

## Navigations: A First-Year College Composite

---

Volume 2

Issue 1 *Explorations: Fall 2017 Learning Communities*

Article 10

---

February 2018

# Learning the Fundamentals from Hands-on Learning

Fernando Asamoia  
*Kennesaw State University*

Anirose Burge  
*Kennesaw State University*

Mercedes Campilango  
*Kennesaw State University*

Dahyun Kim  
*Kennesaw State University*

TJ Rottenberg  
*Kennesaw State University*

*See next page for additional authors*

Follow this and additional works at: <https://digitalcommons.kennesaw.edu/navigations>



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

---

### Recommended Citation

Asamoia, Fernando; Burge, Anirose; Campilango, Mercedes; Kim, Dahyun; Rottenberg, TJ; and Sewell, Cooper (2018) "Learning the Fundamentals from Hands-on Learning," *Navigations: A First-Year College Composite*: Vol. 2 : Iss. 1 , Article 10.

DOI: 10.32727/15.2018.6

Available at: <https://digitalcommons.kennesaw.edu/navigations/vol2/iss1/10>

This Visual Art is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in *Navigations: A First-Year College Composite* by an authorized editor of DigitalCommons@Kennesaw State University. For more information, please contact [digitalcommons@kennesaw.edu](mailto:digitalcommons@kennesaw.edu).

---

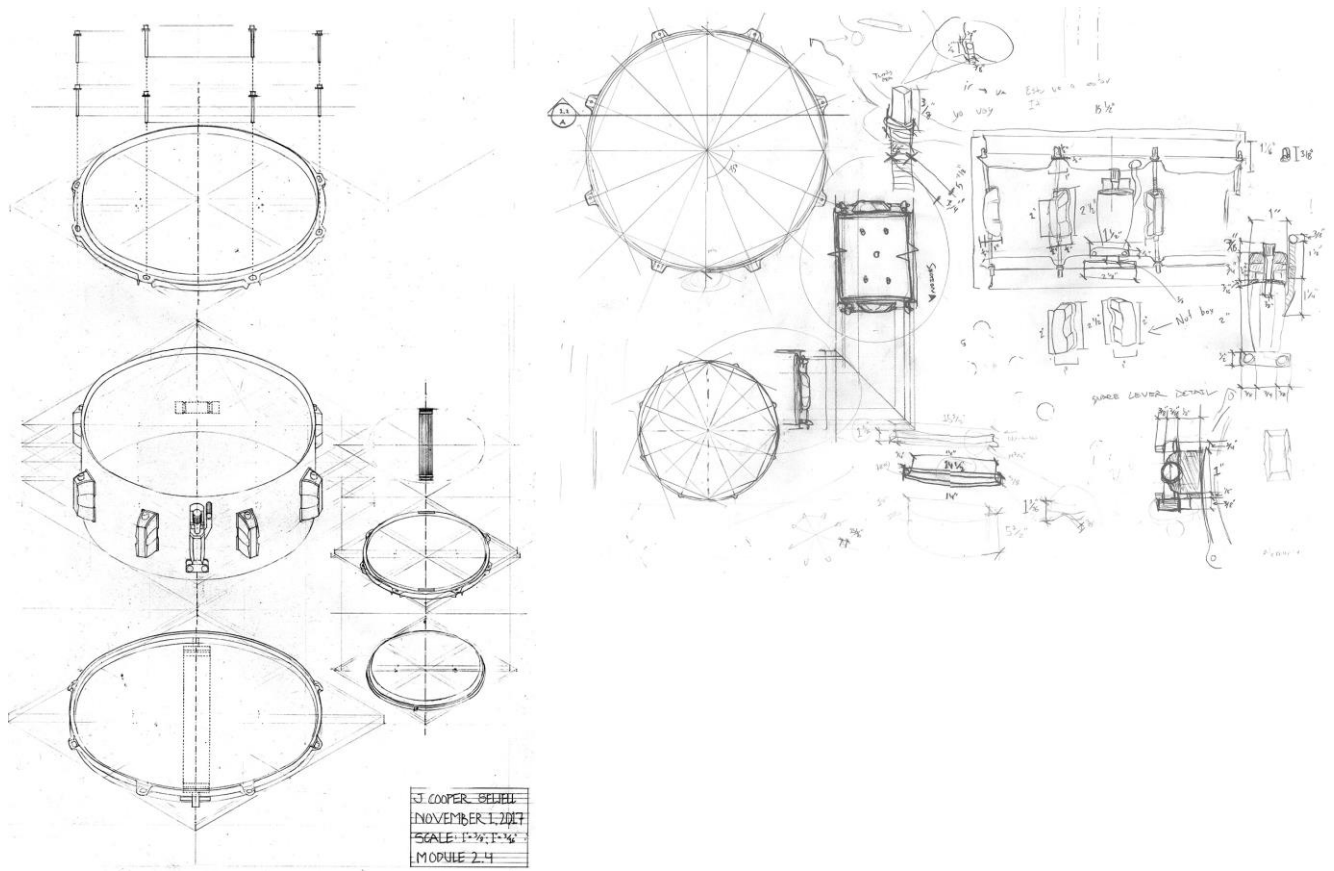
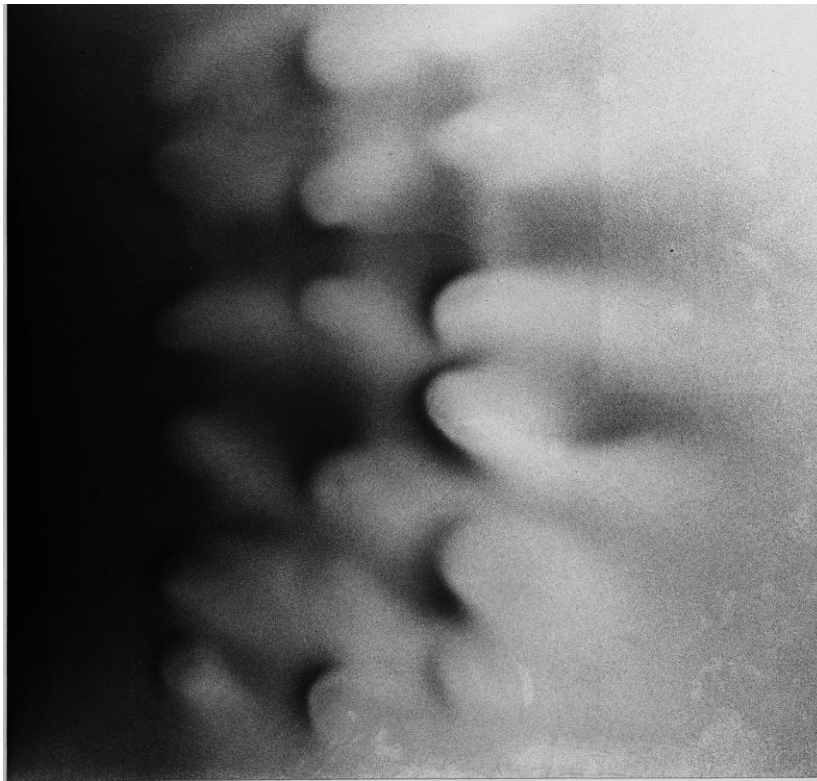
# Learning the Fundamentals from Hands-on Learning

