

Drawing THEN & NOW:

Re-focusing freehand drawing skills with photodrawing

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This paper focusses on the re-visiting and re-application of foundations year freehand drawing skills in the later curriculum. This year's NCBDS conference theme was TIME, and I have indeed clocked a lot of it in my twenty years teaching Architecture Foundations studio. teaching the same studio year-in, year-out might sound rather static: a professor 'going through the motions' for twenty years, but in truth I have witnessed much change: a changing student body, a change in the emphasis of digital technology (*Fig. 0*), an ever-evolving curriculum, and my own growth as a teacher.



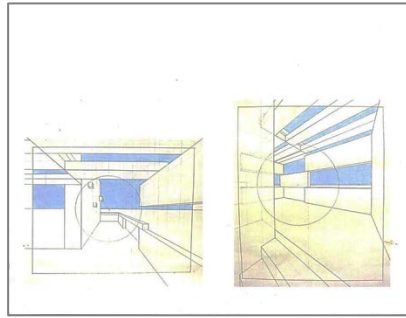
0. The face as emerging hybrid -Foundations architecture student visual roster excerpts -Patterson studio, 2014-2018

In the last three years I have taught a freehand analytical drawing elective which has sought to respond to the desire of senior students to revisit/rediscover their foundations experience, giving me pause to consider the way I might teach the very same students three years on: why they wish to the revisit their roots; how they have changed in terms of their skillset; how they think; and how I might, as a teacher, rekindle their roots and re-imagine their relationship to drawing. Many of these students have not done much freehand drawing since first year and still associate it with either a quaint anachronism or with their first year experience where it is taught as its own discipline, without distraction. For them, the particular, deliberate and iterative practice of skills in first year has given way, over time, to the multitasking demands of advanced studios employing much digital software: they have learned to trust the machine more than themselves.

I described the freehand drawing experience in foundations studio as 'discipline, without distraction', and by that I meant that the relationship between head, hand, and eye is very direct at first. In the beginning, we are drawing what we see: drawing IS seeing. Drawing what you see and distilling the essence of a thing or an idea in a gestural drawing can be a real challenge for students living in a complex world of images where they are used to seeing many things simultaneously. The curriculum establishes a understanding of basic graphic conventions from which students can begin to develop the graphic fluency necessary to describe their own ideas. We begin with establishing a knowledge base of graphic conventions: the plan, the elevation, the section, the axonometric, and the perspective, and building a common understanding of what they mean, how they are executed and more importantly, what they can reveal. What we are fostering is a graphic fluency: an understanding and mastery of the skillset. Over time, these learned conventions become embedded, intuitive knowledge.

Drawing on Drawings: the beginning of complexity

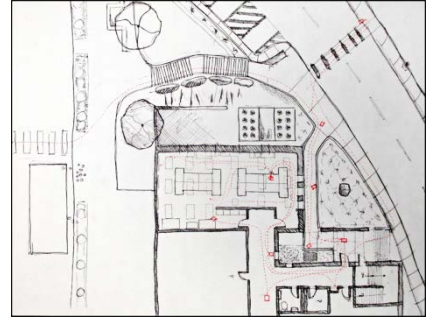
Having established a core understanding of the drawing conventions, Foundations studio can begin to add layers of understanding, meaning, and imagination to drawings, bring them to life. Adding layers creates the kind of depth and complexity that is more representative of our experience of the world: we see many things simultaneously, so we must draw many things simultaneously. The earliest iteration of drawing hybrids begins when we 'draw on drawings' (figs. 1-3)



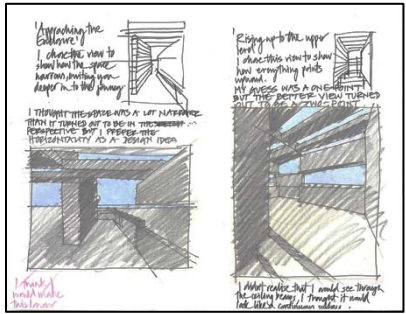
1. Sketches before.



