Communicating Spatial Formations Exploring the Potential of Hybrid Tools in Architecture

IDEAS-BE Grad Seminar Fall Series 2019 - Firdous Nizar

Overview

PARTI

INTRODUCTION

Effective Communication Tools in Architecture

PART II

WORKSHOP

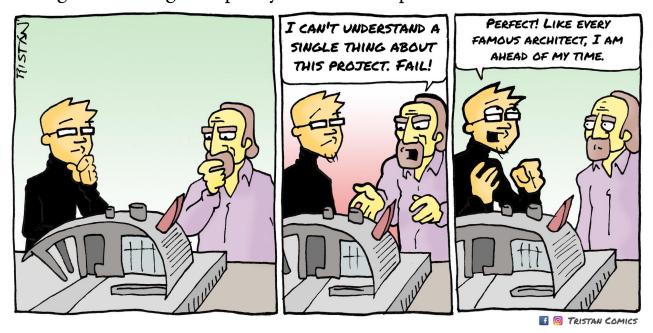
Collaborative Dimensions Survey

INTRODUCTION

Effective Communication Tools in Architecture

My research is on...

• Ongoing communication gap in sharing ideas in architectural projects between clients, architects, engineers, designers, policymakers, occupants, and so on.



My research is on...

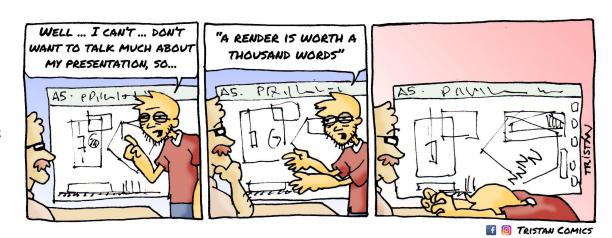
Hypothesis: This gap can be bridged by designing a more effective communication tool in architecture by combining analog(traditional) with digital(new & evolving) architecture tools, encouraging better design collaboration.

What are the challenges of communicating spatial ideas in architecture during collaborative ideation processes?



Contribution

Reimagining the design process to better facilitate bridging the gap in communicating spatial formations in architecture.



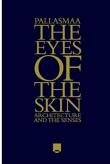
Context

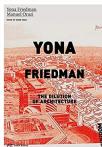
Design Process in Architecture

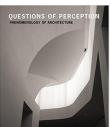
Phase 0: COLLABORATIVE IDEATION



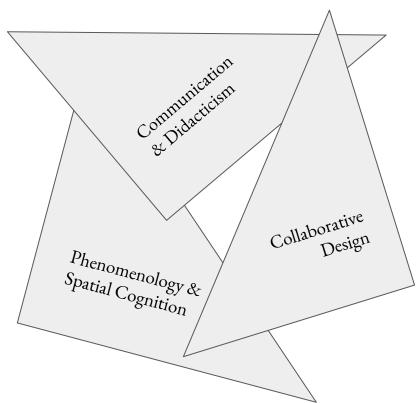
Framework





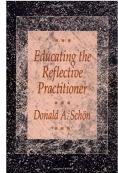


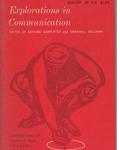




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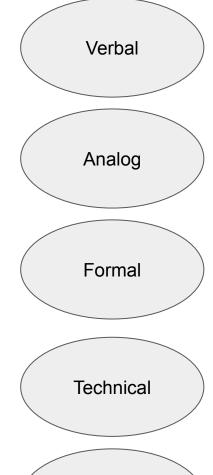




