

**Interior Design 160: GRAPHIC COMMUNICATION FOR DESIGN****WEEK THREE DAY TWO      Wednesday****DUE TODAY:**

- First Version of Retreat Cottage Floor Plan – Freehand on Flimsy to ½” scale

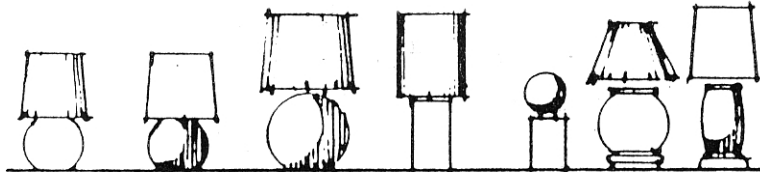
**ACTIVITY**

- REVIEW: Multi-view drawings / Orthographic Projection / Elevations

- What is a multi-view drawing?

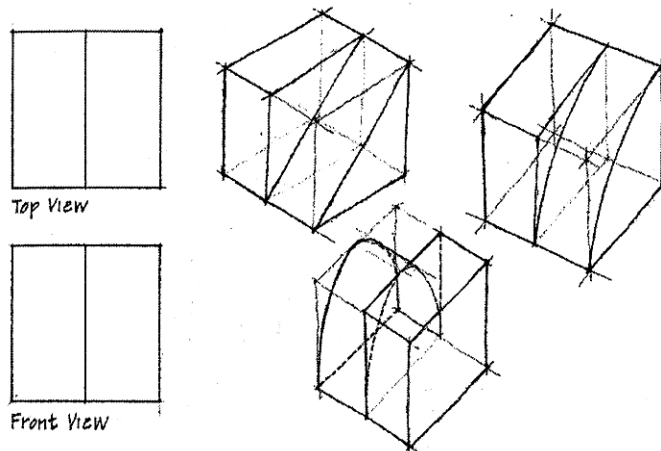
Multiview drawings comprise the drawing types known as plans, elevations, and sections. Each is an orthographic projection of a particular aspect of an object or construction. In orthographic projection, parallel projectors meet the picture plane at right angles. Therefore, the orthographic projection of any feature of element that is parallel to the picture plane remains true in size, shape, and configuration. [Any feature or element not parallel to the picture plane does not retain true size, shape, and configuration. Planes perpendicular to the picture plane are not visible at all.] *Ching: Interior Design Illustrated p. 70*

Cylindrical shapes visible in plan as circles, like the lampshades below, have no roundness in a side/elevation view. Only spheres are visible as circular shapes in both plan and elevation. Some of these lamp designs feature spheres.



A single multiview drawing can only reveal partial information about an object or construction. There is an inherent ambiguity of depth as the third dimension is flattened onto the picture plane.... While a sense of depth can be inferred [by use of line weight and contrasting tonal value], it can be shown with certainty only by looking at additional views. [A minimum of three views – typically plan, front, side – is necessary to communicate three-dimensional form.]

*Ching: Interior Design Illustrated p. 70*



These top and front views can describe a number of different objects. Presented here in pictorial form are three possibilities derived from the same top and side views.

Without a side elevation, these two views are insufficient to communicate the true form of the object.

