Retracing Spatial Design Processes

Master of Design Thesis Defense
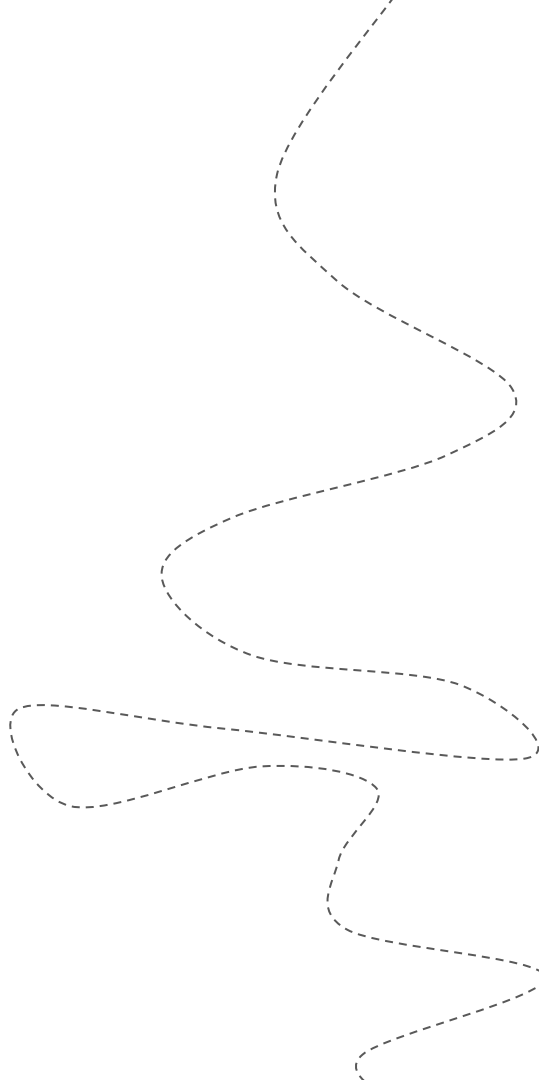
Firdous Nizar

Thesis Title:
Retracing Spatial Design Processes

retrace (v.)

1690s, from French *retracer* "to trace again,"
