

RETHINKING PARTICIPATORY DESIGN:

TOOLS FOR MODELING POTENTIAL URBAN FUTURES



ARGUMENT

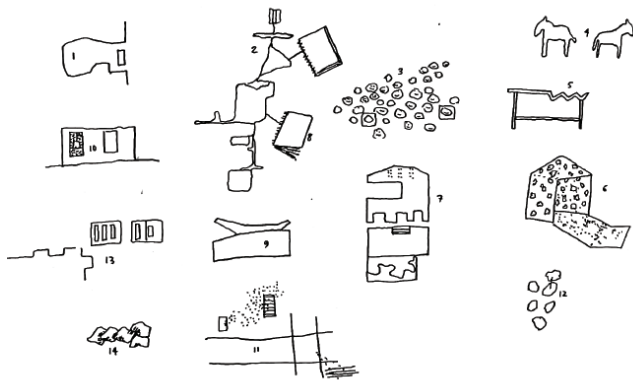
In Vitruvius's Ten Books on Architecture, Vitruvius states in the first book that the role of the architect in society is one who can do all: a person who has complete control over all aspects of a design integrated into society, with no other influences to change or manipulate the architect's vision. Today, this is to be challenged, and a new definition of the architect is to be formed. One that relinquishes complete control over a design scheme and envisages the ideas of a community. During the 1970's, many architects challenged the balance of power in the relationship between the architect and end user. This meant a rethinking of the design methodology in which participation played a key role.

However, a new digital age in a post-COVID world is upon us, and collaborative environments will not exist without new digital mediums. Architects are responsible for harnessing the capabilities of new technologies and learning how best to deploy them in the architectural design process. In a participatory setting, architects will impart this knowledge and skillset on the participants while simultaneously interpreting and advancing their products. Through these means, a new middle ground between top-down and bottom-up urban design will be discovered.

The community at stake in this participatory design process is the students of STEAM at Dr. King Elementary School in Syracuse, New York. By involving the voices of the students, the architectural design process becomes enriched through their understanding of space and their unexpected formal and sociological intuitions. This Thesis aims to establish a community-driven learning space along the scar of I-81; one that responds to both the needs of the larger community but also provides a safe and active learning environment for the students.

"The phase of formulating the hypothesis corresponds technically to what is called in authoritarian planning as 'the project.' But in authoritarian planning this means translating into organisational and morphological structures, functional and expressive objectives that have been defined once and for all - or which are easily frozen because they follow an institutional, and therefore predictable logic of behavior and representation."

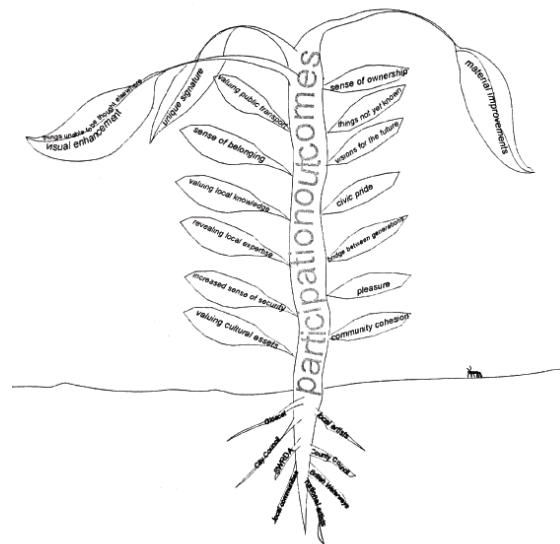
- GIANCARLO DE CARLO



PICTORIAL GLOSSARY OF MUF PROJECTS

MUF

Founded in London in 1994, MUF names their work as "a collaborative practice of art and architecture committed to public realm projects." Their work consists of urban designs where the processes of planning are left open to include the voices of others. In their projects, spatial arrangements and material resolutions are often negotiated through meetings between the public and private. MUF often creates frameworks for further action rather than specific outcomes. This methodology to their approach in designs allows the support of small claims to space, through small interjections rather than large overarching "solutions."



'PARTICIPATION OUTCOMES'



COLLECTIVE MODEL



LA MÉMÉ, HOUSING FOR MEDICAL STUDENTS AT THE CATHOLIC UNIVERSITY OF LOUVAIN, 1970

LUCIEN KROLL

One of the first architects to start the participation movement in the 1970s was Lucien Kroll. His most famous project, known as La Meme, became an alternative method to approach the design process. Successful in its campaign. The students came to Kroll seeking a new alternative to approach the monotonous design proposed by the university. The evolving physical model became a record of the work and design methodology. This process became part of the final product.