2. Contour map before.



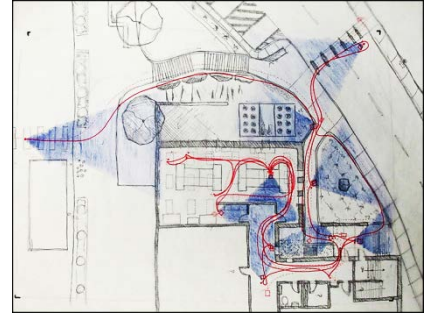
3. Plan before



1a. After: adding observations



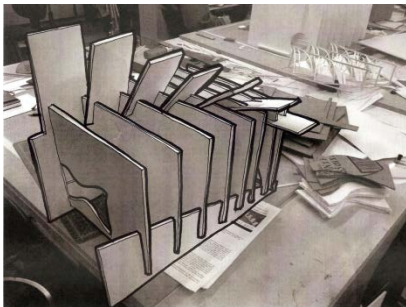
2a. After: adding landscape



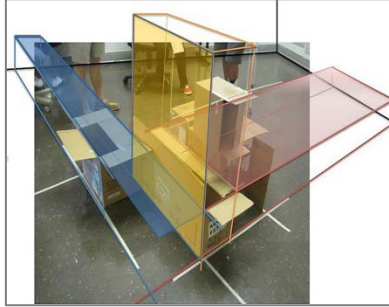
3a. After: Overlaying paths and views

Drawing on Photos: creating complexity efficiently / mixing media

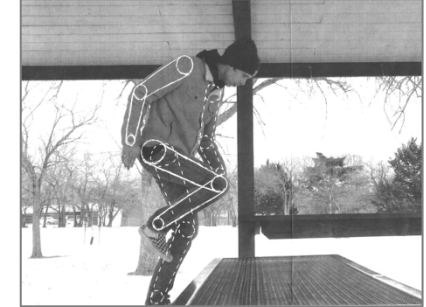
Generating every layer of information by hand denies the fact that some of the information we might need in an image already exists. What exists, or is already known, might be represented by an existing image: a photo. When foundations studio moves into projects that analyze the world, we employ both the camera's eye and our own eye/hand to speed up the process of representing what is unseen, or only seen in our imaginations (figs. 4-6)



4. Improving clarity -Patterson 2016



5. Finding perspective -Patterson 2016



6. Analyzing motion -Noah Wing 2018

Interdependency

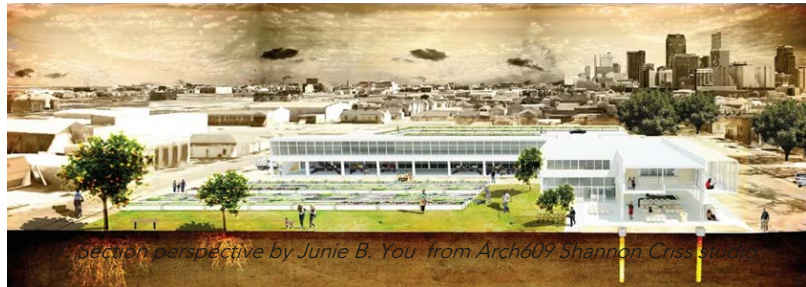
'Drawing on photos' is a type of hybrid image: one that fuses two unlike techniques. In his book, 'Hybrid Drawing', M.S. Uddin describes hybrids as 'the offspring of cross-fertilization between, more or less, distinctly relate parents. As a general rule, hybrids are intermediates between parental types in their morphological and physiological characteristics.'"1 I believe that the hybrid is more than cross-fertilization. These merged images have become one. Neither image makes sense alone: they are completely interdependent.

Even in the drawing conventions there are drawings that depend on each other for information. Take the orthographic set, where plan, section, and elevation are inseparable, the sectional perspective, and the perspective construction that relies on the plan and elevation, and. Interdependency is everywhere, and even new liaisons are forged in the 'viewfinder' where two dimensional and three-dimensional worlds meet in a project that fuses plan, model, and picture, and intangible sightlines into one construct.

The 'In-between' years

Often upper-level students take a freehand drawing elective out of nostalgia, with some skepticism of

its relevance to what they do now, but with enough curiosity to return to the one skill they never really mastered. During the 'in-between years' (between foundations and comprehensive studios) the particular, deliberate and iterative practice of hand drawing skills has given way, to the multitasking demands of advanced studios that employ a broad range of digital media and hybrid images (fig. 7). Freehand skills are often dormant, but their foundations year experience, learning the discipline of



8 Jesse Briant



9. Erin Hoffman -2016

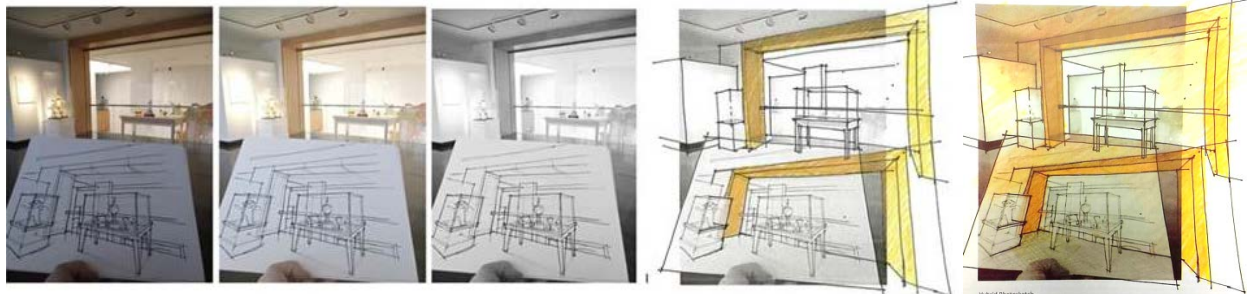


drawing conventions, has become embedded, intuitive knowledge. I use this elective as an opportunity to re-ignite and re-interpret the foundations skillset, while capitalizing on what the students have learned in the in-between years about more complex hybrid representations.

