wicked problems: According to Richard Buchanan, the Wicked Problem has no definitive conditions, right or wrong, or limits to design due to its interdependency of other systems. (1992, p. 15)



- 20 Case Studies
- **26** Generative Research
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- 36 Reflection: Different Definitions of Accountability

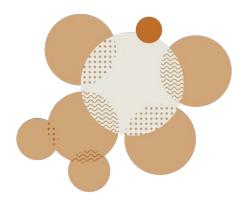
Case Studies

Looking to others who came before me

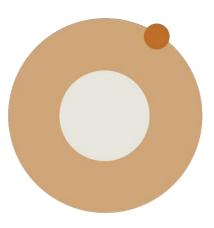
Co-design can be a starting point for a larger solution which would make the co-design portion an ethnographic inquiry. Or it could be an endpoint to a project, which would make this fall into user testing realm. It can be a core identity of the project that would seek sustained participation, such as participatory budgeting (2021), or an ancillary elements such as community outreach. In short, the concept of co-design can be applied to many contexts and to various degrees. And because of this, there are many names to co-design methodology; participatory design, community design, actualized democracy, distributed decision making, sociocracy, and on and on (Bodker, 1996, p. 218; Holmes, 2020; Manzini, 2015; McKercher, 2020; Moghaddam, 2015; the Association for Community Design, n.d.; The Participatory Budgeting Project, 2021).

To examine how co-design methodology is applied in different contexts, I looked into the various organizations working in the participative or democratic structure. I learned about Treehouse Village Echohousing while researching the democratic decision-making process (Treehouse Village Ecohousing, 2021). They use a structure called Sociocracy, which is sustainable and scalable (Sociocracy for All, 2021). The other examples, **Enspiral and Boston Ujima Project**, deal with the distribution of resources (Enspiral, 2021; Ujima Boston, 2018). The last case study, Community-Led Total Sanitation (CLTS), provides a co-design example from an underserved community context and how external intervention can be effectively integrated into the community using community-led processes (Cameron et al., 2015). Looking at the case study provided me with clues about the structure of our project and some key questions to tackle, such as the right balance between efficiency and inclusivity and size. Another question raised from this research was what kind of engagement the Sto-Rox community was ready for and how we would reflect on changes in the community before and after the design to evaluate the success of our project.

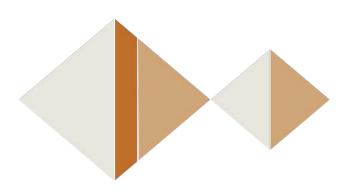
Treehouse Village Echohousing



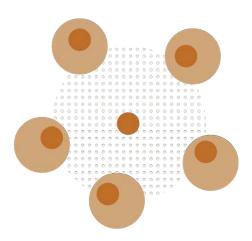
Enspiral



Boston Ujima Project



Community-Led Total Sanitation



Structures of co-design



Treehouse Village Ecohousing

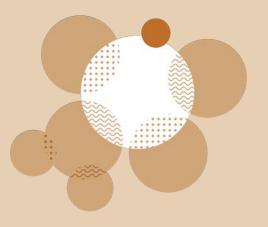
Bridgewater, Nova Scotia, Canada

The co-housing community in Bridgewater, Canada, is co-designing their everyday life using sociology principles. Sociocracy was a practical example of distributed sustainable and scalable decision-making. Each community member is a part of a smaller circles that responsible for different community facets such as community life, legal & finance, and development. Each circle comes up with an idea and decision and reports to the general circle to cast its vote. One thing that was different from our project is that this community's primary purpose is not co-design or co-creation but cohabitation. Therefore, its structure focuses on efficiency over inclusivity.





Logo 1.1: Treehouse Village
Ecohousing
Photo 1.2: Rendering from
Treehouse Village Ecohousing
Timeline
@2020 Treehouse Village Ecohousing



Overlapping Circles

- Participants: Responsibility Group
- Core Group: General Group
- Source of Inspiration: Mission Group
- General group are made up of representatives from each responsibility groups
- Mission group: Looks at bigger society beyond their co-housing
- Consent methodology (sociocracy): Preference, consent, vs. decent

Enspiral

Wellington, New Zealand

Enspiral is a paid membership organization of freelance professionals with the shared value of non-hierarchical leadership. They believe in sharing money, power, and information with others to move towards a more equitable workforce. Depending on the level of commitment, your contribution amount changes. There are two levels of commitment; core members and contributors. The member group sometimes makes administrative decisions. However, for most decisions, such as project selection or budget allocation, they use the digital app they self-developed to engage everyone via simple majority voting. The use of technology allows the group to be connected and stay agile, uniquely possible in a highly tech-savvy professional group.





Logo 1.3: Enspiral
Photo 1.4: Published by Enspiral
LinkedIn
@2021 Enspiral Foundation Ltd



Concentric Circle

Participants: Members

Core Group: Contributors

Source of Inspiration: Catalyst

- Two circles: Members and Contributors
- Catalyst: Looks across the organization making links, bringing topics forward
- Bucket: Budget proposal raised by anyone in the community
- Tech savvy: Discussion and voting via digital platform

Boston Ujima Project

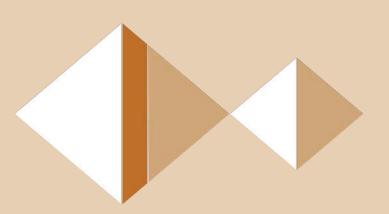
Boston, MA USA

Ujima Boston Project makes a participatory capital process accessible to the local community. This citywide non-profit organization aims to tackle complex social problems with an ecosystem of innovative strategies. This project was exciting for me to study because it aligned close to our intended pilot study. The project tries to collectively nominate investment opportunities, get funding from the people of Boston, mainly seeking engagement from underserved populations. Their goal is to get a return on their investment and distributed back to the underserved populations. The differing point from our project was that it served vast populations and focused on return on the investment; therefore, the recipient was usually a large company selected through rigorous deliberation from the financial experts. Except for the critical final decision, their complicated process that forces many decision-making powers in the mid and end stages to be removed from the general public. This case study made me think about the gain and losses of large co-design and participatory-decision groups.





Logo 1.5: Boston Ujima Project Photo 1.6: Boston Ujima Project Meeting. Published by Sharable ©2021 Boston Ujima Project



Double Diamond

- Participants: Boston Citizen (voting)
- Core Group: Core Committees
- Source of Inspiration: Community Standards Committee
- Community Standards Committee makes sure the
- voting result aligns with overall mission
- Core committees (Investment, staff, experts) investigate and implement funding
- Public voting is used for nomination and selection
- Partnership with financial experts, bigger investors

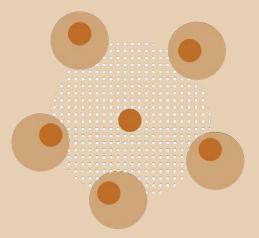
Community-Led Total Sanitation (CLTS)

East Java, Indonesia

CLTS project was a social experiment to examine if existing stocks of social capital had a significant effect on participatory development. The researcher held an initial workshop where community members were asked to reflect on the current situation and educated about the benefit of achieving an Open Defecation Community (ODC). Before the meeting, the researcher measured the village's social capital using a designed survey. The survey result of the villages was measured and compared with the campaign's outcome. I found this study relevant as we went into our workshop series, thinking about the community's readiness and matureness. I wonder how we would measure our community's social capital and how that knowledge would impact the role of the co-design process and the outcome.



Photo 1.7: Indonesia's Total Sanitation and Sanitation Marketing Program photo from World Bank ©2013 World Bank



Distributed Circles

Participants: Village people

Core Group: Outside Aid Groups

Source of Inspiration: Trigger event

- One outside group working with multiple marginalized villages in Indonesia through action-based workshops
- Trigger event inspires village members to turn existing social capital into action

Generative Research

Familiarizing by street survey

When I found out that I was working with the Sto-Rox community, I realized that I needed to find out what people's day to day was like or the diverse lives of the community members. I knew that I would be able to go in-depth about these aspects through the workshop. However, I did not know the suitable topics to start from nor the appropriate language to use yet. So, I sought the topics and languages for the workshop through a simple street survey.