from *re-* "again" + *tracier* "to trace".

To trace (something) back to its source or beginning
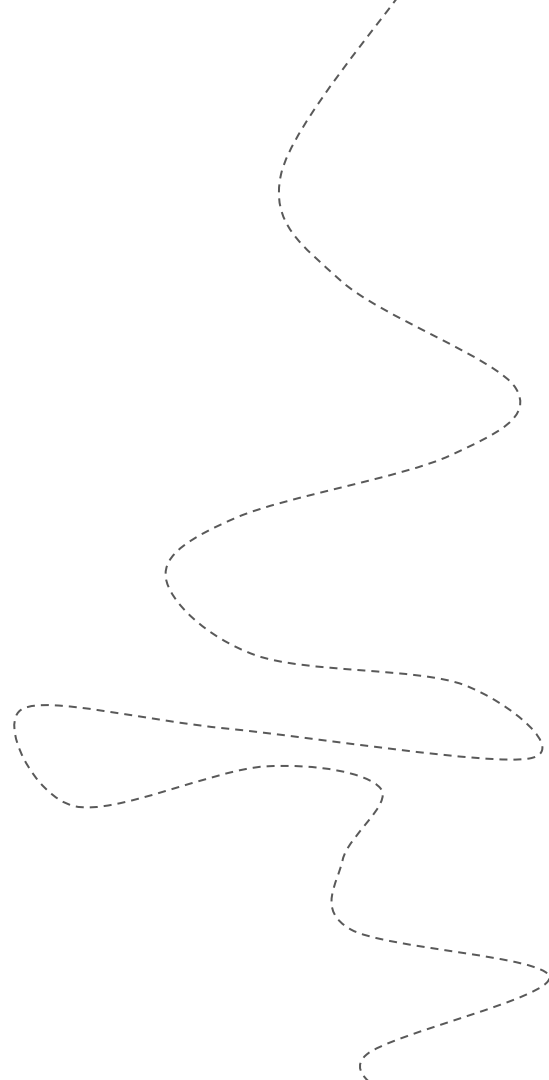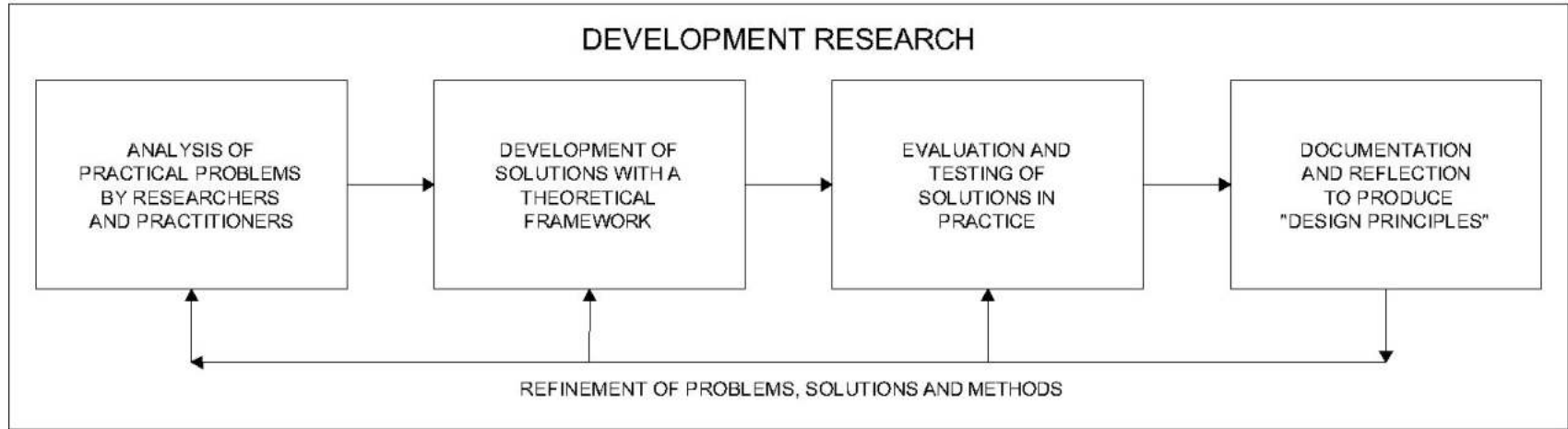"*I wanted to retrace a particular evolutionary pathway*"

