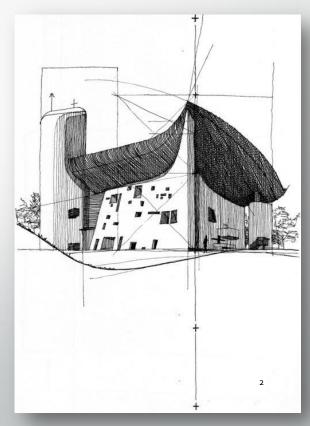
Teaching Architectural Drawing in the digital age

Dr Hawar Himdad 2.3.2022

1

Definition of drawing:

Architectural drawings are representations of ideas that aid in the understanding of buildings, conditions, processes and events. Hence the language of communication in architectural education is drawing, making the importance of drawing skills substantial for architectural students. Drawing is the most important design instrument in architecture, and of major significance in; thinking, experiencing, recording etc.



History of drawing:

The architectural representation, stems from Greco-Roman schematic representation. In the centuries after the fall of the Roman Empire architectural drawing fell into decline as architects worked more as craftsmen, developing designs as they worked and passing architectural knowledge on through apprenticeships rather than physical records.

- In the **Renaissance**, however, the techniques of the ancient civilizations were rediscovered and refined. Just as **mathematical perspective and other theories of representation made Renaissance art increasingly realistic**, architectural drawing also became increasingly sophisticated.
- It was during the Renaissance when architectural education was practiced off-site for the first time. Thus, the early architectural drawings developed from and represented the procedures of on-site building construction.

Different types of drawings

- There are several different **drawing types** that are mainly classified according to their **purpose in the design process**;
- Communication between designer and client
- Intention is convincing
- At the end of design process

1-Presentation drawing



• Communication between designer and constructors

- Intention is clarify instructions for building process
- At the building stage

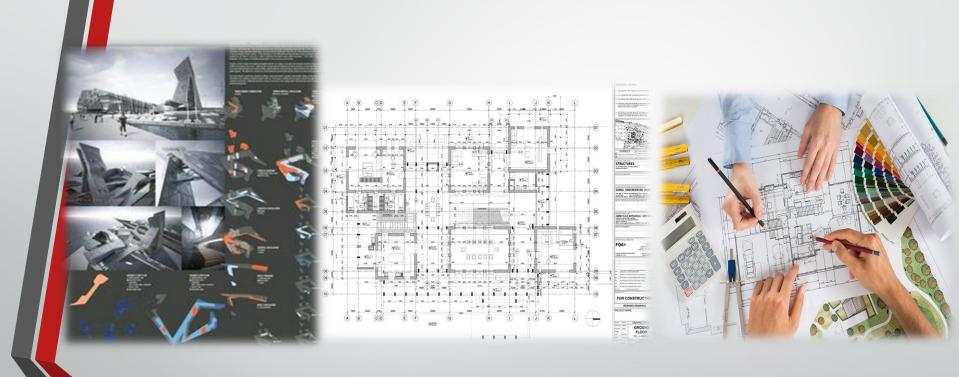
- Communication between designer and client
- Intention is to discuss and bring out ideas
- During the later stages of design process

2- Instruction drawing



3-Consultation drawing





Types of drawing (con.1):

- Communication between designer and environment
- Intention is to observe
- Not necessarily within design process

- Communication between designer and himself (or design team member)
- Intention is to solve design problems
- During early stages of design process

- Communication between designer and himself (or design team member)
- Intention is to freeze an idea in order to explore implication
- At the center of the design process

4- Experiential drawing



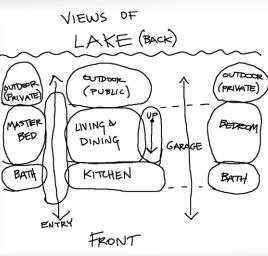
5- Diagrams



6- Proposition drawing









• Communication between designer and himself

- Intention is to assist the development of creative thought
- At early stages or center of design process

7 Fabulous (Visionary) drawings



Types of drawing (con.2):

- Communication between designer and himself (or design team member)
- Intention is to make a calculation
- At any point of design process or building stage

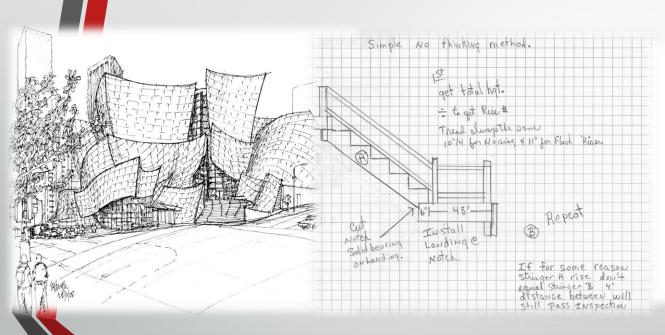
8- Calculation drawings

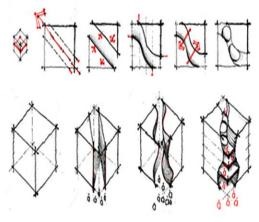


- Communication between designer and himself
- Intention is to explore different possibilities quickly
- At the early stages of the design process
- Keeping a diary of these drawings is important









Hand drawings in the digital age

- **Simplify tools:** Save the decision time of what tool to use as well as the development of mastery as they become intuitive extensions of the brain and hand.
- **Simplify message:** Create several small drawings each communicating a key idea rather than an epic drawing.
- Work small: Enforces to make simple sketches that produce a greater volume of visual ideas . (Resized, Copied and Scanned and Uploaded)
- **Simplify technique:** Techniques used are of second nature for the designer. Meaning that these techniques are to be mastered.
- Attack the drawing: Just getting started is the key to any successful sketch.
- Drawing people first: For sense of proportions, one can start to draw some figures first.
- Composition with dark tones: Working different tones in order to create strong pattern.
- Looseness in drawing: A quick sketch as expression of creative moment.

Annotation: Handwritten notes as a source of deeper insights on sketches.

To conclude

- There are different types of drawings that should be used according to their purpose and intention.
- Since drawing is substantial means (for communicating, understanding, thinking, recording etc.) for designers, **design students should draw very frequently.**
- Students should keep a diary/sketchbook throughout the design process.

References

- 1. Brooks, P., (2010), "The Design of Design: Essays of a computer scientist", University of North Carolina at Chapel Hill, Pearson Education Inc copyright.
- 2. Ching, F., (1990), "Drawing: a creative process", Published by John Wiley & sons.
- 3. Cook, P. (2012), **"Drawing The Motive Force Of Architecture"**, AD Primers, John Wiley and Sons, London.
- 4. Frascari, M., (2011), **"Eleven Exercises In The Art Of Architectural Drawing"**, Routledge, New York
- 5. Fraser, I., and Henmi R., (1994). "Envisioning Architecture: An Analysis of Drawing", Van Nostrand Reinhold, New York.
- 6. Lawson, Bryan (2004), "How designers think", Fourth edition.
- 7. Richards, J., (2013), **"Freehand drawing & Dicovery: Urban Sketching and Concept Drawing for Designers"**, Published by John Wiley and Sons Inc., Foreword by Francis D.

Ching.