From Ching: *Design Drawing* p. 132

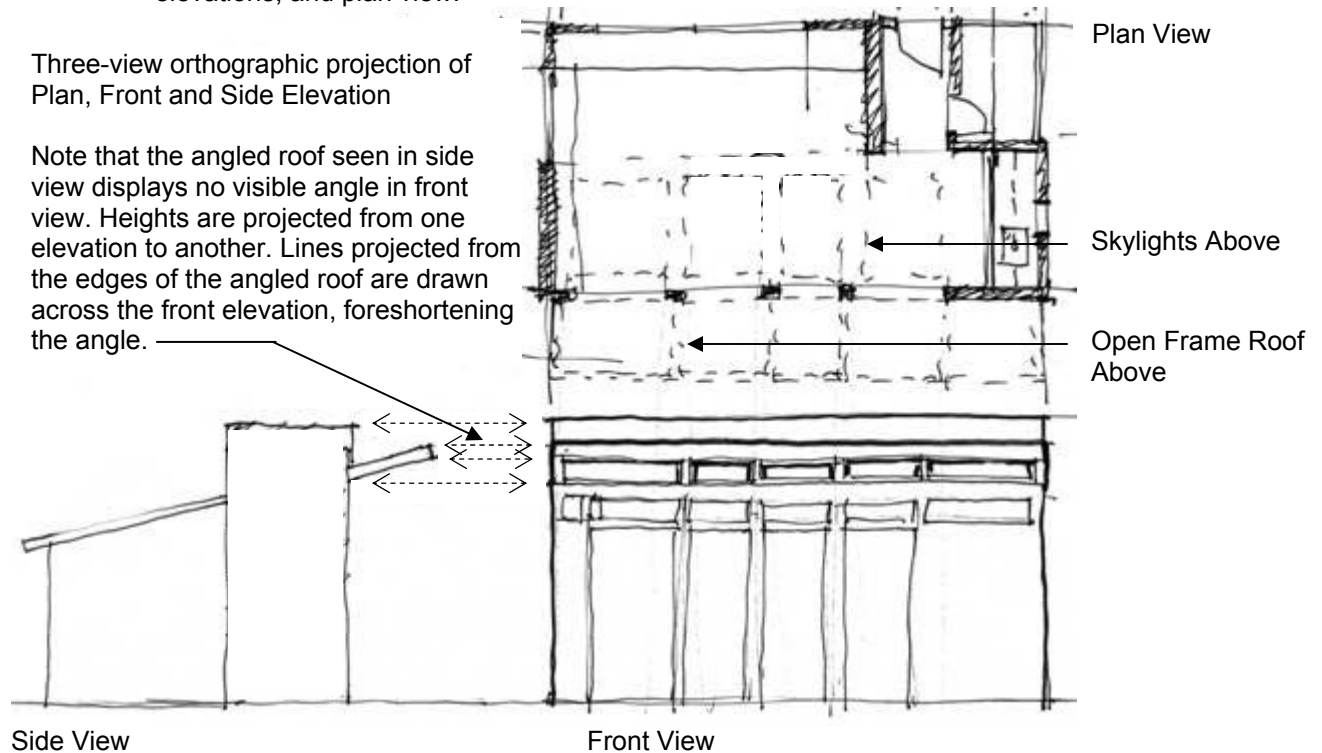
- Orthographic drawing types:
  - **Plan:** an orthographic projection of an object, structure, or composition on a horizontal plane
  - **Section:** an orthographic projection of an object or structure as it would appear if cut through by a vertical plane to show its internal configuration.
  - **Interior Elevation:** orthographic projections of the significant interior walls of a building. While normally included in the drawing of building sections, they may stand alone to study and present highly detailed spaces, such as kitchens, bathrooms, and stairways. from Ching: *Interior Design Illustrated* p. 71-73

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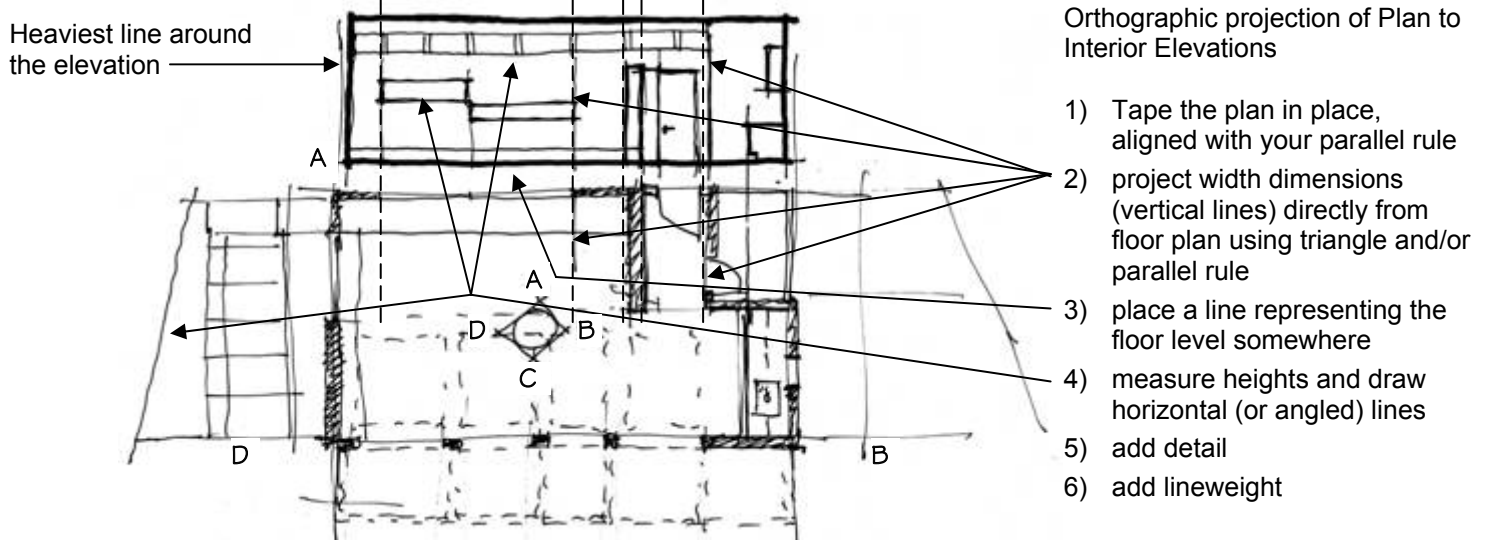
- How is an interior elevation drawing used?
  - Elevations serve as a primary source to show heights, materials, and related information that cannot be seen in floor plans, sections, or other drawings. Elevations generally show:
    - i. Object profiles and finish materials
    - ii. Relationships of different parts of objects such as doors, drawers, and top surfaces of a cabinet.
    - iii. Vertical dimension of an object that cannot be found in a plan view. In some cases, horizontal dimensions are also shown of clarity.