*How does digital design tools
in architecture education help students*
trace, **reflect** and **collaborate**
during the design of spaces?

DEVELOPMENT RESEARCH

| ANALYSIS OF PRACTICAL PROBLEMS BY RESEARCHERS AND PRACTITIONERS | DEVELOPMENT OF SOLUTIONS WITH A THEORETICAL FRAMEWORK | EVALUATION AND TESTING OF SOLUTIONS IN PRACTICE | DOCUMENTATION AND REFLECTION TO PRODUCE "DESIGN PRINCIPLES" |

REFINEMENT OF PROBLEMS, SOLUTIONS AND METHODS

informed and planned
"trial and error"

"...this "virtuous circle" depends on the capacity of (the) student and studio master to communicate effectively with each other, in spite of the potential for vagueness, ambiguity, or obscurity inherent in the things about which they try to communicate" (Schön, 1987).

MEANWHILE IN THE STUDIO...

Tristan Comics

Development research
as informed and planned
"trial and error"

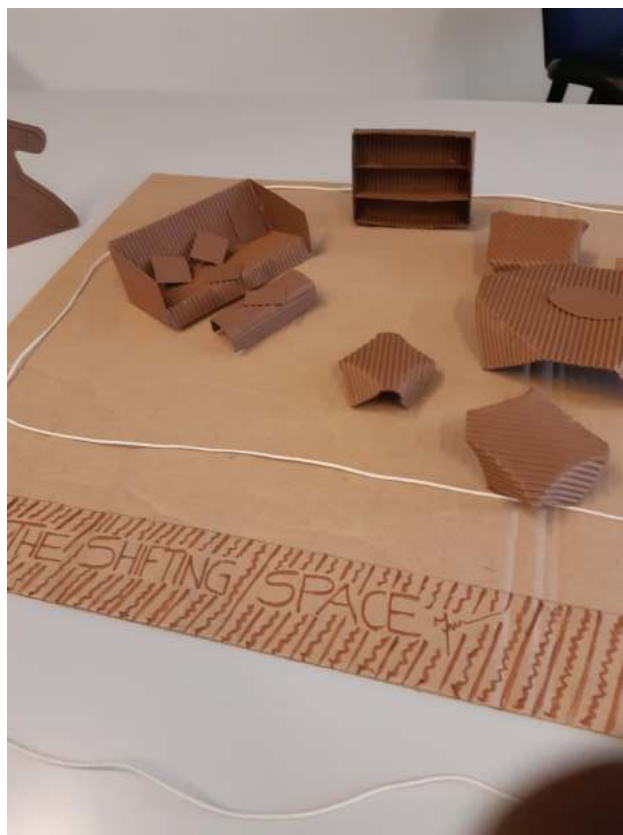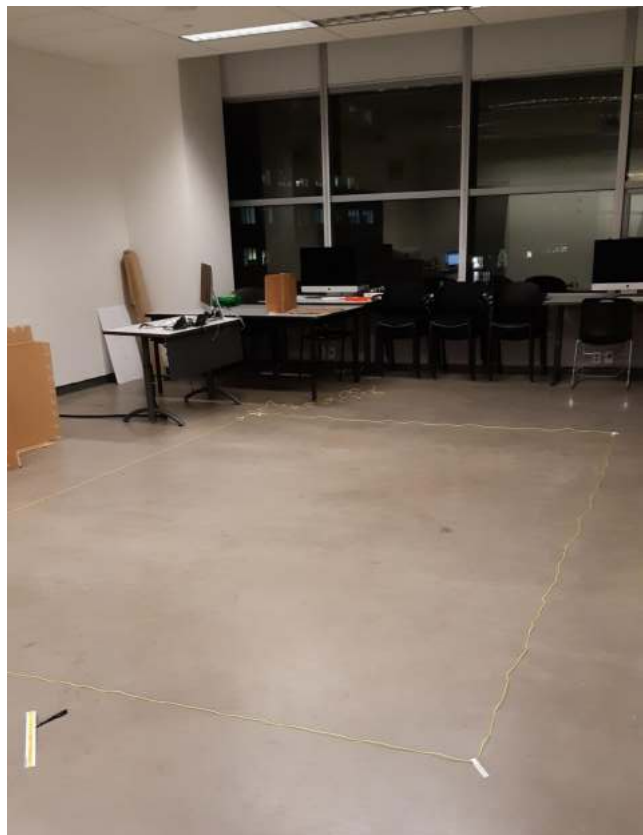trial #1

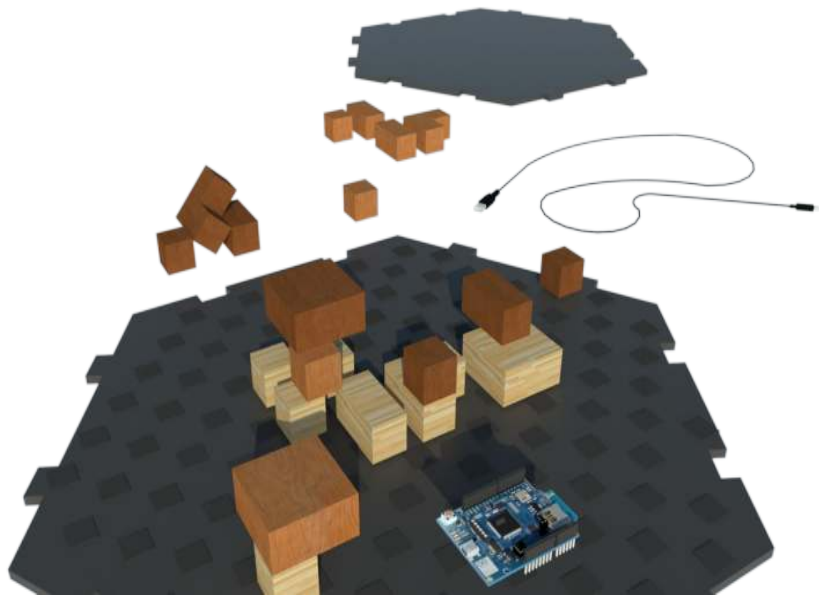trial #2

trial #3

trial #4

trial #1

THE SHIFTING SPACE

Does the tactility of furniture act as a design tool for humans to dynamically interact and shift the boundaries of their lived spaces?