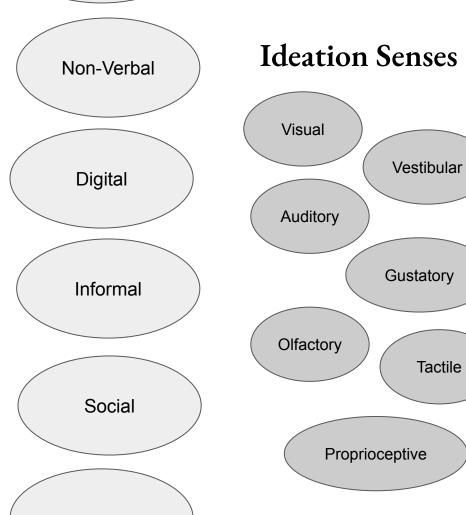




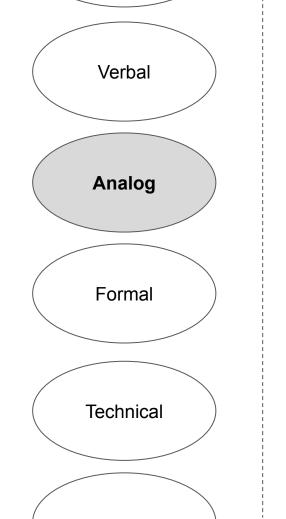
Types of Ideation Tools

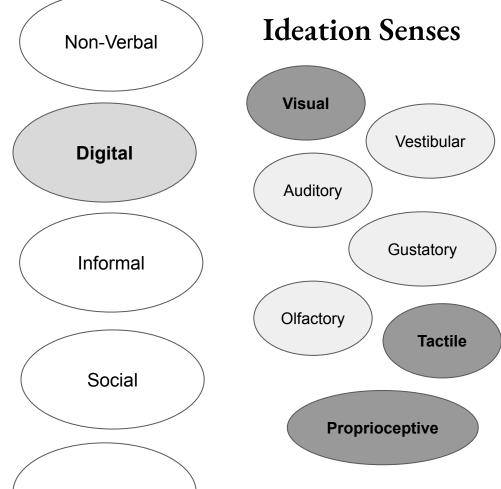






Types of Ideation Tools



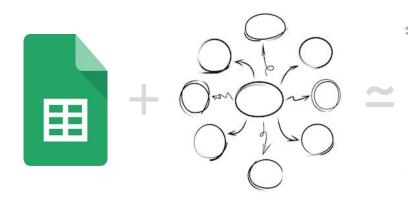


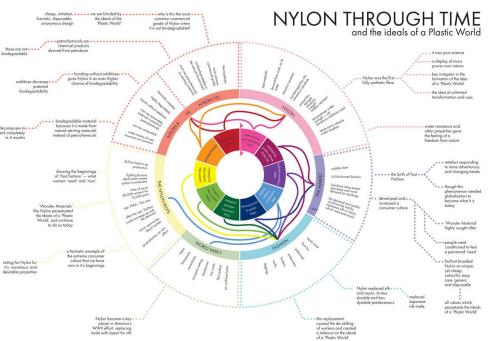
Tools Studied

- Analog/Traditional Sketches, maquettes, concept description, collage, moodboards, plans, sections, elevations, live presentation...
- **Digital**/Modern detailed axonometric, 3D model, statistic diagrams, rendered perspective, presentation panel, film animation, AR, VR,...



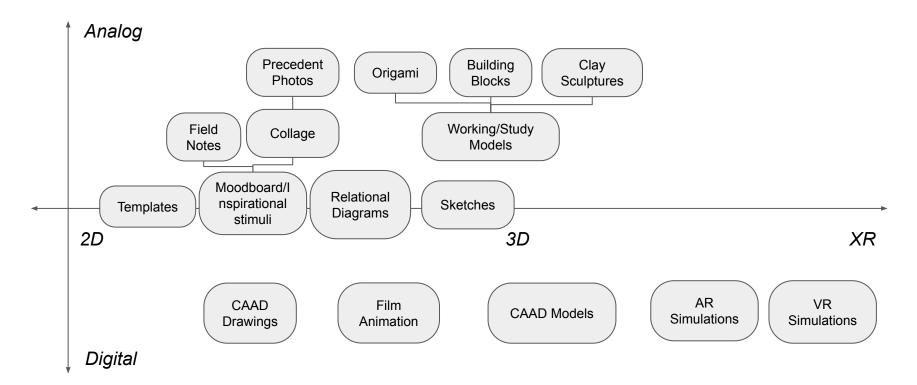
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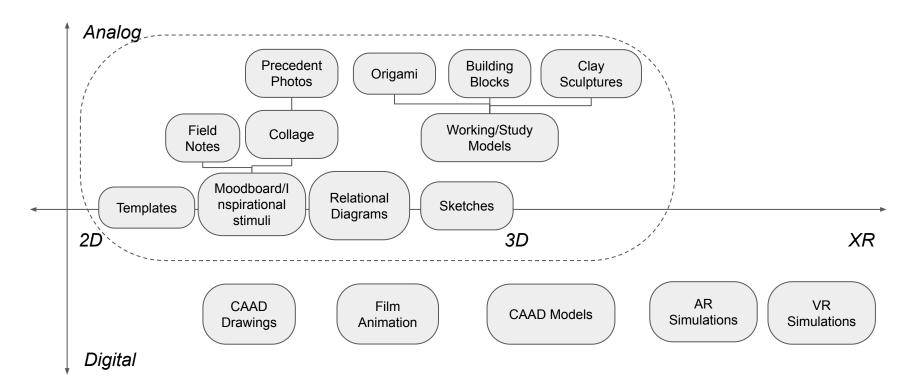


© Saire Creative, https://sairecreative.com/portfolio/nylon-through-time-infographic/