The work of La Meme became a symbol for a new type of architecture that influenced others to adopt participatory methods into their designs. This eventually developed into a new category of self-build design. In which the users are the ones who develop and design their own projects, and the architect provides the tools, means, and methods as guidance to achieve their own vision. We looked at this project because of its outcome on the discipline of architecture, as well as how successful it became to set out its goals. The collaborative model becomes a catalyst for our own framework of design.

1. Establishing Connections

- Outreach**
 - Failed connections, no responses from Blueprint 15, SHA Syracuse Crows
 - Initial meeting with the Principal
- Assumptions**
 - First site visit
 - Assumed programmatic needs (park space)
- Introductions**
 - Initial meeting with Principal Alexander
 - Coordination with Mr. Vincent
 - Logistics, class layout, student names, unforeseen obstacles
- Getting to Know Each Other**
 - Capabilities (materials)
 - Creativity (staying with the prompt vs. moving away from it)
 - Testing first assumptions (park space)
- Preparing Workshops**
 - Purchasing materials
 - Testing potential outcomes
 - Developing lesson plan (very prescriptive)
 - Thinking about size of the students' desks
 - Learning Photogrammetry and Lidar technology

2. Creation

- First Workshop - Cube Exercise**
 - Understanding of the joint
 - Introductory techniques
 - Adapting for the joint, misusing the joint
- Second Workshop**
 - Integrating new materials, new methods
 - Loosening the lesson plan
 - Cube to House
 - Privacy, security, screening, wrapping
- Documentation**
 - Lidar scanning for digital archiving
 - Interpreting design language
 - Sociologically findings
- Introducing New Mediums**
 - TinkerCAD
 - Evaluating computer skills
 - Collage Exercise
- Third Workshop**
 - Ignoring prompt
 - Working better in groups + friends
 - Designing for their interests + passions
 - Misuse of component pieces

3. Translation

- Developing Moments, Spaces, and Extensions around the existing school**
 - Referencing Working Drawings
 - Reintegrating Lidar as part of the translation
- Re-evaluation**
 - Second meeting with Principal
 - Programmatic Needs (School & Community)
 - Advancing modeling techniques
- Last Workshop**
 - Ignoring prompt
 - Working better in groups, with friends
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- Kids Critique**
 - Moving Pieces of the model around
 - Referencing where their classroom is, where the playground is, familiarizing them with scale
 - Drawing playground ideas at a similar scale to what is existing
 - "Is this going to be built?"

4. Visualization

- Introducing VR**
 - Experiencing space in new methods
 - Evaluating our work influenced by their designs
 - Recognition and altering reality