trial #2
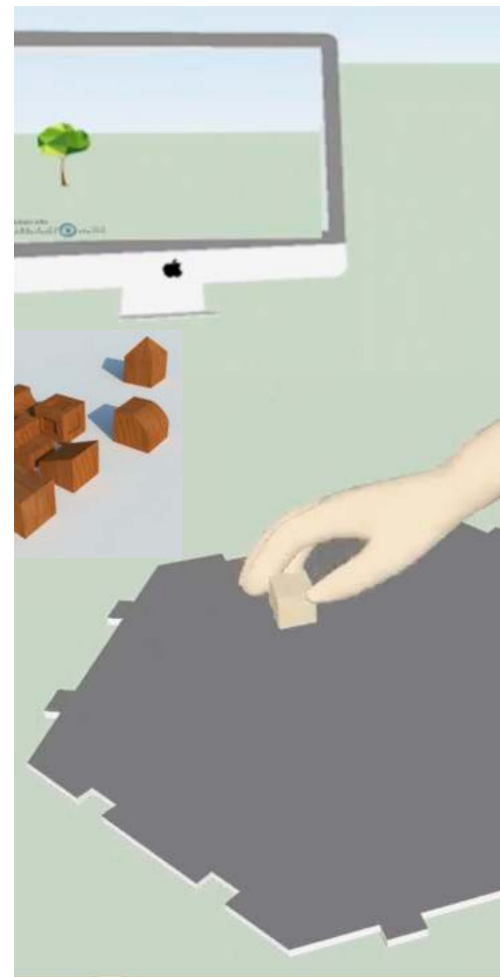*trial #3*
trial #4

trial #1

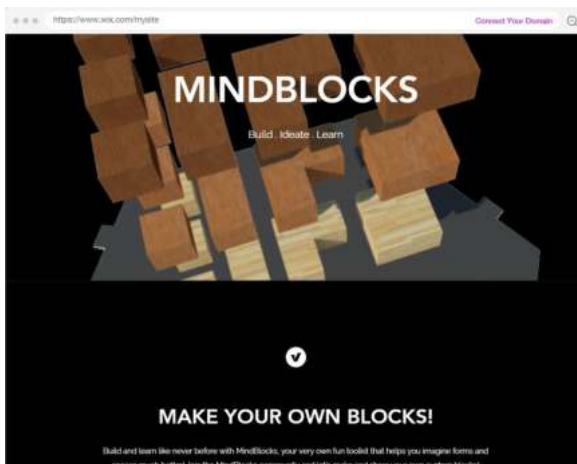**trial #2**

MINDBLOCKS v1

Does building blocks as interactive design tools facilitate communication between architects and clients during the design process?

trial #3
trial #4
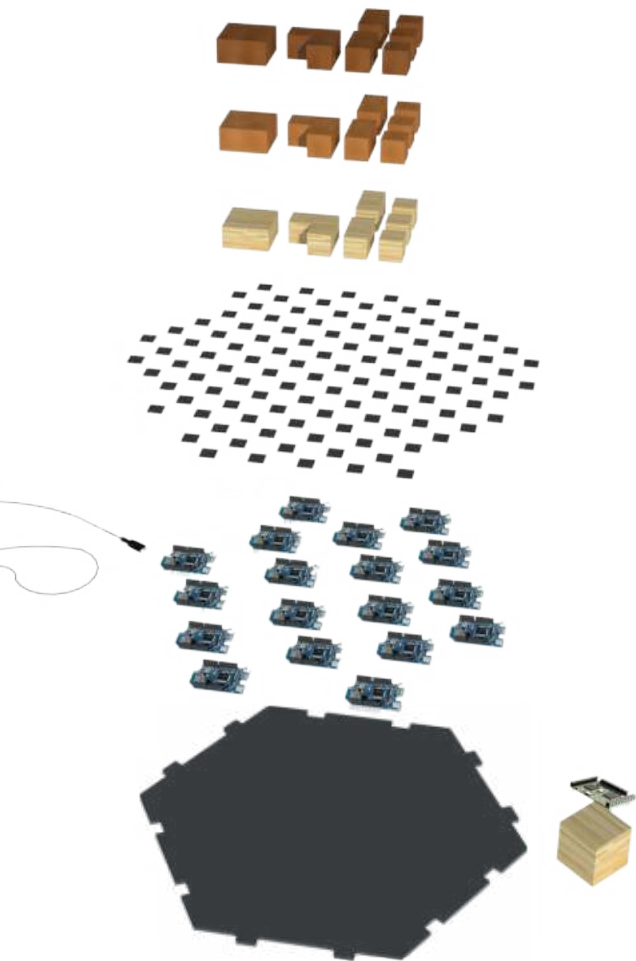
trial #1
trial #2

trial #3

MINDBLOCKS v2

Can Augmented Reality tools enable digital design in architecture while still being tangible modes of verbal and non-verbal design in architecture?