Photo: The street survey was conducted with passerby in a local mall parking lot and coffee shops

Design

Designing the street survey, I was inspired by Professor Dan Lockton's New Metaphor to open the conversation (Lockton et al., 2019). What kind of metaphors do they use to describe the concepts of participatory capital, such as 'neighborhood' or 'finance'? This would give me a glimpse into what kinds of topics are in people's minds, as well as the language and sentiments associated with those topics.

As a first step, I gathered some of the concepts related to participatory capital and community-based programs such as Finance, Money, Family, Health, Community, Neighborhood, Neighbor, Freedom, Trust, Safety, Prosperity, Independence, and Power. After sharing the list, my advisor, Professor Kristin Hughes, also suggested I added the word Faith, which was something that I did not think about before. This concept turns out to be very important to American culture.

Afterward, I started to gather images for the metaphors. Images are evenly distributed on the scales of positive, negative, or neutral emotions. I also tried to have variation from concrete everyday objects to abstract objects such as magic or ghost. Whenever possible, images were familiar or directly from the Sto-Rox community.

The instruction I gave to the survey participants was one sentence, "pick a word from the bucket, select an image that is the best metaphor", with one generic example of 'love as a key.' I conducted the metaphor game with pedestrians on the street as well as with community co-designers.



Photo: Images and words used in the street survey

Quotes from the community

- Independence as bridges. It gives a chance to crossroads to somewhere else. It's a pathway.
- · Prosperity as time. It doesn't always mean money.
- Independence as a solitary tree on a hill. It is on its own, but it's beautiful; it's doing its own work on itself.
- Faith as magic. You think you hit the end of this road, and something impossible happens. It hit me on my 60th birthday that there hasn't been anything I didn't get through.
- Independence as an open door. It's my choice if I go through it or not. I can knock it down or lock it. I can do any god damn thing as I want with this door and my life.
- A shoe with faith. Living Sto-Rox, children being able to go play outside without being worried about getting hurt from the street (like wearing a solid pair of shoes) is a faith you need to have.

Overall takeaways

There is a general sense of 'it used to be better.' Two interviewees from different demographics talked about this aspect of the Sto-Rox, which correlated to my research. Sto-Rox hit peak population during the 1930s steel area but has been in decline in population and income ever since. Some people talked about having no hope for the future, while others spoke about the cause of the problem, such as lack of unity.

There is a sense of community- however, it is small disconnected pockets. Many of the Sto-Rox community members are people who lived in the area all their lives. They care about the community deeply. However, I observed that people have small, close-knit groups but have a mistrust of the community as a whole. There is much work to be done on building trust with each other and embracing diversity.

We need both external and internal motives for community revitalization. This was an interesting point to me as someone who is coming from the outside with outside resources. One of the participants said, 'You need

guidance but you also need willingness (from the community).' Since sensing a value of independence, I want to further investigate what is a good balance of external and internal motives.

Money is more than money. It means more time, it implies enablement, it means bigger possibility. Money is a tool. I realize that when talking about the finance and capital investment, we need to talk about the core purpose beyond monetary support.

Bringing in diverse racial backgrounds, past trauma, and lifestyles to our design is essential to build a community. Sto-Rox is very diverse in culture in many spectra. It is also a neighborhood that is going through a transition and possible gentrification. How do we keep diversity and authenticity while bringing people together as a community?

Metaphor as method

Overall, the metaphor game successfully introduced me to a community that I was foreign to. The community leader commented, 'This is a good exercise to allow people to converse in a level that is internal.' Understanding how Sto-Rox views the posed concepts was incredibly beneficial in understanding the community and thinking about my own positionality.

Another thing that I did not realize is the value of sheer action of asking for people's opinion and story. Another community member told me, 'It's nice when someone asks you for your opinion. People are always pulled in different ways, taking care of others, (but during this exercise) you get a moment to talk about yourself and what is important to you, I feel like a lot of people never get to do that.' Hearing this, I understood the potential of co-design for this community who has not been heard.

Gathering the Co-Designers

Creating personas and inviting co-designers

In consideration of co-designer's time and effort, we decided to recruit five co-designers for the pilot study so each is given a fair amount of stipend. But how do we decide who is going to be our co-designers? Is it an open call or through an invitation?

To make sure that members' motivation was community rather than money, we decided to get nominations from non-profit partners who have been involved in community work. I wanted to make sure we had a diverse set of voices. In this particular community, diversity most often meant race. But I wanted to push that mindset to include class, gender, background, occupation, and world views. We did this through the creative adaptation of a conventional design tool, **persona**⁵. Persona has often a negative connotation since it can reinforce stereotypes or flatten a diverse community to a single illustration. But persona was helpful for the planning committee during the recruitment phase as it provided a launching point and a diversity guideline.

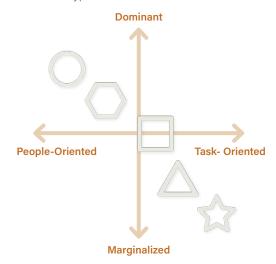
To come up with our set of personas, I started with a 2 by 2 matrix. One axis had expert knowledge to lived knowledge and the other had collaboration style from people-motivated to task-motivated. I listed out all the **different types of knowledge I saw from the generative research** that are appropriate for the project; financial knowledge, creative energy, lived experience, entrepreneurship, big picture. While I was doing this, I noticed that there are existing hierarchies between the types of knowledge.

5. Persona: "Personas are abstractions of groups of real people who share common characteristics and needs". (Miaskiewicz & Kozar, 2011) Personas are commonly created by aggregating research data from people and are used to understand and empathize with them. However, Persona can reinforce stereotype or flatten a diverse community to a single illustration. By using persona to recruit people, we used it as a diversity guidelines and prevented personas from replacing real people's story.

Step 1 Identify knowledge types



Step 2 Match knowledge with collaboration types



For example, finance was highly regarded in our society while lived experience not so much. So, through this 2x2, I tried to balance the power difference between the personas. More dominant knowledge was paired with a more people-oriented collaboration style while more marginalized knowledge was paired with independent task-oriented collaborators. I presented an initial set of persona to the community leaders and we tweaked them together. And using the final set of personas, community partners nominated community members who match these personas.

Image 1.8: *Illustrations from Open Peeps,*

Step 3 Final personas



THE BIG THINKER

I am part of the Sto-Rox community but also lived in other places. I can imagine Sto-Rox's future fondly but also understand the complexity of them all. I ask big and small questions. I am 'get appreciation' type. I like to contribute my thoughts to the group, so they can see the bigger picture. I am positive and supportive.



THE URBAN ENTREPRENEUR

I grew up in the Sto-Rox community. I have some experience of running a business (maybe it was informal and that still counts!) and always think about how I am make things better for me and you. I am 'get along' type of collaborator. I am aware of other people's needs and open to other's ideas and opinions. As long as everyone is satisfied, I am satisfied.



THE PEOPLE PERSON

I am from the Sto-Rox community and involved in the community. I have my challenges day to day, but with my community, I always get through them. I love people and am adaptable to different environment. I am 'get it done' type of collaborator. I stay on the topic and focus on getting results. I am straight talker and not afraid to make decisions.



THE FINANCIAL WIZ

I am from Pittsburgh and work with the under-represented groups. I have wealth of financial knowledge such as budgets, tax, and other financial tools.

I am a 'get appreciation' type of collaborator. I love to help others by staying reliable and providing appropriate knowledge.



THE URBAN CREATIVE

I grew up in the Sto-Rox community and care about the community. I have experienced challenges but I have my support network that I can lean on. I am creative and open to imagination in right environment. I am 'get it right' type of collaborator. I want good reasoning for steps we are making. I am careful not to make mistakes. I slow down often to pay attention to details.

Recruitment poster





Community leaders who nominated people also reached out to them to invite them to the project. I provided the poster listing some of the quick facts and what the project was about. It was important to set clear expectations as much as possible because this becomes the foundation of trust for the co-design process. The poster aimed to give the correct first impression of the project through it's visuals and language; site-specific, approachable, collaborative, and human.

Poster iteration: (Top left) The first iteration includes only abstract graphic illustrations. (Top right) The second iteration welcomed the photo of the main street, bringing in the sense of place. Still, its language is dry and is lacking crucial details.

