

## 2005 MIT IAP Sketching: communication, concept, and the line | *Outline*

### **Thursday, Jan. 13<sup>th</sup> 5:00 pm – 7:30 pm**

*Communication: the three-dimensional tools, how to construct and what to look for*

#### Introduction:

- Quick personal introductions and any quick thoughts on the reading
- This workshop is about technique for 3-dimensional drawing, drawing is about practice.
- Drawing is the physical record of thought. The sketch is a type of drawing, a sort of draft which holds the precursor of thought to the larger whole. Most of us at MIT are involved in the act of creating in one way or another.
- The sketch may be used for diagramming a business plan, describing a prototype to a client or manufacturer, clarifying your own thought, or a meditative activity.
- It is a way of communicating, thinking, and understanding.
  
- Rule 1: everything is freehand, rule 1+x: there will be no erasing.
- This workshop (now in its fourth year) is primarily derived from my own varied education, experiences, and reading, but mostly self-education in drawing.
- How the workshop will run: brief class instruction followed by class exercises. During exercises instructors will be moving to each student individually to offer further guidance as needed. For those students with more advanced skills, we may offer a different twist on the exercise. After each exercise we will briefly view and discuss each others work.

#### Axonometric

- 1:1:1 ratio (actual dimensions)
- 30 / 60 / 90 degrees
- 45 / 45 / 45 degrees
- Discuss hybrid ratios and degrees for analytical communication (15 / 15 / 30 or 0 / 60 or 0 / 90) section / axonometric, cut-away, peel-away

#### Perspective

- Unlike Axonometric, perspective is how our eyes actually see (or our brain actually interprets) – it's distorted like looking through a super wide angle lens (convex shape). We have central and peripheral vision, our eyes focus on points.
- Basic perspective:
  - o horizon line according to the eye
  - o *Perspective Rules*:
    - 1 All horizontal lines vanish on the horizon line
    - 2 All parallel lines vanish together
    - 3 Vertical lines do not vanish together; exception for tall building or looking up or down
    - 4 Rule of foreshortening applies for all horizontal lines
  
- The cube is the most basic unit of proportion – when you understand how it changes in space relative to your eye and the horizon line, you will understand proportion.

#### Physiology of the cube:

- 3 sets of parallel edges

	Surfaces	edges	corners
How many	6	12	8
Max seen	3	9	7
Min seen	1	4	4

Exercises on what to look for: *rewiring your brain with tricks of the trade (avoiding 'identity')*

- Negative Space (the shapes displaced by object)
  - Organization of interlocked chairs to sketch in perspective

A few words on line-weight and basic drawing technique

- line-weight, line-weight, line-weight!! It's heavy, thin, dark, and light in a transitional stroke.
- The line may be read like words. The line records the speed at which it's drawn. It is read through thick, thin, slow, fast, continuous, broken, etc.

Upside-Down Sketch

- Picasso's Russian friend up-side down
- Start anywhere; look for relationships, relationships, relationships!! Draw light guide-lines, measure with the end of your pencil and the tip of your thumb.
- Compare and translate the distance of line to line, point to point, line to point, the angle of a line relative to the edge of the paper, etc.

Cube handout as homework

- Ten 1 inch cubes in a spatial array: 5 above the horizon line and 5 below the horizon line
- I've put together various tutorials that may be found on the website, which include: PDFs on Basic Techniques, Perspective / Axonometric, Tone, Figure and Movement, and sets diagrammatic sketches to copy. They have been taken from my own sketches, and various books or other clippings.

**Friday, Jan. 14<sup>th</sup> 5:00 pm – 7:30 pm**

*Concept: diagramming and interpretation drawing*

Introduction and examples of diagramming

- point, line, dot, dash, field, hidden line, etc. to build your *graphic dictionary*
- look at blues diagram, napoleon march diagram, train schedule diagram, 3D clouds
- Your eye always sees the darkest darks on the page FIRST (or the most contrasting element)
- figure / ground: the control of object and negative (or white) space to achieve visual balance of dark and light
- use background, mid-ground, and foreground to create depth and grounding of objects

Bell Peppers: *an exercise in diagram and line-weight*

- continuous contour line to create shape and depth

Lobby 7: *group axonometric diagrams*

- will be given trace with volume
- each student will diagram two systems which may include but are not limited too: sight line, sound, façade, structure, people movement, gathering spaces, light . . .
- drawings will then be overlaid to produce larger examination of lobby 7 systems

**Saturday, Jan. 15<sup>th</sup> 10:00 am – 2:00 pm**

*Line: the power of its simplicity*

Meet **promptly** at 10:00 am at the Museum of Fine Arts in Boston (Green Line E-train to Museum stop on Huntington Avenue). Bring your MIT or other student **ID** for MFA discount.

- Timed sketching series of photographs
- Timed sketching of Egyptian objects
- Egyptian objects, shade and shadow
- Discuss some particular art works as diagrams and an understanding of drawing principles

12:00 pm **promptly** meet in Lobby and walk as a class over to the Isabella Stewart Gardner Museum

- Itinerary Line sketch: *line as record*
  - o Set up axo volume
    - Your continuous path through museum, tracing the space.
    - Diagram a series of moments
- Individual meetings with instructors to review your sketches and offer critique for furthering your individual skills.
- Meet **promptly** at 1:45 in lobby for wrap-up.