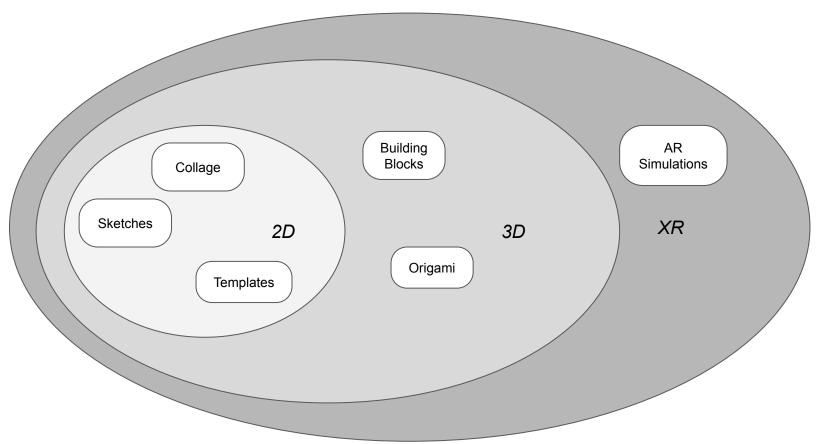
Dimensions of Ideation Tools



Dimensions of Ideation Tools



Functions of Ideation Tools



Quality of Ideation Tools & the Potential of Hybridization

"(The) aspect of quality is more important than the availability of a prescriptive method or the presence of a technical infrastructure...advanced technological solutions sometimes even hamper good development of a design (Cheng and Kvan 2000; Achten, 2002)."

WORKSHOP

Collaborative Dimensions Survey

Survey Framework: Collaborative Dimensions

Visual design thinking: a collaborative dimensions framework to profile visualisations

Sabrina Bresciani, Institute for Media and Communications Management, University of St. Gallen, 9000 St. Gallen, Switzerland

Design Thinking is predominantly visual: a variety of visualisations — from sketches to analytic diagrams — can support designers' work. Each visual format has affordances that constrain and enable specific cognitive and collaborative actions: how can we describe, select and design visualisations for supporting specific phases of the design process? By integrating literature from related domains we developed a "Collaborative Dimensions of Visualisations framework", which allows to distinguish seven traits of visualisations: Structural Restrictiveness, Content Modifiability, Directed Focus, Perceived Finishedness, Outcome Clarity, Visual Appeal and Collaboration Support. Each dimension is described and an illustrative example is provided. The framework is a pragmatic and theoretically grounded discussion tool aimed at helping designers make more informed decisions regarding the visualisations they work with.

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Keywords: visual representations, design process, design thinking, affordance, co-creation

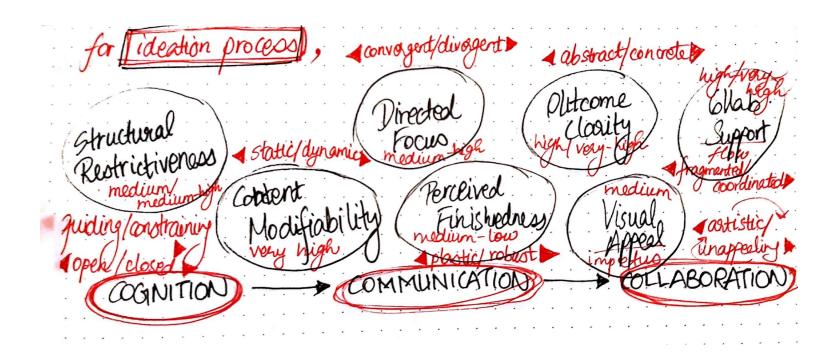
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Figure 1 Classification of visualisation's characteristics emerged from the literature. Legend:

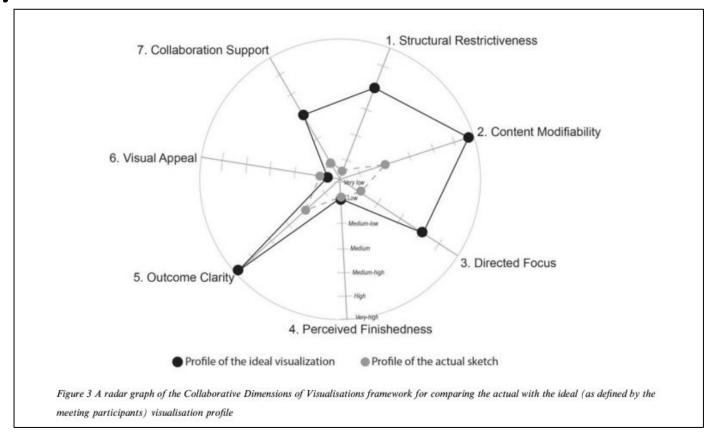
Field of Visual Languages and Information Visualisation;

Field of Design Studies and Management

Survey Framework: Collaborative Dimensions



Survey Framework: Collaborative Dimensions





DISCUSSION







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THANK YOU!