Final poster: (Right)The final iteration became site-specific with approachable language, photo of the community, and hand drawn drawings of people.



Designing Workshop

While the community leaders were busy recruiting the co-designers, I started designing the workshops. In order to do this, I looked for mutual understanding among the community leaders and I. We talked about the definition of participatory capital, and a few priorities of the workshops. We all agreed that **revitalization of Sto-Rox needed strong community and local business collaboration.** So how do we make sure aids to local business leads to community-business collaboration?

Originally, I envisioned co-designing the workshop with the community leaders. Turns out, designing the workshops was too difficult for people to imagine that had not gone through any type of co-design workshop previously. I could not ask for them to be involved in the detailed design process. Considering this, discussing questions and the purpose of the workshops was input that I sought to make sure workshops I was designing independently served the community. I went through several iterations for the workshops. Each time, I presented the workshop with its purpose and questions we wanted to pose through the workshop activities.

Initially, I aimed to have a total of 7 workshops. However, it got smaller due to delays in recruitment and time constraints. When this happened, it was essential to hold on to the discussion topics that were most important so that I do not edit out the core questions of the workshops. Largely, we followed the belief of understanding the past and current environment (workshop 1 for community level, and workshop 2 for societal level) and making (workshop 3) and looking ahead (workshop 4).

Individual workshop format

I set up the consistency of workshop structure to follow the ice breaker, introductory explanation, 2-3 main activities, and closing. This was important for multiple reasons; it was easier for me to design the workshop in pieces and delegate if needed. Also, it would give co-designers a sense of ease and mastery as they got used to the format of the workshops through repetition.

Practice runs

For some of the workshop activities, doing user testing with people who have similar educational, economic and age backgrounds with community members was hugely helpful. I practiced explaining different concepts and activities with peers so I could time activities and refine the language to be simpler and clearer.

Workshop Booklets: (Right) Every workshop had different themes. However, the activities and discussion from the workshop built on each other.



Purpose

Listen to each other's perspectives on Sto-Rox

Questions to tackle

What is important to you in your life? What are the most urgent needs of the community? What is the preferential future for you?

Activities

Identifying Existing Capital Rose, Bud, and Thorn 2024

Concept

Co-Design, Participatory Capital



Purpose

To get buy-in of why Participatory Capital is needed

Questions to tackle

How might help for small local businesses lead to community revitalization?
What is the current system, how can we work with or without the current system?

Activities

Board Game

Qualities of Healthy Capital

Concept

Synergy, Synthesizing



Purpose

Develop outreach, application process, decision criteria

Questions to tackle

Is this going to be loan or grant? Length of application? What is the eligibility, decision criteria? How many people get awarded?

Activities

Card sorting (Individual and group) What if... discussion

Concept

Inclusivity



Purpose

Imagine program's future impact and plan actions

Questions to tackle

What is the future of Sto-Rox Participatory Capital? How do we measure success, impact?

How do the community give feedback? Who is responsible for reacting to the feedback?

Activities

Open discussions Plan discussions

Concept

Feedback Loop, Future Cone

Reflection: Different Definitions of Accountability

Scott, the non-profit director, told me, 'you need **head**, **hand**, **and heart** ⁶ to do community work.' I thought the passion I had was enough for the heart he was talking about. But looking back, it is more than that. A heart is about having a big heart, but also a strong heart. Can you recover when it gets broken?

Recruiting was the most difficult part of my journey. Partially because this was my first time working with the community, mainly because no one really talks about the emotional roller coaster outside designers go through. To my surprise, emotional investment in the project was not being matched at the beginning of the project, and this was the most devastating thing to realize. But this will be common, especially within a community that is new to co-design.

Going into the community, all outsiders say, "I am mindful. I am here to learn". And the community welcomes you. And you fall in love with each other. It is easy to do so. It is wonderful to build connections when the possibility is whole. You make plans as a team, agree on the responsibility and timelines.

But then the deadline approaches. You remind community members gently. And again. It is next week when we have to move into the workshops, and we haven't heard back from community leaders. You are disappointed. The negative thoughts creep in. In my case, it was 'they can't do this simple thing! I am doing everything else; designing, printing, visualizing, documenting. I am putting 8 hours a day into this and they can't make 3 phone calls!' And then the wash of shame comes over me. 'This is exactly what I thought a horrible old-fashioned designer would say.' Now I am more disappointed in myself, and I can't shake that heavy feeling off me.

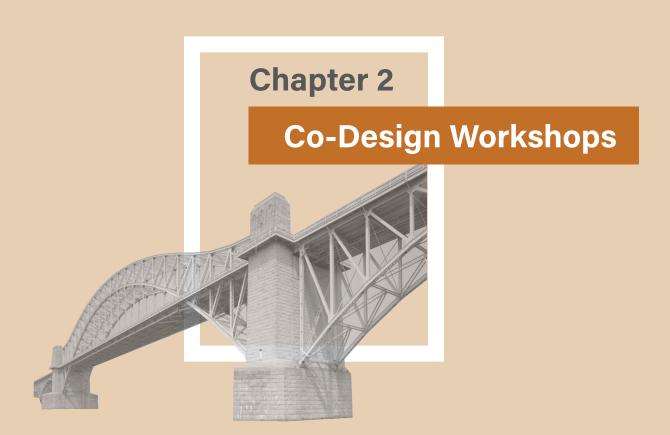
I moved in stronger to the community in frustration: an email with more firm language. As a last resort, a calendar invite is sent out for mandatory attendance. The yelling erupts during the meeting. The community leader says, 'We are not here for you. You are working for us.' Tears through zoom is not a pretty sight.

Looking back, there was a barrier that I had to overcome when moving from one world to another. Whether I realized it or not, I was part of the world of academia. This meant I used particular language, think bigger picture because I have a vague hope that I can do something about it. I care about what others think and what others think of my intellect. I maintained a certain level of office work productivity. This meant that I checked my emails and responded to important emails on time. But this was all different 15 minutes away in a community outside of my campus.

Community leaders had people they needed to help and families to take care of. This meant going to people's porches with some dinner and masks. Printing out the forms and filling them out with them. Going to town hall meetings. Emails were checked on the go with full hands. Accountability, to me, meant timely response to urgent emails, but to them, it was being there for the community through many ups and downs.

Do I have something I can offer here? I am not sure, but just a fair warning for other young designers. The clashing of the world will happen. Especially if you are virtual partners with the community. There are so many missed opportunities after the Zoom meeting ends. My advice is then you focus on the content. You pick up more work. And make sure you share the feelings calmly and gradually. And you do that as a human, not a professional. Don't dwell on the disappointment or resentment, not to them, but especially not to yourself. There is too much work and changes we need in this world for that. Besides, no one can be creative around a bitter person!

Instead, count the success. When I shared my feeling with Scott, the non-profit director, he wrote to me, 'Community development should come with a warning - it's messy, challenging, and painful at times - but those are precisely the things that make it so rewarding when you accomplish something together.' Even a tiny moment in a discussion can be a foundation to make the community be emotionally invested in this project. Build on that to bring them in and make the co-design process theirs as much as yours. Keep showing up with a good strong heart, and you will find those hearts inside the community as well.



- Workshop 1: Past, Present, and Future
- 46 Workshop 2: Financial Wellbeing
- Workshop 3: Participatory Capital
- Workshop 4: Future Capital
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Co-Design Workshops

Scott Wolovich, Director of New Sun Rising led the project, became a bridge between stakeholders, and hold the team together. I was the lead facilitator of the workshops and was joined by community leaders and my thesis advisor who offered me facilitation and planning support. Everyone played crucial role in assisting each other (See project stakeholder map).

The entire project took place during the height of Covid-19 pandemic so, out of the caution and everyone's health and safety, we decided to conduct the workshop via a video conferencing platform. We held co-design workshops every Thursday evening from February to March 2021.

On Wednesdays, I would deliver the workshop booklets to their homes and workplace. If we caught each other in person, these deliveries sparked a casual one-on-one conversation about how people's week was going. They would share what they thought about the last workshop's activities and discussion. If they had more time, I talked to them about the next workshop activities and walked them through some individual activities. The small personal interactions laid the foundation for deeper discussions in the virtually ran workshops.