The assignments.

The ability of upper level students to manage complexity became a launching pad for a series of assignments combining multiple images. In the first assignment, students were asked to sketch multiple views of the same building (plans, perspectives, details...) not knowing that they would be asked to combine them in a kind of 'analytique'. These images were successful in that they brought together embedded and new knowledge, but they were time-consuming as they were purely hand-drawn (figs. 8, 9). Even though the students had committed to a freehand drawing class, there was still a strong desire to use the camera as a tool so I decided to look back to the early foundations 'drawing on photos' assignments that had employed both the camera's eye and the human eye/hand. The first of these assignments was 'photodrawing', which would simultaneously represent the same view with both 'eyes': the camera's eye and human eye. The students were asked to sketch an interior view using only

lines. When the drawing was complete, they would hold up the sketch and take a photograph that showed both sketch and place. Then, print out that image and continue to draw, using information in the sketch to enhance the photo, and information in the photo to enhance the sketch, fusing the two in a single image that blurred boundaries and knitted together representations in to a single image: a hybrid (*fig. 10*).

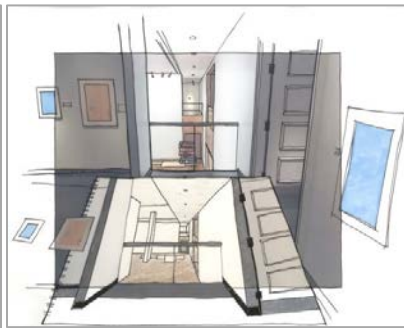


10. Photodrawing sequence from sketch & photo to merged 'photodrawing' - Anne Patterson 2017

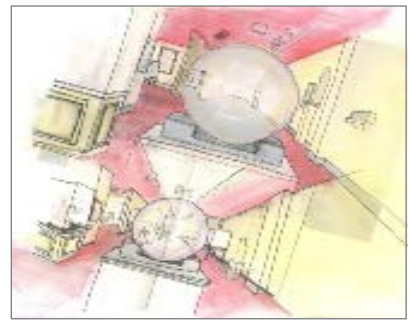
The photographic portion of the images were enhanced with lines, achieving more clarity, and the line drawing portions of the image received tonal and color information using a variety of media, including colored pencil, markers and pastels (figs 11-13). In this way the drawing was more like a photo and the photo more like a drawing: a sharing of properties and an equalizing of media.



11. Colored pencil -Sydney Grimm 2017

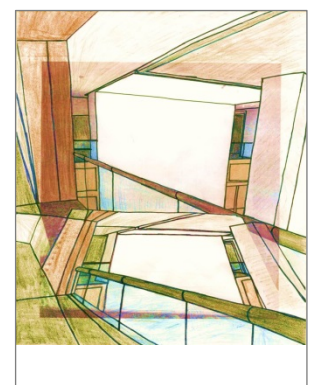


12. Marker -Spencer Reed 2017



13. Pastel -Kevin Sloan 2017

In some solutions the difference between sketch and photo was clear, but in others the interface was blurred and the final image was an abstract hybrid which read as a single view. (*fig 14*). The photodrawing assignment essentially knitted together two perspectival, pictorial images and I was interested in perhaps creating a drawing that might fuse the pictorial with the analytical: the kind of drawing that in a single image could communicate both the objective understanding of an abstract drawing projection and the live experience of a photographic view. It came to mind that the sectional perspective is a drawing type that exhibits interdependency between two such views and that the photo might be ideal for representing the pictorial and the drawing could represent the analytical. Thus the third assignment, **section-perspective**, was



14. Michaela Hoefler -2017

Students had encountered section perspectives many times, from cutting through simple objects in foundations studio, to the complexities of perspectival wall sections in their fourth year comprehensive studios. Shannon Criss, an associate professor at the University of Kansas school of Architecture & Design, uses the technique to bring wall sections to life: understanding their importance as the interface between outside and inside. Professor Criss says that "The sectional perspective is the

quintessential drawing type for contemporary design, capturing a multiplicity of viewpoints, simultaneously analytical and experiential, bounded yet open-ended. The authors are guided in their investigation by our jointly held conviction that the sectional perspective not only exists as a form of media, but also functions as one, simultaneously instantiating action and reflection. As artifact, the sectional perspective mediates between author and witness (most commonly, the student and the studio critic) and between the drawing itself and other forms of architectural artifacts (typically two-dimensional orthographic projections). As technique, the sectional perspective intervenes between and acts upon the student's awareness and understanding of design, between thinking about the making of a building and the (potential) reality of its execution." ²

