Sampling Club: Research Through Sampling

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Abstract

Sampling Club was a 9-week research working group led by artist-in-residence, Etta Sandry in the Unstable Design Lab. The club consisted of artists and HCI researchers and met weekly to explore sampling as a research practice. In this workshop, I will share Sampling Club as a collaboration model and how I benefited from participating as a graduate student researcher. In doing so, I aim to contribute to the conversation of mutual benefit between artists and researchers and to incorporate alternative models into future research.

Author Keywords

Artist residencies, collaboration models, computational fabrication

Background and Motivation

I am a graduate student researcher in the Unstable Design Lab and an artist with a practice expanding into kinetic sculpture, illustration, and recently in woodworking, weaving, and ceramics. During Fall 2022, I was a member in Sampling Club, a working group conceived by artist and weaver-in-residence Etta Sandry during her Unstable Design Lab residence. I saw my role in the group as both a learner and a critical friend. Each week, I would bring my sampling-in-progress to the group to share and receive feedback, and I would offer the same thoughtful perspective for others. As a result, I created a project called Glitch Weaving [2] which explores algorithmic error in weave drafting.

My participation in Sampling Club led to many samples of glitched wovens created using a functional software tool (Fig 1). Glitch Weaving was informed by the artists and researchers in the club, helping to shape its direction and provide critical and timely feedback. As an HCI and design research practice, I'm motivated by artist-researcher collaborations and see the value in artists as collaborators on engineering projects [1]. I intend to continue my research with collaborations like these to aid in defining and designing meaningful research questions.
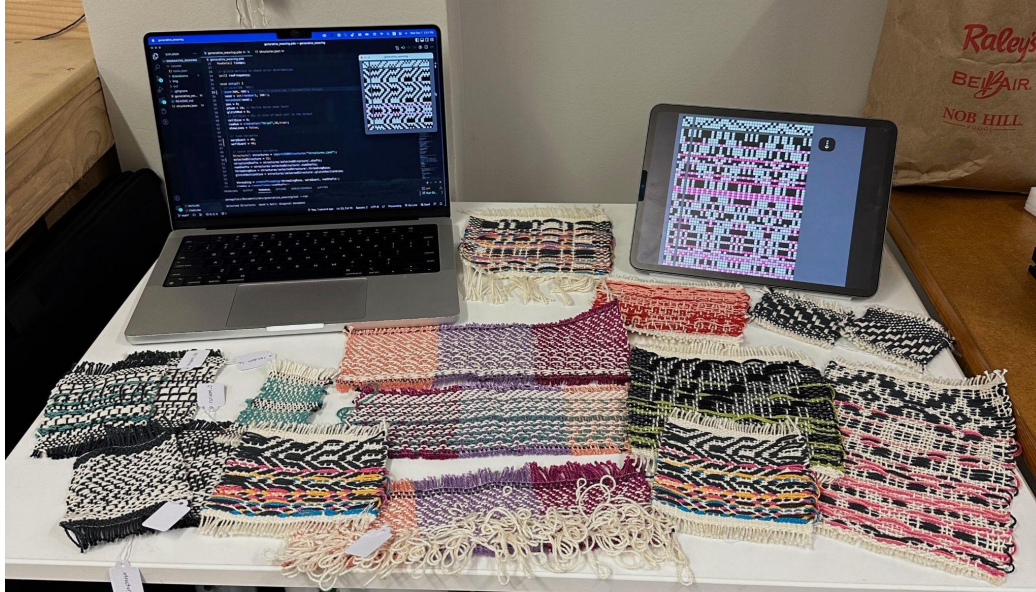
Fig 1. My Sampling Club showcase included samples, a demo, and an example of glitched weaving drafts.

Sampling Club Model

Sampling Club was conceived and facilitated by weaver-in-residence Etta Sandry. Sampling is a common weaving practice in which a weaver makes smaller tests of a design before committing to a larger piece. In her initial call for participation, Etta describes sampling as "a knowledge that is material, haptic, tacit. It is a material process of thinking, failing, and transforming." As a group, we met weekly to share our sampling-based research practice and inquiry-driven making. Our club had a diversity of research questions and materials, including biofoam, glitch, overspun yarn, slime mold, and multilayer drafting. For instance, the researcher working with slime mold explored different environmental elements that could yield the type of expression she sought in growing her living organisms.

Each week, Etta shared a prompt with us to offer as a spark for next week's work. Prompts included: remake in a way you think will fail, use found materials, use materials that feel "wrong for the job," make it big, make it small, and wild card. These invitations were invitations to look at our research with renewed perspectives. This work coincided with the planning for an end-of-year showcase of our research, and we discussed what it looks like to share the process of sampling in research to other researchers. We celebrated our accomplishments with a showcase in the Unstable Design Lab and invited the larger University of Colorado community to see our creations. I shared the results of this research during the showcase to communicate my research to those outside of the club and to engage them in making their own glitched weave designs.