Project stakeholder map



Workshop structure

Workshop mindset: I came up with 4 mindsets and reminded the codesigners of these at the beginning of each workshop.

BE PRESENT

You are chosen to be a vital part of the team. The team won't be complete without your contribution. Think about why you are talking or why you are NOT talking. Make space. Step into the space. Take a look around you to see how your presence is affecting others and how others are affecting you.

TAKE TIME

Give yourself permission to be curious and give yourself a generous amount of time to understand the topic. Good things take time. Be open to the learnings but also watch for your gut feeling. Pay attention to your body; get up, go to the restroom, take a sip of water, look at the window for a moment

BRING SINCERITY

Be appreciative of the honesty and take care of the vulnerability during the session. If we start from assuming positive intention, we will hear the truth without judgment or blame. 'Invite' others to explain their opinion that is different from yours. Take moment to go over what you are going to say so it is coming from sincere place.

BE OPEN

Be excited about the unknown possibility. Notice yourself when you are getting attached to a certain outcome. Focus on the impact of this project on the community and our future.

Focusing activity: This was an icebreaker activity or other quick and easy activity meant to bring people into the workshop mindset. We did various things, all lasting 5-10 minutes: traditional ice breaker activities, meditation, or brainstorming project names.

Introduction: I introduced the workshop what, why, and explained the relevance from the overall project perspective. I also shared a couple of relevant concepts to keep in mind for the workshop.

Main activities: Each workshop had 2-3 activities that lasted 20-30 minutes. I ordered the activities so that we progressed from more individual-based activities to group discussions.

Closing: Closing gave 5-10 minutes for everyone to share their last thoughts. If co-designers had questions or anything else they wanted to discuss, I allotted time here for them to do so.

Survey: At the end of each workshop, co-designers could fill out a survey anonymously. They were asked about the overall workshop as well as the co-design methodology.

Workshop 1: Past, Present, and Future

Purpose

To get buy-in of why Participatory Capital is needed

Questions to tackle

How might help for local businesses lead to community revitalization? What is the current system? How can we work with or without the current system?

As an introductory workshop, this workshop had 3 different goals: Introduce the project and its objectives. Introduce co-designers and facilitators to each other. Start the conversation about Sto-Rox's needs and values.

Thinking about this, I titled the workshop 'The Past, Present and Future' and explored these temporal frames at the individual, interpersonal, and community levels.

The 'focusing activity' explored the Sto-Rox community on an individual level, sharing what they love about their community (See photo 2 on page 45). Afterward, the two main activities probed the co-designers to identify present community capitals and reflect on the community's future using Rose, bud, and a thorn from 3 years in the future.

Outcome

After a round of introductions, the community leaders briefly described the Participatory Capital pilot project. Scott, Director of New Sun Rising, who started this whole project and brought everyone together, talked about how donations are often given TO a community without working WITH the community. "That is why our project aims to design a new format of public aid by putting the community in the driver seat of decision making about the fund distribution," he said.

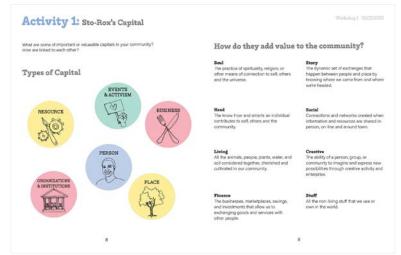
I started off the workshop by talking about the four mindsets; Be present, Take Time, Bring Sincerity, Be Open. These four mindsets were the crucial foundation for co-designers to allow themselves to become vulnerable. The vulnerability leads them to try different things and creative.

The focusing activity was a 2-minute Pictionary game around their favorite thing about Sto-Rox. It gave people an opportunity to be silly, since no one can draw something impressive in one minute, and engage with each other. Through this exercise, we could see the individuals' values drawn into their purest and simplest form; neighborhood, children, family, meeting new people, taking on leadership, and a sense of unity.

Activities Board Game Qualities of Healthy Capital

Concept Synergy Synthesizing





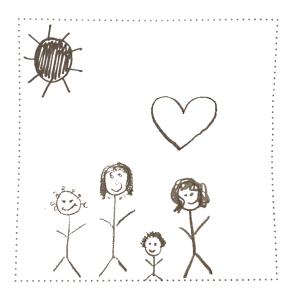


Booklet pages: (Top) Workshop 1 introduction (Middle and Bottom) Main activity 1,2

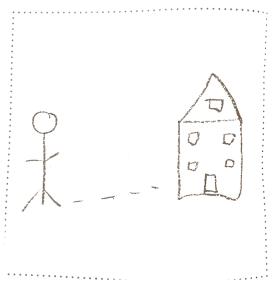


Photo 1: (Top) The tags are filled and threaded with existing community capitals. From main activity 1.

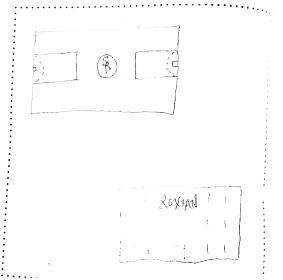
Photo 2: (Right) Drawings from Focusing activity. Co-designers had 2 minutes to draw a favorite thing about their community, and others had to guess what they drew.



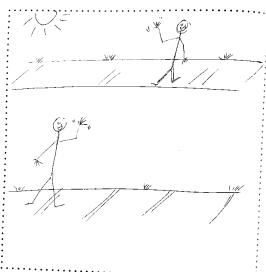
Sketch 1: "I love the kids in the community. We are so blessed to have them."



Sketch 2: "All my families live in Sto-Rox. I love vising them"



Sketch 3: "My favorite thing is supporting local sports team and going to the concert at Roxian!"



Sketch 4: "My storefront has giant windows and all my neighbors always wave at me, multiple times a day! I love my street."

Workshop 2: Financial Wellbeing

Purpose

Listen to each other's perspectives on Sto-Rox

Questions to tackle

What is important to you in your life? What are the most urgent needs of the community? What is the preferential future for you?

Even though we were missing 2 out of the 5 co-designers due to their personal circumstances, this workshop was a turning point in many ways. It was a workshop where community members got the hang of the co-design process. Also, this was the workshop where they made mental connections between the co-design process, community, and local economy and started to be emotionally invested in the project.

Facilitation and flow-State

My advisor Kristin and I had many conversations about facilitation. Out of these conversations, one of these was an idea about flow-state (Sin, 2012). In this state, workshop participants forget everything outside and focus on the discussion and activities they are doing. But could we achieve that in a virtual workshop?

In this workshop, I got to hone my facilitation skills. I am not sure if co-designers were in the perfect flow state during this workshop; however, a few things made my facilitation smoother and more engaging, reaching close to the flow-state.

The first thing was delegating the note-taking and time-keeping responsibilities to someone else. This allowed me to totally focus on the facilitation. There was also another person who wrote notes on the overall workshop and about my facilitation. Looking over these notes afterward was very helpful as a person who was new to facilitation.

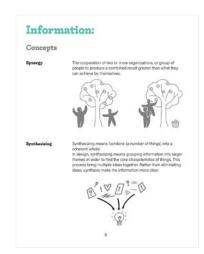
I shared my takeaways with co-designers from the first workshop at the beginning of the workshop. This reminded co-designers of what they did and showed that I really listened to what they had to say.

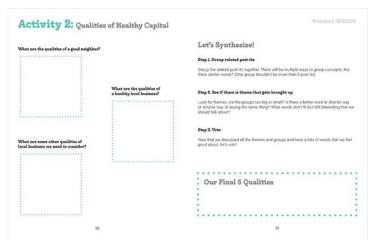
I also reminded the co-designers that the facilitator is really there to just move the workshop and nothing else. I told them that they could totally forget about the facilitator and have dialog among themselves.

Activities

Identifying Existing Capital Rose, Bud, and Thorn 2024

Concept Co-Design Participatory Capital





Workshop booklet: (Right) Workshop 2 concepts (Left) Main activity 2



Game board with pawns: Players appreciated having a physical game board, coin tokens, and personalized pawn. It helped them stay engaged to reach the flow state.

