Drexel University | | Department of Architecture + Interiors | | ARCH156 | Winter 2010

Course Number and Title: ARCH 156 / Graphic Communications I / 3.0 Credits

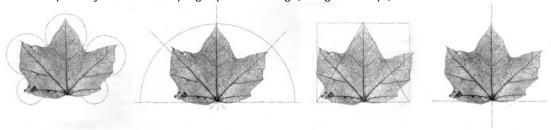
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"Drawing plans, especially freehand, immerses the design researcher in the process of editing for the sake of revealing the ideas embedded...in the plan. Stripping away detail may enhance certain characteristics of an architect's thinking and reveal ideas that may be useful in one's own work."

- Don Hanlon, Compositions in Architecture

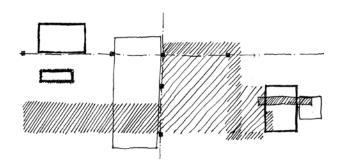
PROJECT 1: Analytical Drawing (Diagramming) – Complete in Class Week 1

Analytical drawing plays a vital role in the development of a designers' graphic vocabulary. Analytical drawings, or *diagrams*, utilize many basic drawing tools such as line, line weight, hatching, tonal rendering, line type (dotted, dashed, center line), and geometry. These tools, combined with the techniques of hand drawing (in pen and pencil) and the medium of translucent paper (vellum or trace) as overlays on *base drawings* (plan, section, elevation), form the arsenal by which we can dissect existing built forms. By looking to precedent examples, we become well-versed in a spatial language that can be used in our *own* design work, especially when developing a *parti drawing* (design concept).

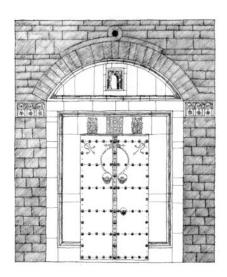


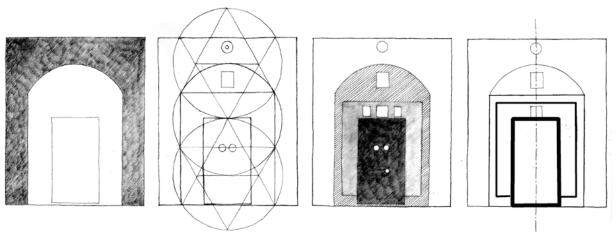
The key to diagramming buildings lies in the **abstraction** of built forms through the use of lines and gradient rendering. This allows us to compare and assess elements such as axis, hierarchy, proportion (geometry) and other concepts by focusing on general relationships that have been observed.

Begin by looking for **part-to-whole** relationships within a composition. Create a separate diagram for each topic and use translucent paper (trace or vellum) to create overlays, comparing one diagram to the next.



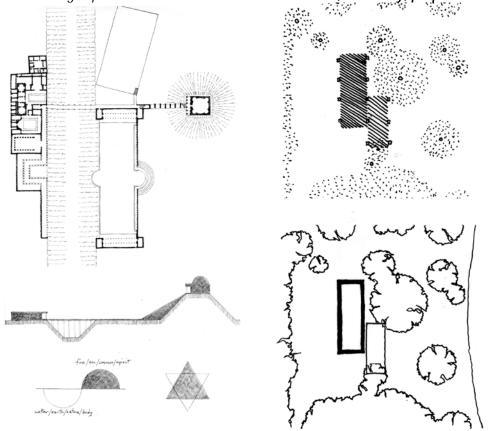
An acute focus on the **perfection** of hand drawing techniques allows these diagrams to be of fine craft, making comparisons between drawings easy.





Image, top right: Door from the House of Ibn Arafa, Tunis, 19thc. Diagrams, left to right: number, proportion, hierarchy, axis.

- Use the plan and section provided as the base drawing underlay for all of your diagrams. Note that a clear layout relationship between the plan and section on the page is important! Include a North Arrow.
- Use a sheet of translucent paper that covers the entire base drawing for your first diagram topic. All diagram sheets must utilize the same size paper, and all diagrams must align with one another.
- Use at least 2 line weights and several line types, plus a gradient of hatching, in each diagram.
- Test line weights, line types, tone and layering techniques in your sketchbook.
- Diagram the following in plan and section in ink: axis & circulation, hierarchy, proportion and parti.



Image, left: Winter Palace of King Herod at Jericho, 1st c. BC. Image, right: Diagrams of the Farnsworth House, Mies van der Rohe 1945-51