My process was informed by sampling, as I made small and iterative tests in both code and textiles. For instance, one week I was asked to describe my motivation for creating glitched

weaves. Was it functional or purely aesthetic? I discussed with the group that it was a bit of both. The function was a weave sample that was structurally valid and wouldn't fall apart. I later used remaining samples to mend jeans with holes and modify a second hand jacket. The aesthetics focused on choice in selecting which glitched draft to weave. There are many possible glitches, but the density of error and how that looks in the weave is a personal choice.

Towards Mutual Benefit

In designing a mutual benefit diagram, I focused on visualizing key factors in relationship building between researchers and artists based on my experience in Sampling Club (Fig 2). I used the visual language of LEGO bricks to communicate key ideas in building artist-researcher collaborations. These building blocks are assembled through the working relationship. Some blocks can be brought by individuals, while others are built collectively over time.
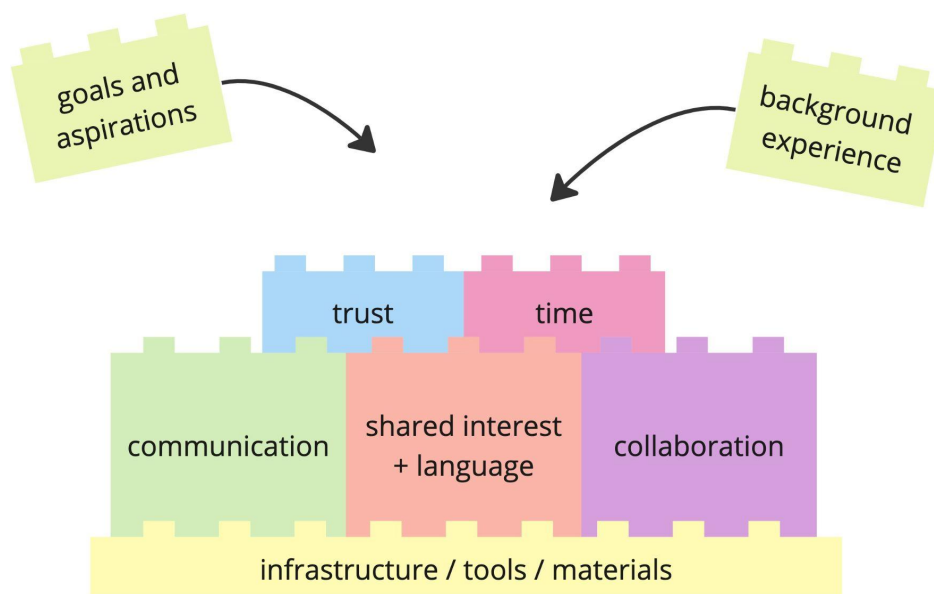

Fig 2. Mutual benefit diagram with building blocks.

The building blocks consist of the following:

Infrastructure, Tools, and Materials: Start with a shared foundation. These shared resources can be built upon for the duration of the collaboration.

Background Experience: While common background experience is not necessary, individuals' backgrounds can facilitate new research directions.

Goals and Aspirations: Decide on a direction to work toward together. If important, call out this goal early in the collaboration to define a metric for success.

Communication and Collaboration: The way in which we share and build on each others' ideas impacts our results.

Shared Interest and Language: Find common ground in terminology and motivation. Pick collaborators that share similar values in work.

Trust and Time: All of this work takes time, and trust is an asset that grows through shared experiences.

For the Workshop

I propose to share Sampling Club with workshop participants and can speak to its benefits, challenges, and learning outcomes as an artist-researcher collaboration. Sampling Club is a community for individuals engaging with research across traditional disciplinary boundaries. This unique collaboration model opens up many possibilities for future research directions, and provides an inroad for individuals from both art and engineering backgrounds to engage in materials-driven research.

References

[1] Laura Devendorf, Katya Arquilla, Sandra Wirtanen, Allison Anderson, and Steven Frost. 2020. Craftspeople as Technical Collaborators: Lessons Learned through an Experimental Weaving Residency. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (CHI '20), Association for Computing Machinery, New York, NY, USA, 1–13. DOI:https://doi.org/10.1145/3313831.3376820

[2] Deanna Gelosi. Glitch Weaving. *Deanna Gelosi Portfolio Website*. Retrieved May 30, 2023 from https://github.com/deannagelosi/generative_weaving