Outcome

The focusing activity started the workshop off by asking co-designers how they would spend 100 dollars for good. They discussed the impact of money, scale of change, homeless population, and the pandemic. This 10-minute discussion was perfect to put co-designers in the head space of finance literacy.

Afterward, I took time explaining the workshop's purpose and two concepts. Turned out, having easy and straightforward instruction makes people more comfortable. I realized that taking time to explain the activity concisely and clearly is crucial to participants easing into the workshop as much as any icebreakers or focusing activities.

The first main activity was a board game, inspired by monopoly designed to show a micro version of how a local economy works. The game's objective was for all the players to get to the end of the path before the timer runs out. All the players had to help each other to win. The ideal way to win was to pick community needs over their personal needs. However, how they would help each other was not apparent. During the gameplay, one of the players had to choose between advertising their business on Facebook or local newspaper; he picked Facebook, saying he had to cater to the young people for his business. This was precisely what was happening in the real world- local newspapers were dying, and social media was filling in that gap without returning any benefit to the local economy. And one can blame him for his decision. These small actions of the players amounted to the local economy breaking down on the board game and in the real world.

So, in the end, they lost. Players got stuck, and the community had no money to help them. I stopped the timer and invited the players to share their thoughts. They talked about how engaging it was, and this was great for team building. I noticed that we were not talking about the content of the board game but just talked about the surface-level takeaways such as teamwork and entertainment value of the game. Trying to guide the conversation to a deeper layer, I shared why I designed this board game. I spoke about informative research findings that for every \$100 spent in local business, 68 dollars stay in the community versus only \$43 when you spend it in the non-local companies (Civic Economics, 2012). This triggered the co-designers to have a conversation on gentrification, local business and community collaboration, a game of chance in life, and how that relationship is essential. "Without contributors and without collaboration and partnership of the community, the local businesses won't thrive. You have to use unique individual gifts as team members and mold them into one entity. Move as a body rather than individual pieces." one community member told us. It was amazing to listen to this unified wisdom pouring out of them.

The second activity was thinking about healthy capital. On post-its, people wrote different qualities they are looking for from an individual, organization, and community level. Everyone had a chance to write their own for 3 minutes and share them out. I used the timer on the digital whiteboard so that the co-designers can keep track of the time and write in silence until the timer rang. With the post-its they wrote, we went through an affinity mapping activity. Rather than using design jargon such as Affinity Mapping, I simply asked the community to group the related post-its together. I asked them 'why' when there is exciting grouping in order to continue the endepth discussion.

This experience was something that co-designers found really rewarding and gave confidence in working as a group. The content they came up with was really great, but the sheer process of going through a group consensus was empowering. Seeing how their individual inputs became a unified idea and turning into something formal such as project values, was a powerful experience. I could feel that they became more invested in the project by the end of the workshop because they started asking more detailed questions about the program and next steps.

Synthesized virtural post-its:

Experiencing how their individual inputs became a unified idea and turning into something formal such as project values was a powerful experience for the co-designers. During the synthesizing process, a virtual whiteboard allowed me to move the post-its and adjust the size to highlight them quickly to talk about it and select the 5 main qualities.



Workshop 3: Participatory Capital

Purpose

Develop outreach, application process, decision criteria

Questions to tackle

Is this going to be loan or grant? What is the information we want to gather? Length of application? What is the eligibility, decision criteria? How many people get awarded? what is included?

This workshop was where the participatory capital pilot started taking shape. In this workshop, co-designers came up with the structure of the funding, application elements, and selection criteria for the participatory capital. Finally, all the former discussions came together to create something tangible. Moreover, this was the workshop where I started to provide opportunities for co-designers to be autonomous and take on more responsibility through homework and having a discussion without the facilitator in a breakout room.

Outcome

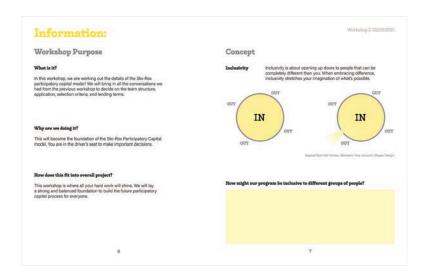
The focusing activity was to brainstorm some names for the project and the co-design group. The booklet asked them to come up with lists of adjectives and nouns first. I put the co-designers separately into the breakout room and asked them to brainstorm for 5 minutes or so. The great thing about giving people that space was that the co-designer started to take on more responsibility, became more autonomous, and took ownership of the project. Also, it made the co-designers bond with each other. When they came out of the room, we discussed some of the words they came up with. After a short discussion, we had a name for the project: **Community Investment Fund.** The project was started as participatory capital pilot, but now Sto-Rox had their own name that was appropriate, authentic, and easier to remember. The project was their own.

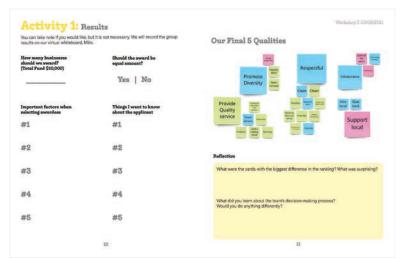
The first main activity was card sorting for the application selection elements. I asked the co-designers to think about what details should be included and the importance or priority of them. Before the workshop, I individually met with them and did the individual card sorting during the week. I took a picture of the result and digitized it into the miro board ahead of the workshop.

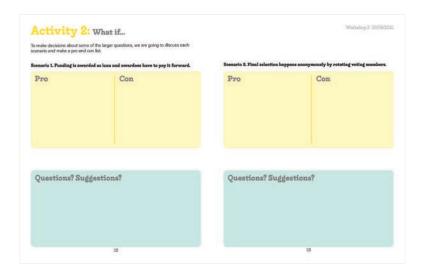
Activities

Card sorting:
1. Individual homework
2. Group during workshop
What if... discussion

Concept Inclusivity







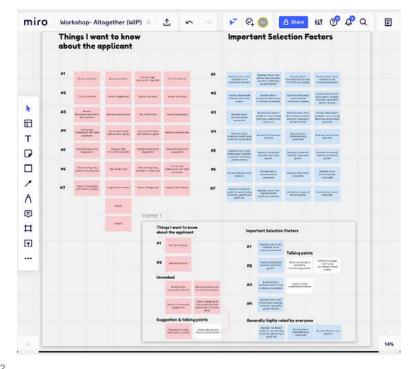
Booklet Pages: (Top) Workshop 2 introduction (Bottom) Main activity 1,2 When the workshop began, with the digitized board of individual card sorting results, we were ready to jump into discussing the similarities and differences of people's ranking. Not surprisingly, when the discussion becomes more concrete and outcome-oriented, the conversation gets more opinionated. Couple of things I've learned from this;

Some of the co-designers with less dominant knowledge became timider since they thought they lacked the knowledge to participate. But, this is also a great moment where the facilitator can lift marginalized knowledge with encouragement. A facilitator can ask general questions such as, 'in your job, how do you judge someone's trustworthiness?' or 'since you are a kindergarten teacher, so how do you make parents care about the other kids in the community?'

I should budget time to unpack each card for a card sorting activity. Especially I came up with the language of the card, so it took much longer to hear co-designers' interpretation of each card. For some instance, the

to hear co-designers' interpretation of each card. For some instance, the discussion unpacking the meaning of each card was more enriching than the results.

So in the end, we ran out of time and over time. However, we managed to narrowed down the cards to the most critical factors to include in the application and selection criteria. Also, they made the decision that this fund would help the small family-owned micro-businesses as a grant instead of a loan. They knew that making this a loan would put a greater burden on the recipient.



Virtual whiteboard: I digitized the individual card sorting results so we can talk about differences and similarities to come up with unified ranking







Photos: (Top) Co-designers working on individual card sorting at their workplace (Left) Completed individual card sorting sheet

Workshop 4: Future Capital

Purpose

Imagine program's future impact and plan actions

Questions to tackle

What is the future of Sto-Rox Participatory Capital? How do we measure success, impact? How do the community give feedback? Who is responsible for reacting to the feedback?