In the section-perspective assignments in this elective, the students are not really designing the new, but using the technique to understand the existing built world. They are asked to use a photo to record what is seen, and to use drawing to reveal what is understood, or 'known' about the building section. The photograph alone frames a view, cutting the picture off as a rectangle, but the section frames a view that describes the actual edge of framed space: the very edge between outside and inside. The photo demands presence: you have to be there to take it, and the drawing demands knowledge, understanding, and imagination to interpret and visualize the cut edge. Just as the photodrawing had sought to blur the edge between drawings and photographs, the section-perspective project sought to draw attention to their differences. Drawing an accurate section required the students to draw a line on the photograph where they intended to 'cut' the building. Removing the part of the photo that was to one side of the line gave them a general idea of where the section line would be (*fig. 15*) The success of the section drawing depended on their careful observation of the details and textures of the surface of the building, both inside and out, so many supporting drawings had to be made. You cannot take a photo of a section, you can only derive it, so have to make informed judgements about what to draw: you have to depend on yourself. The group studied the same building (Strong Hall at the University of Kansas) so they could share observations and information about details. The upper level students' understanding of wall sections made it possible to choose a building so rich in detail.

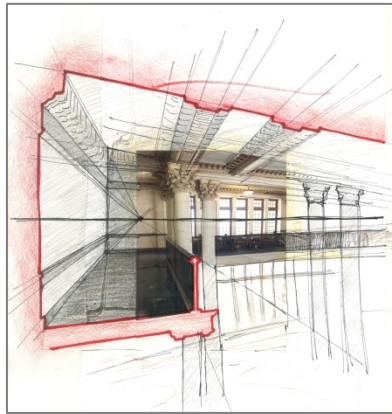


15. Section-perspective example -Strong Hall by Anne Patterson

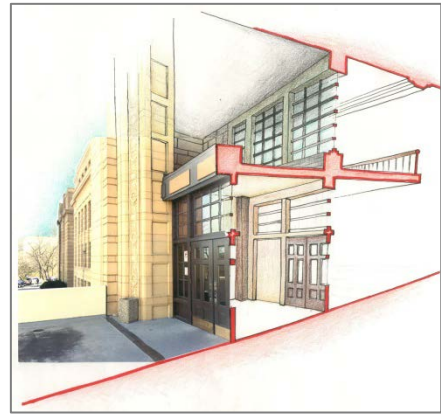
Combining the analytical with the pictorial has proved to be the success of this elective: combining embedded knowledge and live action: learning to critique the photograph with the human eye, with its ability to analyze and imagine. In his book, 'Hybrid Drawing', M.S. Uddin says that "Composite Drawings have an unsurpassed ability to convey the total concept of a project... the trick is knowing when and how to combine them in ways that are coherent, illuminating, and clear."³ I concur that knowing when and how to combine images is the crux of this assignment. In these finished works (*figs. 16-18*) students use drawing to edit the photograph but treat the camera's image not as a shortcut, but as a drawing partner so the images complement each other, filling the void that the other cannot show. In this way they can create images that are simultaneously evocative of place and rigorously analytical.



16. Zachary Lundgren -2017



17. Shelby Hartman -2017



18. Simon Davies -2017

In his book, 'The Thinking Hand', Juhani Pallasmaa says that, "The hand-eye-mind connection in drawing is natural and fluent, as if the pencil were a bridge that mediates between two realities."⁴ Pallasmaa goes on to say that "the focus can constantly be shifted between the physical drawing and the non-existent object in the mental space that the drawing depicts." In both the photodrawing project and the section perspective in this elective, I foster an oscillation between the seen and the known, between inside and outside, between two lenses. Hopefully, a freehand drawing elective like this can rekindle embedded knowledge, and students can re-imagine their relationship to freehand drawing, re-purposing it into new, evocative hybrid drawings that can evoke the richness of the places they are designing. All tools: digital, analog, and mind should remain sharp at all times.

References

- 1 & 3. M.Saleh.Uddin 'Hybrid Drawing: -techniques of Contemporary Architects and Designers' -1999
1. 2. Shannon Criss & Larry Browne, 'Drawn Through: The Sectional Perspective as a Tool of Engagement -ACSA paper 2013
2. 4. Juhani Pallasmaa, 'The Thinking Hand' -2009