*from Kilmer & Kilmer: Construction Drawings and Details for Interiors p. 99*

- DEMONSTRATE: Projecting Elevation Views from Floor Plans
  - We began by analyzing a completed model to study the relationships between front and side elevations, and plan view.



- Then we looked at relationship of floor plan to interior views:



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- Elevations are oriented by compass point. So in naming elevations, refer to them by North, South, East, or West. For instance, EAST ELEVATION: KITCHEN.
  - In interior elevation labeling, if you look at a wall and you are facing North, it's a North elevation.
  - In exterior elevations, the wall is labeled by which side of the building its on. If the side of the building faces North, it's a North Elevation. It's not the direction the viewer is facing, but the direction the building wall is facing: the North side of the building.
- We also viewed examples of freehand elevation drawings to see line quality, lineweight, and degree of detail required.
  - View the Design Graphics Review pdf document on the course web page. It shows
    - i. how to draw a refrigerator and range in elevation – p. 1
    - ii. how to draw windows in elevation – p. 2
    - iii. how to draw windows in plan view – p. 2
- In preparation for next week's model building:
  - Have enough foamcore to show 8' to 9' high walls. It's not necessary at this point for you to know what shape roof you will have.
  - Build the model with walls 8' to 9' high all the way around the outside.
  - If you have an idea of the shape of the cottage roof, you may proceed to study that in the model.
  - There will be no roof on this version of the model.
- CRITIQUE:
  - 16' x 26' interior dimensions, no exceptions, no extension beyond
  - fireplaces may protrude beyond the footprint restrictions (see Ching book pp.210-212)
  - connect architectural elements to better integrate the space and details within it
  - HAVE A SPECIFIC CLIENT ACTIVITY SO YOU CAN HAVE A STRONGER CONCEPT
  - on a related note: simplify, simplify, simplify
  - SHOW EXTERIOR WALLS AS 6" THICK, INTERIOR WALLS 4" THICK (unless plumbing)
- SUGGESTED ACTIVITY IN CLASS: work on plan revisions, elevation studies for Monday

**ASSIGNMENT**

- READING:
  - Ching – Chap. 2 pp. 56-67: Programming, Plan Arrangements and Strategies
  - Ching – Chap. 2 pp. 68-73: Multi-view drawings – Elevations, in particular
  - Kilmer – Chap. 7 pp. 99-112: Elevations – this chapter outlines elevations for construction drawings, not the conceptual drawings we're doing, but if you look through it you'll get a better idea of the details and features that are typically included in these kind of drawings; in particular, read the introduction on p.99, the two major headings on p. 102, figure 7-16 and accompanying text, and review the pictures of kitchen elevations on p. 105

**DUE: Monday**

- **Revised floor plans.** Based on today's critique and on what you discover while studying elevation views of the plan, update plans to reflect your latest thinking AND you improving skills.
- **Elevation studies.**
  - **TWO (2)** minimum.
  - Present the two most significant elevations in 1/2" scale, freehand on flimsy, with lineweight
  - Don't present BATHROOM elevations.
  - Don't present Kitchen elevations if it is a separate room and not the most significant activity.
  - Use the projection method demonstrated to day: Draft guidelines representing the widths directly from the plan. Trace over these measured drawings.
  - The intent of studying the space in elevation is to begin considering the third dimension of your space, and to consider surface and detail application.
  - As you see how your plan looks in elevation, consider whether the proportions and relationships work. Revise your plan if the elevations suggest another solution.
  - Do MORE than two elevations if you really are imagining the entire space. Even though these elevations don't have to be presented, they can be. However, as you begin studying the space in elevation, you will want to explore how the elevations connect to each other.