I looked forward to this future-ing themed workshop because I wanted to hear how the community moves forward. The discussion on the project's future would show how invested co-designers were in the project regardless of the facilitator's presence. Moreover, big picture discussion such as talking about the future is always more fun than working on the details! Overall, I found it productive and engaging to alternate big picture imagination types of exercise and narrowing-in or decision-making discussion between the workshops.

Outcome

For the final workshop, I started out with small reflection as a focusing activity. We all were sprinting all the way to this moment, so I wanted to give us time to quietly reflect. Meditation was less than 5 minutes, facilitated with the cameras off, eyes closed, and with just audio. It gave us time to calm ourselves down from a busy workday and ease into future imagination mode. Also, this allowed me to give thanks for the fantastic workshops on behalf of the community.

At the beginning of the workshops, two concepts I shared were **future cones**⁷ **and feedback loops (See booklet pages on the right)**. Given the infinite number of future possibilities, there are definitely better scenarios versus not. I asked the co-designers to think about "what actions can we take right now to make sure we are moving towards the ideal future scenarios?" The feedback loop ensures that one notices all the consequences occurring from an action, taking the feedback and incorporating it back into the next set of actions, completing the loop. These concepts had many applications, such as accountability, the impact of the project, future cycles of the project, and were essential to leave with the community as they move on to work on the project independent of the structured workshops.

Jumping off the feedback loop concept, the first main activity we did was talking about measures of success. I included this brief activity to make

Activities Open discussions Plan discussions

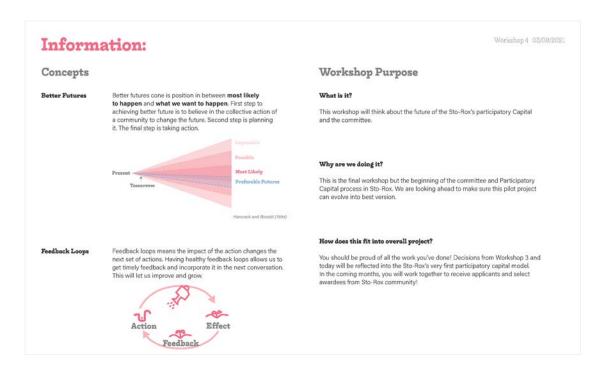
Concept Feedback Loop Future Cone

7. Future Cone: A graphic depiction of taxonomy of alternative futures. The center shows most possible future scenarios, the wider part represents plausible, and the widest part encompasses probable future scenarios (Voros, 2003, p. 16).

sure the program had evaluable goals, and they had the common language to talk about goals and accountability moving forward. Hopefully, the codesigners would use this framework to talk about the project as they move forward. Sometimes it is enough to just plant the seed of thought.

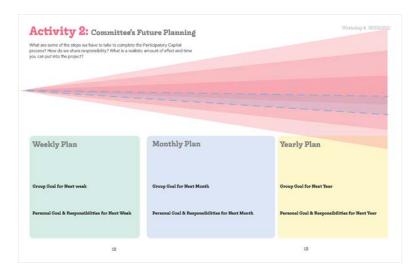
The rest of the workshop was facilitated by community leaders. This was our way to transition from outside-facilitator-ran workshops to community-led projects. Together they talked about their name, timeline of the project, baseline qualifications. As I feared, the conversation was less structured and, more often, went off-topic. We did not get to answer all the questions we had since we ran out of time.

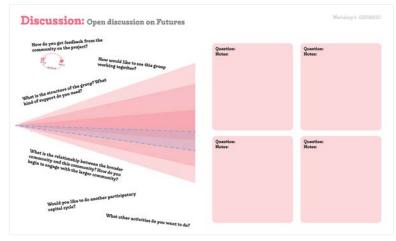
Nonetheless, the conversation felt like it belongs to the community. It was amazing to see the conversation, opinion, and answers pouring out once the discussion structure was more fluid and open. Seeing this, I wondered what would be the balance between structured activities and open discussion during a co-design process.



Workshop booklet: *Workshop 4 Introduction*







Workshop booklet: Main activity 1, 2, and discussion. Activity 2 and discussion portion was led by community leaders.

Overall Outcome

Community Pay-It-Forward⁸

The community understood how crucial this fund would be for the small family-owned micro businesses. They knew that making this a loan would put more burden on them. Moreover, they sought ways for this fund to make a greater impact on the community beyond the grantees. So, they came up with a Community Pay-It-Forward framework. In this framework, recipients pay back the fund through community engagement rather than through monetary repayment. For example, businesses could provide their space to local youth groups, become career mentors, provide free haircuts or lunch for the back-to-school day. This was such a fantastic idea that I would have never come up by myself. And even if I did, I would have had no support to convince the businesses. Now, this idea was coming from fellow community members who had real lived experience of the community and were ready to train the business owners and other grantees.

The co-designers were transforming financial capital into social capital to make a more significant impact than initial funding. This would also promote building relationships between businesses and communities, fulfilling one of the core needs they identified for Sto-Rox.

Looking back, the most amazing thing is that I can trace this great idea forming as early as the street survey and early workshop discussions. This gave me confidence that the co-design process was able to surface the underlying needs of the community and make an attainable and authentic solution.

Core needs they identified for Sto-Rox: See workshop design section on page 34 and Workshop 2 on page 48.

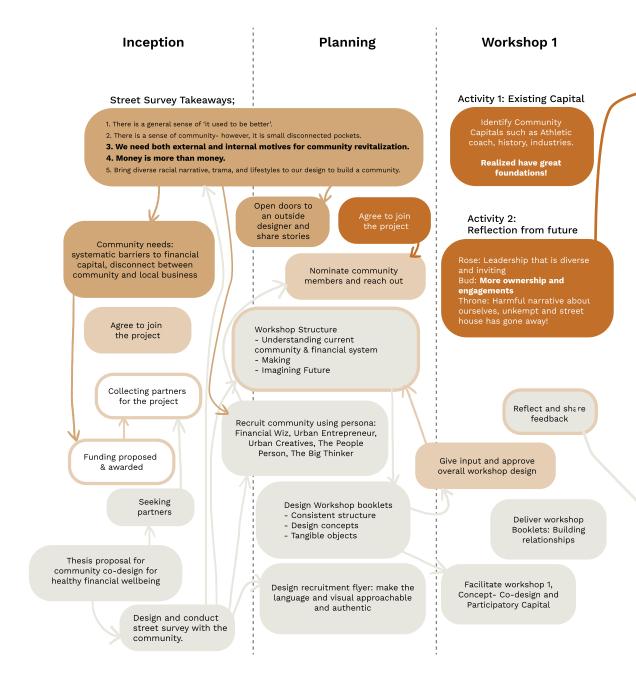
Built investment and trust

According to the surveys that co-designers and community leaders filled out after each workshop, the community members who said they never experience the co-design before told me that they had a better understanding of a design process. They also said that through this process, they have learned something new (100 percent said yes) and change their opinion and perspectives (71 percent said yes).

Leaving the community, I was worried that people would lose steam. However, when I visited the community during their later meetings, I could see they were continuing the work, and their relationships and commitment were even stronger. Four 90-minutes workshops were enough to build that trust and emotional investment in the project. The most amazing thing is that they were already talking about inviting and training the next set of community co-designers. I cannot ask for a better outcome than that.

Co-design process sketch

This is a reflective sketch of the project. It is messy at first glance, but I believe the sketch is wonderfully representative of the project's spirit upon close reading. It shows that various engagements and groups are consistently influencing and informing others. The shift in colors indicates the hand over of the project from the experts and project holders to the community. Especially, follow the **bolded text items** to see the formation of the community-pay-it-forward idea.