TOYS AND BOOKS
FOAM CORE
CARDBOARD
WOODEN BLOCKS

MODELING

PENCIL
CRAYON
SHARPER
STENCILS

DRAWING

LIDAR
PHOTOGRAMMETRY
SCANNING
PROMPT
DIGITIZING

ALTERING
BUILT
VICTORY

TESTING
MOCK UPS
LIGHT
MATERIALS / TEXTURES
SOUND

RENDERING
COLLABORATIVE DIGITAL MODEL
VR
PERSPECTIVES

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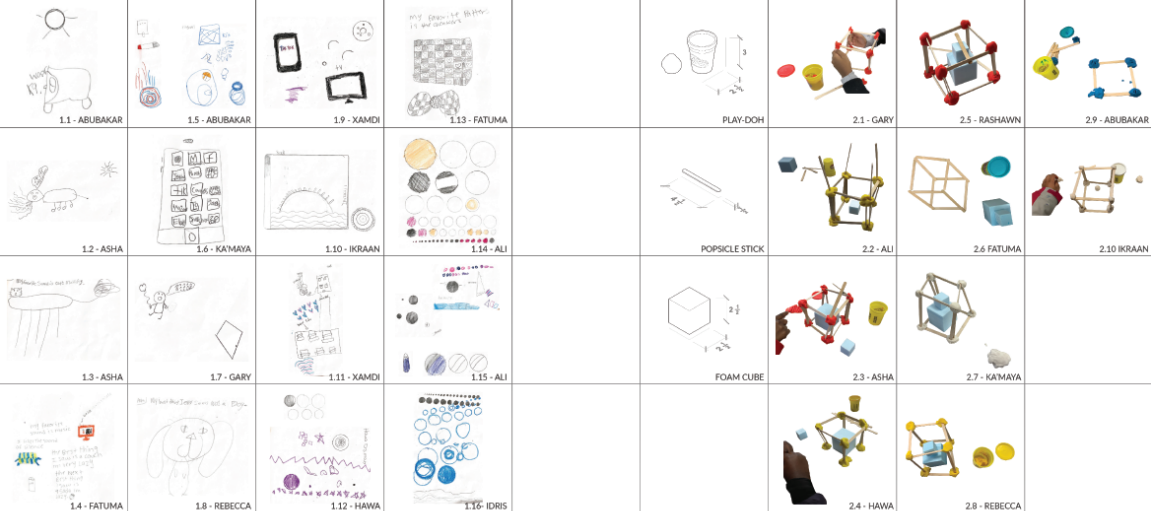
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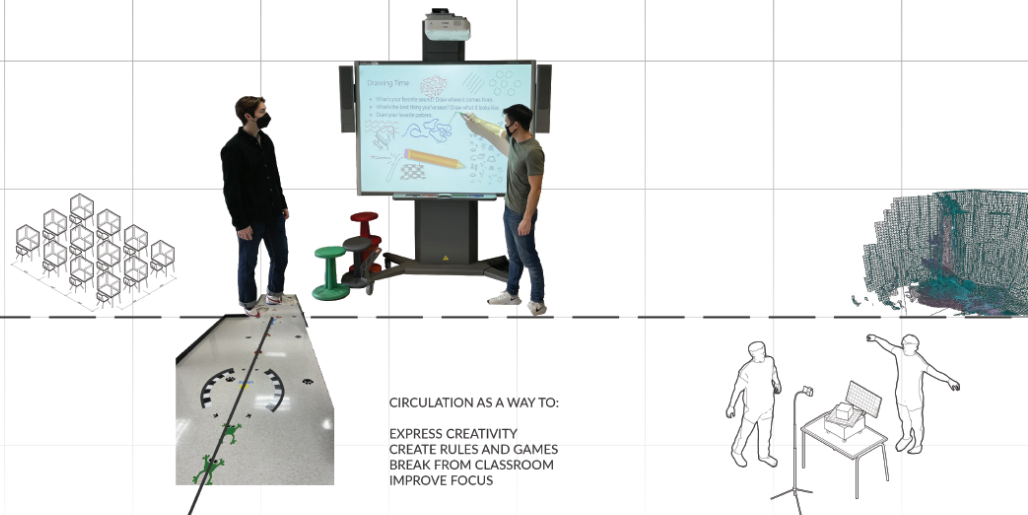
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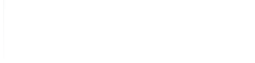
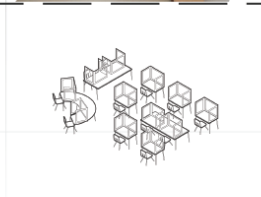
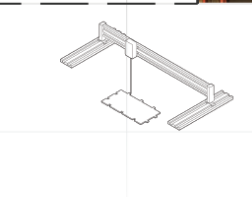
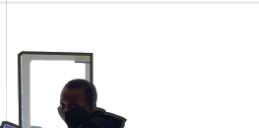
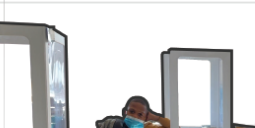
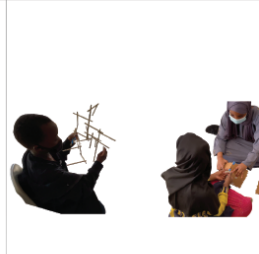
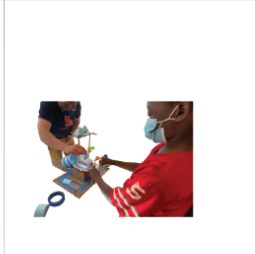
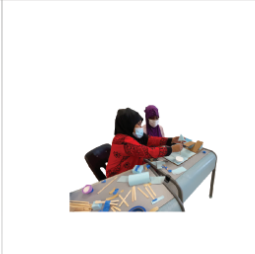
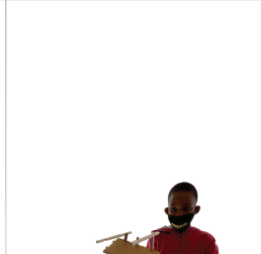
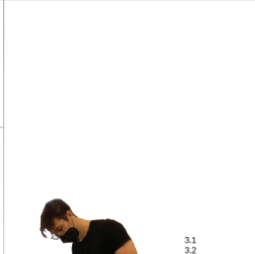
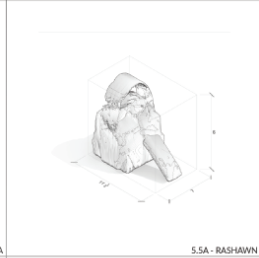
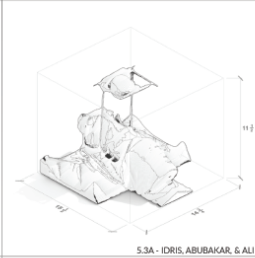
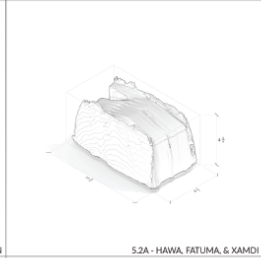
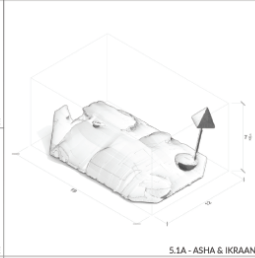
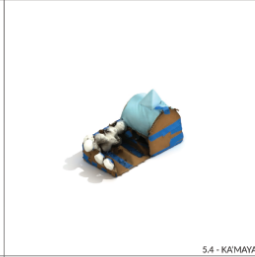
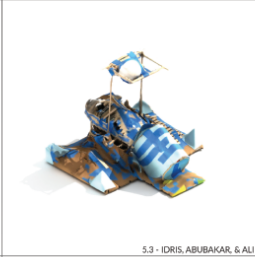
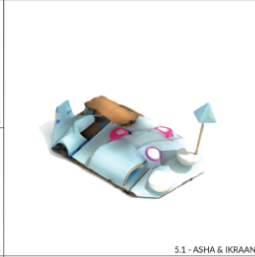
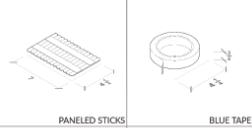
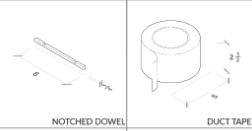
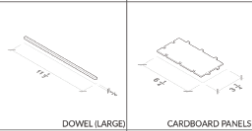
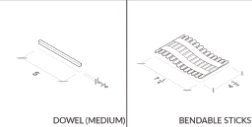
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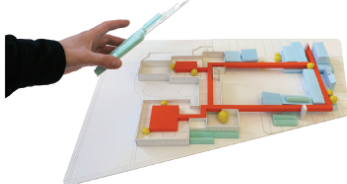
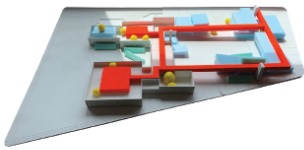