trial #4

Sketch
Non-Verbal

Precedent
Non-Verbal

Massing
Non-Verbal

Audio
Verbal Spatial
Narratives

Concept
Non-Verbal

Walkthrough
Non-Verbal
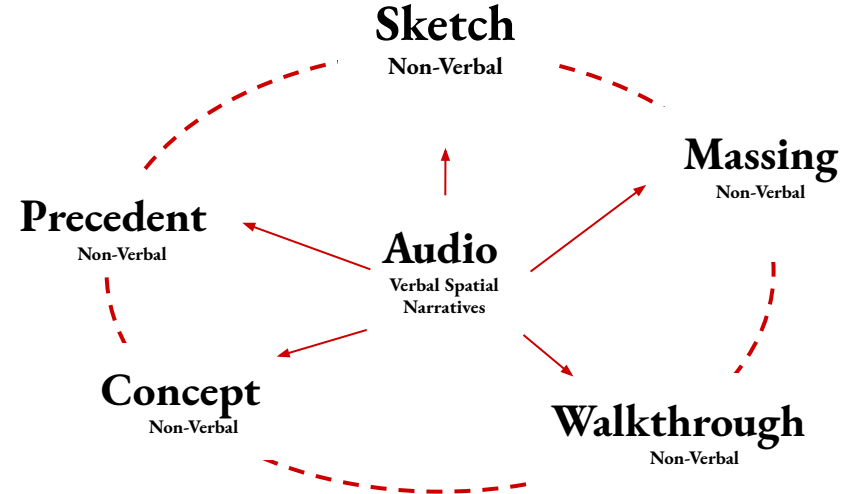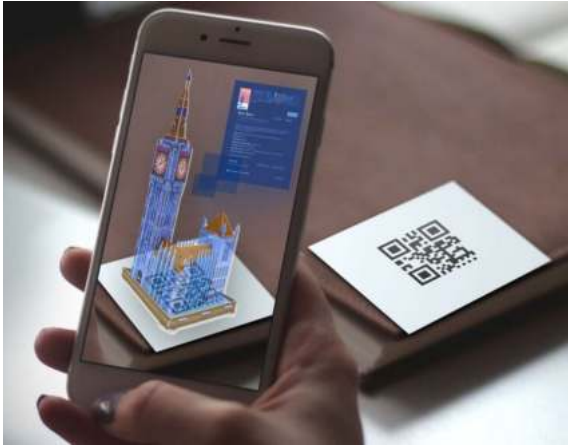
trial #1
trial #2
trial #3

trial #4

RETRACER

How does digital design tools in architecture education help students trace, reflect and collaborate during the design of spaces?

Free Aspect   Scale •———————— 1x   Maximize On Play Mute Audio Stats Gizmos

retracer

user feedback

more
trial and *error*

MDES THESIS DEFENSE
17 AUGUST
20 mins

③ METHODOLOGY : 3'
// Development Research //
(van den Akker, '99)
<< explain briefly with diagrams >>

Should there be a LIVE demo of Retracer?

- proof of concept
- easier communication
- demo on actual device brings clarity of functionality

YES | NO
- too much proof ← only for demo
- risky, could freeze
- might forget some features

Ⓐ Iteration 1: The SHIFTING Space

Ⓐ Question ▷ Approach ▷ More Ⓒ Questions ▷ highlight question for next iteration   2'

Ⓑ Iteration 2: MindBlocks v1
Ⓒ Iteration 3: MindBlocks v2
Ⓓ Iteration 4: Retracer   5'

The Development Research Approach

④ Communication + Collaboration in ARCHITECTURE Education → Sasha Aang Hari

ⓐ Roleplay comic between [student] and [instructor] in a design studio [current scenario] (could include comparisons or anecdotes of real-world practice)   3'

ⓑ Key quotes from Schön, Ingold, Pallasmaa (and/or).

☐ Option 1: explain directly with LIVE demo of tool [ON THE iPad]
+ key frames (BEFORE | AFTER)
+ survey questions & responses

☐ Option 2: brief roleplay comic c/ Sasha, Aang & Hari
+ video clippings of key features & workflow
(merge survey findings in the dialogues?)

more PRACTICAL
more FUN

• Explaining through roleplay of 3 ch... could be time o...

① Brief Introduction 3'
+ TITLE: 1'
" [Retracing Spatial Design Processes] "

② Main Research QUESTION : 1'

How does dynamic documentation and tracing of the evolutions of design proposals promote design reflection and collaboration in students and novice practitioners during architecture studios ?   25w

How does digital design tools in architecture [studio pedagogy] help students [trace / reflect / and collaborate] during the design process? (of spaces)   19w 20w

TOO LONG

→ education

☐ Option 3:   ≠

⑥ Future of [Retracer] in Architecture Pedagogy   2'
// 3 points + quote //

✱ POSSIBLE QUESTIONS (make supplementary slides)
CC   MR   MW

The whole presentation in the form of a play?