Groups who were responsible

Community

Co-Designers

Community Leaders Project Holder Design Expert

Execution Workshop 2 Workshop 3 Workshop 4 Activity 1: Measure of Success HW: Card sorting Activity 1: Board game **Build relationship** through Community **Project: Increased** Think about collaboration between Pay it forward Meet with facilitator and think about priorities about importance of local community and businesses, businesses and Diversity, business benefit community collaboration response and feedback Submit application Activity 1: Group Card sorting Activity 2: Future Planning Important things about the applicant: Plan for the fund, Activity 2: Give feedback to Synthesizing the committee and project Community Collaborative Fund Set Timeline for application, submission, decision Came up with 5 Qualities of (May 2021) Engage and train businesses to be next set of Open discussion Collaborative, co-designers! Support local, Community pay it **Decided that this** Provide Quality Service will be grant rather than loan forward format Transform financial capital to social capital Brainstorm and design Workshop 4 questions Brainstorm Cards for card sorting Facilitate Workshop 4 Reflect and share feedback and start community outreach Reflect and share feedback Meet with co-designers individually to go through card sorting Seek more opportunities and Conceptpartnerships Future Cone, Feedback Loop Facilitate workshop 2, Facilitate workshop 3, Application and Concept- Synergy Concept- Inclusivity and Synthesizing funding logistic Loved this support workshop!!



Photo: Zoom meeting screen

Reflection: Teacher-Student and Student-Teacher

Critical Pedagogy was the guiding principle as I went into the workshop. Paulo Freire says we need teacher-students and student-teachers in the space of dialogical pedagogy. This means that teachers and students both have to be in the learning mode and, at the same time, in the teaching mode (Freire, 2018, p. 80).

This kind of sharing of the roles is crucial in the co-design mindset because traditional design education tells designers to be on either end of the extremes; teacher or student. When designing in the community context using traditional design processes, designers take on the role of a teacher. Think about the director in the Trueman show. The design experts who resumes the role of a teacher has the idyllic master plan for the outcome, and they feel like they bear the responsibility to guide the community to the utopia. The other end of the spectrum is community-led design; well, the wrong interpretation of it. Misunderstanding co-design could lead to a designer passively listening, note-taking, and never imposing one's view. An advocate of this would say, 'saying anything as a designer to the community would be reinforcing classism, elitism, and often racism!'.

However, borrowing from Freire's teacher-student, student-teacher model, I believe that the co-design space should have active exchange of teaching and learning. The critical point here is that both sides are diligent and proactive rather than passive. Even in the latter case of a community-led design scenario which might look good, the designer is passively listening to the community. And this won't do much good as offering the community the design expertise, questioning the community, pushing the community with a fresh perspective of outside designer. As a designer, we can share a new way of looking at a problem and unconventional pathways of doing things. Community and designers, they both have something valuable to contribute to each other. In healthy co-design, communities and designers have to go out of their comfort zone while being flexible to pivot their own thinking.



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Our Ideas Belong Here (OIBH)

Co-design starter kit

I was able to achieve fruitful results as a beginner co-designer with great partners, and I am ready to share what I've learned. After this experience, I am convinced that co-design methodology has a place everywhere where we make decisions. Some people might think this is radical, but to achieve the wicked problem⁴ of our modern, interconnected global society, it is both a necessary and attainable step. To make co-design more regular, it should be more low-key, lightweight, and flexible than how the current co-design narrative portrays itself. The co-design starter kit, *Our Ideas Belong Here (OIBH)*, aims to enable anyone to easily start their co-design project for their community.

4. Wicked problem: See definition of the wicked problem on Page 17 or glossary

Context

The OIBH project will be a co-design starter kit for beginning codesigners interested in designing with underserved voices. It could be in a community setting but also in the workplace. There are always existing hierarchies in every space. When a hierarchical power structure dominates the decision-making process, the perspectives of marginalized groups who would get impacted by the decisions often get left out. This tool will focus on that power imbalance between the dominant and marginalized. With this focus, it will give a generalized starting point for anyone to co-design.



Mode of engagements

Currently, most co-workshop designs are based on synchronous inperson engagement. However, the world has changed since the Covid-19 pandemic, and we need more hybrid options of community engagement and remote workplace engagement. I am excited to position this tool in virtual space with some asynchronous in-person resources to fill in that gap (See diagram on Page 64).

Through this, I want to lower the barrier of design and spread co-design methodology by providing co-design activity templates that can hold many different forms of communities and ideas.

Furthermore, in turn, use cases of this toolkit could give us opportunities to collect and share examples of co-design, normalizing participatory decision-making and co-creation.

Elements

The facilitator guide has sections on the basics of co-design, team roles, mindsets, as well as detailed instructions on each activity, including budgets of time, material cost, ideal participant size, purpose, and outcomes.

For activities resources, I refined the activities we went through during our project and made it more lightweight, both in terms of material cost and facilitation skills, so it is easy for non-profit organizations or community members to implement on their own. I am making easy and cheap editable activities sheets and large community boards that can be put up on the community gathering space for asynchronous engagement.

Rendering: Mock up of community boards for asynchronous in-person engagements





OIBH Sample Pages

Started by **Diana Minji Chun** Made by You Co-design Starter Kit

Roles and People

There are some foundational roles that every co-design project requires. They are numbered in the ideal order of recruitment. One person can have two roles, if necessary, but try to delegate the responsibility as much as possible, so the project has a strong collaborative planning team.



1. Project holder

A person who is responsible for seeing the whole process through. This person is highly invested in the co-designers' community and act as a bridge between team members and the co-designers. The person also has the wherewithal to find a replacement if other roles become vacant. This person is ideally NOT a co-designer.



3. Co-designers

Anyone who would be impacted by the outcome or design can be a co-designer. They meet regularly to discuss and come up with a design or give input on a existing plan.

Other helpful people to include

Outside Experts: People who went through the related path before or hold particular relevant knowledge. Reach out to them to hear their story and share your questions.



2. Facilitator

Runs the workshop. Explains the activities, keeps everyone included, engaged, and on track. Multiple people may be able to take turns facilitating if they function as a well-communicated team. This person is ideally NOT a co-designer nor planning support.



4. Planning support

Logistic support, treasurer, communicator, keeper of timeline, a facilitation support. This person is ideally NOT the facilitator.

Larger community: People who are distantly related stakeholders. Doing initial engagement with them might give you a good understanding of the context and direction before jumping into the workshop.

Worksheet 1: Project Scoping

Timeline

How long would it take to achieve the goal of the project? If you envision this as an ongoing project, how long is the first cycle? How long can the project holder dedicate time to the project?

Sketch your own timeline

Use date (ex. Jan 1st) or time span (ex. Week 3)

Start

Finish

Budget

Do you have a budget? How much? Other than buying materials, renting space, providing snacks and drinks for the workshops, would you be able to pay co-designers?



Size of Engagement

How many core co-designers can you have to represent diverse samples of stakeholders? (More about this on page 7) How many co-designer can you build a personal relationship with and individually reach out to? See 'Roles and People' on p.5 for more information.

What is the number of people in the project?					
	Smallest group necessary		Biggest group possible		
Between		and			

Worksheet 2: Planning and Gathering

Step 1. Topic identification

When you have your project holder and facilitator, we are ready to start the project. What is the co-design project about? What is the question you are trying to ask? And what are some of the topics or knowledge you need in answering the question? The easy way to figure this out is by asking yourself, 'what are the google search terms, books, or expertise you would seek if you have to answer the question alone. (ex: finances, high school education, homelessness, gardening, race justice, etc.) Write some subtopics—highlight 5 of the most important topics.

Торіс	Торіс	Topic
Sub topic	Sub topic	Sub topic
Topic Sub topic	Topic Sub topic	Topic Sub topic

Step 2. Create Imaginary Co-designers

From the highlighted topic, see if there are more dominant topics or knowledge. Look for knowledge that our society thinks is more hireable such as finance, and the topics that are viewed as problematic such as addiction. And match them with collaboration style (see page 8). If the topic is more dominant (finance), then match it with a more people-motivated collaborator. If the topic is less dominant (single motherhood), you can pair it with a task-motivated collaborator. Come up with imaginary story for the co-designers. See the example below

Co-designer Example

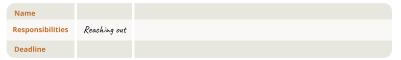
Topic Single Motherhood Collab. type Get it Done

Story I am from the community and involved in the community. I have my challenges day to day but with my circle I always get through them. I love people and am adaptable to different environment. I am get it done' type of collaborator. I stay on the topic and focus on getting results. I am straight talker and not afraid to make decisions.

Step 3. Recruit

This can be nominations from community partners. Or you can do an open call and interviews, which is successful if the project can provide a direct stipend or benefits. Discuss and use the imaginary co-designers as a guide in order to recruit diverse co-designers to the table. If you have three people who falls into co-designer 1 type, try to find other co-design types to even out the group. Pay attention to imbalance of power throughout the process.