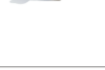





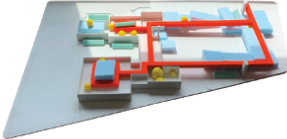








The community at stake in this participatory design process are the students of STEAM at Dr. King Elementary School in Syracuse, New York. The school is part of the Syracuse City School District, and has recently dealt with funding issues. Two years ago, the school was reinstated under a new designation of STEAM learning. By contacting Principal Kurich-eses Alexander, we were referred to 4th grade teacher Steven Vincent and his class of 12 in-person students. Each week, we met with the students for an hour on Monday's and Tuesday's. We constantly had to consider the capabilities of the students within that short period of time, all the while maintaining COVID-safe protocols. Each meeting served as a way for us to iterate our design process while also advancing the participants' own design capabilities.



	PLAY-DOH	POPSICLE STICK	3.1 - ABUBAKAR	3.3 - ALI	3.5 - ASHA	3.7 - FATUMA	3.9 - GARY	TEETERING	MIS-USE	MISAPPROPRIATION
	CARDBOARD SQUARE	PIPE CLEANER	3.1A - ABUBAKAR	3.3A - ALI	3.5A - ASHA	3.7A - FATUMA	3.9A - GARY	PATCHING	TEETERING	





PRIVACY

IMPORTANCE OF LEARNING BREAKS & TIMES TO BE ALONE

3.7
4.5
4.8
5.6



