

project 2 building study:

02.09.07.F issued

2.03

03.02.07.F due (all parts)

**BUILDING PARTS EXPLORATION**

This graphic and modeling project will focus on two important issues pertaining to the making of architecture.

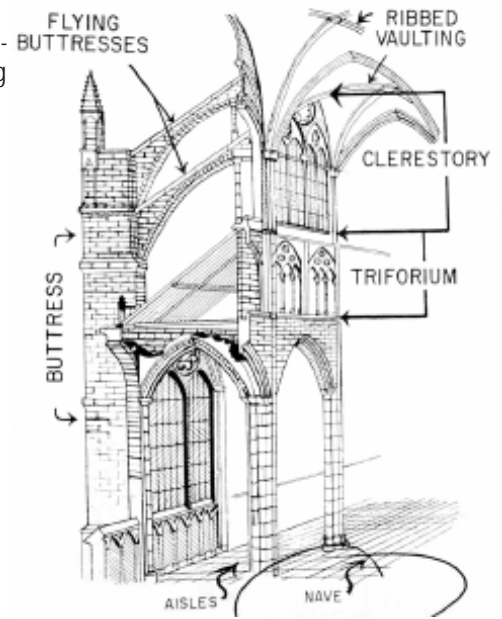
1. to understand how designers use structure and materials to inform space and/or structure
2. to study how details can be used to create a thematic whole to the building

Part Two:

**Construction:** Now that we have explored and understand the basic principles of each of the buildings that are part of the building study, we will determine various means to re-represent these ideas. While a certain level of abstraction is always necessary in making a drawing or model, an attempt must be made to maintain the essence and accuracy of the building.

**Assignment:** Explore through no less than 6 freehand studies (no smaller than 12" x 18") followed by a developed three dimensional exploded axonometric (computer or drafted) and chipboard model of a minimum of two of the following observations. Each project will lean towards specific aspects noted on this list. Be prepared to discuss how and why you have determined that these elements are most prevalent in your building.

1. Structure: Primary and Secondary
2. Structure: Structural System 1 & 2, etc.
3. Enclosure: Skin - Envelope
4. Components: How the assembly of small parts lead to form and space
5. Material: How primary building materials lead to form and space
6. Material: How the ground or roof plane is manipulated
7. The relationship of circulation to structure
8. Loadbearing to non-loadbearing elements



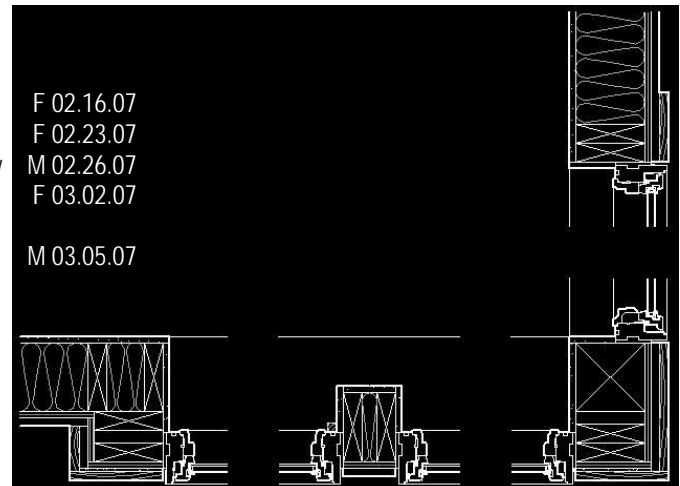
**Reading:**

"Slowness", T.Williams & B.Tsien (on course website)  
"Is Drawing a Lost Art?" Bill Bouchey (attached)

**Calender/ deadlines:**

The assigned readings are to be completed by  
Part two (6 freehand studies) of this exercise are to be prepared by  
Part two (draft of the axonometric) of this exercise is to be prepared by  
Part two (draft of the model) of this exercise is to be prepared by

Project Mid review: (revise portions of exercises above)





January 01, 2006

By Bill Bouchey

"Is drawing a lost art?" asked Dina Frank, president of Mancini • Duffy, looking up from the portfolios of candidates we were reviewing. Mancini • Duffy attracts some of the best graduates of the top design schools, but there was little evidence that they had done any hand drawing. Few seem to know how to draw. And many arrive on our doorstep not knowing why that should matter.

It does matter, a great deal. Drawing is not simply one of many skills a designer must have—it is absolutely fundamental to the creative and problem-solving process, the heart of what it means to think like a designer.

Designing—the way my senior colleagues and I were taught it, the way many of us teach it—is not only a visual discipline. It's tactile, sensory, spatial; it is as much an innate sense as it is methodical and analytical. Drawing brings together the mind, eye, and hand with the weight of the pen, the degree of resistance of the writing surface, the mental image of the scale of a space or element.

"But I hear someone say, 'We have the computer, and computer drawing is so much faster and more accurate, more polished.'" True enough, but these are not always virtues, and mastery of computer design programs is not a substitute for the acquisition of spatial sensitivity. I am as grateful as the next person for the advent of 3-D Studio Max and Form Z. But I am dismayed by the emphasis I see on virtual design and finished product.

Computer drawing favors the figurative over the literal. If changing the width of an aisle, for instance, is a simple matter of click and point, why should one get up, go stand in a nearby aisle, and experience its dimensions first hand? The computer discourages a feeling for the impact of relationships and proportion. The screen makes a layout look workable; the mind's eye, connected by experience with the body's sense of itself in space, says, "This can't be right."

The computer lets us mistake the image for the thing it represents. If I click on the icon for a club chair and it fits in the space, I am inclined to think I have selected the "right" furniture. But if I have to draw that chair, I have to know all its dimensions, and even before I finish my sketch, I will understand whether or not I've made the right choice.

The very speed and accuracy that are computer drawing's most valuable features may deceive us about the nature of the design process, making it seem linear and logical. It discourages "sloppiness," which in turn discourages experimentation and exploration. A sketch reveals thinking and process, it expresses the "why" and "how" of design decisions, which is invaluable for learning, not just in school but also for a lifetime of professional practice. Sketches suggest and imply, which opens discussion; a computer drawing often looks finished, at any stage of design development. And that closes off conversation.

"Virtual" drawing creates the expectation of immediate gratification, which discourages the designer from stopping and checking his or her assumptions. It makes for a certain laziness about problem solving, a false conviction about accuracy: Why test out an idea—in the real world, or by talking to others—if the representation of that idea looks polished?

When candidates bring me a portfolio, typically I see little, if any, evidence of the developmental work that led them to their final design. They have pushed the "delete" button, or drawn over the previous idea. I don't see sketches, thumbnails, any evidence of process, of a progression of ideas in which things were ruled out or emphasized. It's as though the prospect's training valued perfection of presentation over transparency of thinking. I tell people I want to see sketches, drawings on napkins, all the messy, human, hand-made things. And when I ask them to think outside the box, I don't mean only the conceptual one—I mean the computer, too.

So, is drawing truly a lost art? Not if my colleagues and I have anything to say about it. We invite our counterparts in the design schools to join with us in restoring this fundamental skill to its rightful place—at the heart of the profession.

Bill Bouchey is a principal at New York-based Mancini • Duffy.

## Links referenced within this article

### Find this article at:

[http://www.contractmagazine.com/contract/search/article\\_display.jsp?vnu\\_content\\_id=1001919357](http://www.contractmagazine.com/contract/search/article_display.jsp?vnu_content_id=1001919357)



Uncheck the box to remove the list of links referenced in the article.

© 2006 VNU eMedia Inc. All rights reserved.