Timeline and responsibility during recruitment process for the planning team



Reflection: Thesis for Unheard Voices

Starting a thesis project was a daunting task. Everything was new to me: the broad definition of design, design research, co-design, community design, and even a very concept of a thesis. I thought I would not produce work similar to those highly regarded, impressive theses that other Carnegie Mellon Master students had shown in the past. Nevertheless, I had one thing that I was confident about: my passion for seeking out marginalized voices.

The inspiration for my thesis topic came from my mother-in-law, who first crossed the US border from Mexico in the 1980s. Whenever I talk to her, I learn about our society's wicked problems from her point of view. She has been doing housekeeping all her life trying to provide for her son. During the 2009 housing crisis, she lost her house and struggled to make sense of the society that took not only all her savings but also her zest for life for a while.

Talking to her, I began to question; Why did she need two full-time jobs? Why did she get injured at the job? Why was she behind on her mortgage payment? Why did she have to go to the payday lender? Were these problems really her fault or the fault of our broken system that lacked different perspectives, compassion, and understanding? How can our economy and society's vision include her in the picture? She communicates with me sometimes in imperfect English, but the enormity of her love and wisdom for life always comes through. She has so much to offer us. She inspired me to find ways to uplift those voices like hers through this thesis.

It was amazing to do a mock workshop with her. Even if it was a practice round, seeing her talk about her life, community, and her family gave me so much joy. Co-design can be utilized to reach a specific outcome, but in some cases, being together might be a good enough outcome itself. Those are the emotions that I thought about while making this toolkit.



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Co-design within a Bigger Context

The co-design process is often considered to take more resources, time, and even generates a higher risk of going wrong (Bodker, 1996, p. 215; McKercher, 2020, p. 39). So, why people's participation worth it, notwithstanding? Furthermore, how does design fits into the bigger picture of a more democratic and more equitable society?

There is no question that democracy is beneficial to our modern society. Democracy makes our society fairer as well as adaptive to change. When governance is in the hands of multiple people, it gives us ample opportunities for checks and balances, making our community more equitable. And as our world change and evolves, inviting diverse perspectives can bring about resilient and flexible solutions and innovations.

But I wondered if co-design has any measurable impact or scientific relationship with a democratic society. So, I dug through the link between hard science and co-design. Moghaddam, the author of The Psychology of Democracy, argues that when society reaches true democracy (Moghaddam calls it **actualized democracy**⁹), people go through a fundamental change in their psychology (2015, p. 4). Democracy requires us to think deeply about the human relationship, such as how we see ourselves concerning others and our leaders. It involves more abstract thinking, imagination, and critical thinking (Moghaddam, 2015, p. 5). The co-design process is a great way to practice abstract and critical thinking, engaging people in smaller scale democracy. Therefore, co-design not only allows actions to be taken for a more equitable society but is also a perfect bridge for people to achieve actualized democracy.

Co-design is necessary for solving **contextual social problems**. In order to tackle the problem that cuts across multiple policies, systems, generations, and cultures, we need creative collaboration between people or organizations. With today's technological development, small-scale movement can be connected instantly from thousands of miles away and turned into social innovation. Or even better, as Ezio Manzini aptly wrote, it can become a collection of solutions that is 'a recombination of existing assets that aim to achieve socially recognized goals in a new way' (p.11). This type of distributed social movement starts with a small contextaware design solution led by the local community. In a bigger picture, these co-design projects create a movement of solutions for resilient social innovation for the global culture by training more creatively engaged civic collaboration and decision-making processes.

9. Actualized democracy:
Democracy that is full, informed,
equal participation in wide aspects
of political, economic, and cultural
decision making independent of
financial investment and resources.

Contextual social problems: See definition of the wicked problem on Page 17 or glossary

Reflection: Thesis Rooted in the Real Messy World

During my master's education, I learned much about the theories, ethics, methods, techniques, technologies related to design. Nevertheless, this thesis process showed me there is hands-on knowledge of design we need to learn more about. Even though the context and questions of my thesis shifted from the early stage to now, the focus of learning from real people's voices stayed the same. I am unsure if my thesis fits into the **right or good thesis** from the traditional academic research perspective.

Right, meaning it is not quite quantifiable or structured research. I sought people with unheard voices. We listened to each other, I helped them design part of their community, and through the process, we saw our society from each other's point of view. This thesis is just my perception and story about it. Nevertheless, I believe it is a powerful story for co-design. I thought, if we have enough of these stories, maybe listening to everyone's voice might become more natural.

As to the **good** part, I was an outside designer who had my questions to answer. This was an uncomfortable fact for me for a while, but I grew to be ok with that uncomfortable feeling because I realized that my need will not go away but can co-exist in the community. The moments when my need for **'questioning the world for change'** and the community's need for **'a new way of doing things'** met are what I am taking stock of as I finish my thesis.

For me, doing my thesis base on hands-on knowledge from non-designers was the best decision I made. Doing a thesis rooted in the real world humbled me, grounded me, and made me the designer I wanted to be.

I hope this thesis document is a reminder of my commitment as I step out of the world of academia into the real workforce. It will be full of quotas, matrics, requests for tangible evidence, and ROI calculations. However, these tools only attempt to 'evaluate' the future for the few. This thesis experience showed me that a co-design process could 'reshape' the future for all of us. My thesis was only a year-long, but it launched my lifelong project that will take all of my head, hand, and heart. I am ready for it.

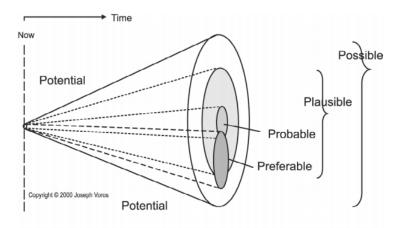


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Glossary

- **1. Co-Design:** a methodology where all stakeholders decide and take intentional actions to change their surroundings according to their shared values. Read more about my interpretation of co-design on page 14.
- **2. Resilient understanding:** Having a resilient understanding means that the story could be hold true amoung different perspectives, cultures, or times. To gain this, we must research multiple perspectives, redrawing the cause and effect of past events and systems that led to the current situation.
- **3. Underserved community:** According to Presidential Executive Order 12898 signed in 1994, "underserved population" is defined as "a broad category that includes minority and low-income populations but may also include many other categories that face challenges engaging with the public and private resources and reaping equitable benefits, such as children, the elderly, and the disabled." This definition has been widely used by government agencies and research institutes such as Urban Institute.
- **4. Wicked problems:** According to Buchanan, the Wicked Problem is problems that has no definitive conditions, right or wrong, or limits to design due to its interdependency of other systems.
- **5. Persona:** "Personas are abstractions of groups of real people who share common characteristics and needs." (Miaskiewicz & Kozar, 2011) Personas are commonly created by aggregating research data from people and are used to understand and empathize with them. However, a persona can reinforce stereotypes or flatten a diverse community to a single illustration.
- **6. Head, Hand, Heart:** I first learned this term from Scott Wolovich. Popularized by the book titled "Head, Hand, Heart" by David Goodhart, the phrase represents different types of the abilities one might need to do any given task. Indeed, I realized that knowledge and cognitive ability (head), technical, practical abilities (hand), and social and empathetic skills (heart) are necessary to work in a community co-design space.

7. Future Cone: This is a graphic depiction of a taxonomy of alternative futures. The center shows the most possible future scenarios, the wider part represents plausible scenarios, and the widest part encompasses probable future scenarios (Voros, 2003, p. 16).



Source: Adapted from Hancock and Bezold (1994)

- **8. Community Pay-It-Forward:** This framework was designed by Sto-Rox community co-designers. In this framework, recipients pay back the financial aid or donations through community engagement rather than through monetary repayment. For example, businesses could provide their space to local youth groups, become career mentors, provide free haircuts or lunch for the back-to-school day.
- **9. Actualized democracy:** A form of governing system that allows full, informed, and equal participation in wide aspects of political, economic, and cultural decision making independent of financial investment and resources. (Moghaddam, 2015, p. 4)

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