## **Authors**

Fernando Asamoá, Anirose Burge, Mercedes Campilango, Dahyun Kim, TJ Rottenberg, and Cooper Sewell

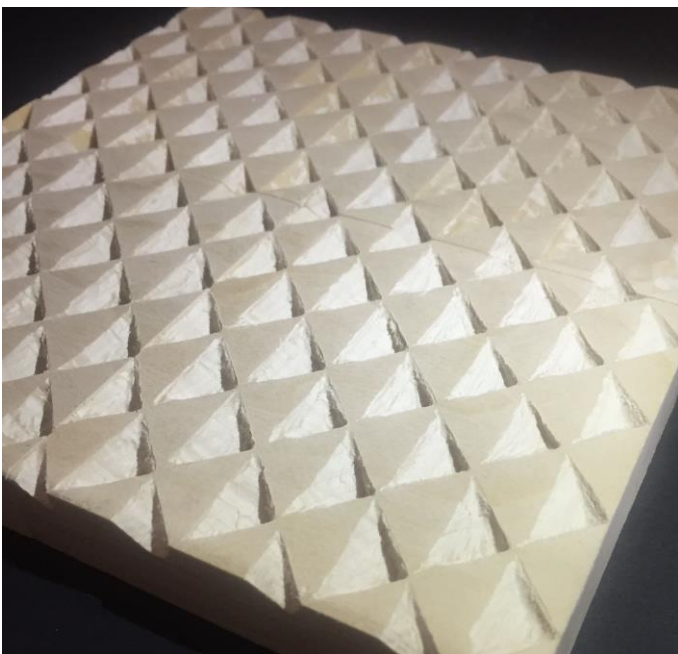
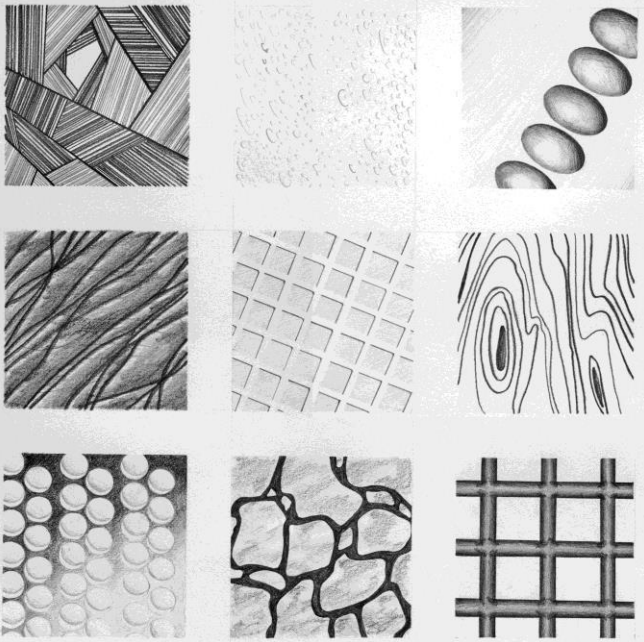
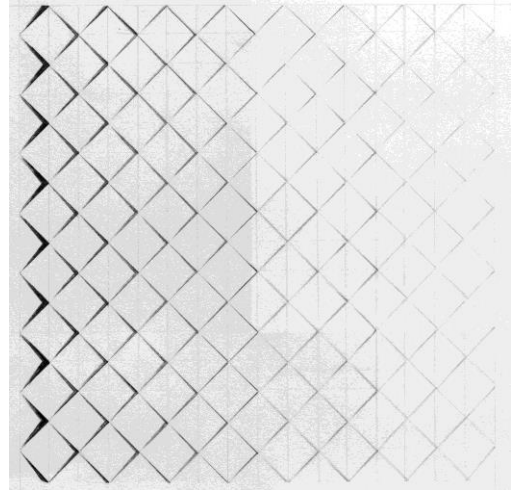
This learning community, Fundamentals in Design Thinking, explores the notion of design as an act of thinking-through-making. It focuses on hands-on learning, which included drawings, model-making, and producing artifacts. As such, the learning community linked Introduction to Architecture, which covers the reading about design principles and craftsmanship, with Architecture Studio, which covers design exercises and projects. The Introduction class demonstrated that craftsmanship is not only about developing technical skills, but also serves as a means to germinate critical thinking. These lessons served as a basis in executing exercises in Architecture Studio. As the name of the course suggests, the primary concern in the hands-on exercise was in the understanding and ability to read and create space. One set of projects focused on learning to see the world through different filters. Different media and genres in drawing served the purpose of understanding various aspects of the environment. For example, charcoal drawings aimed to capture the environment as a series of planes, in which different planes were defined by varieties of phenomena of light and shadows. In another example, line drawings intended to capture the edges of things and objects in the environment around us. These drawings offered a basis for translating two-dimensional artifacts into three-dimensional ones. The models created from drawings allowed the studies on varieties of properties of space, such as scale, proportions, and spatial characteristics.

The project in the wood shop offered further ways to learning through making. The project started from drawings textures in the environment, which captured textures at various scales through zooming-in and zooming-out the drawing objects. The assignment then asked students to analyze the drawings to capture basic elements, such as points, lines, and planes and the relationship between them. These findings served as basis to construct three-dimensional artifacts out of wood tiles and other materials. The constraints for the wood artifacts were the basic module of 4" x 4" tiles and the format of the artifacts that should not exceed 12" x 12." The wood shop sessions started with students learning varieties of tools for carving, including hand-chisels and powered chisels, in order to become familiar with the techniques and procedures for each tool and how the tools interact with the materials. The findings from these engagements with tools, process, and materials would inform the design process. The experiences from making drawings, models, and artifacts were discussed in the Introduction class.

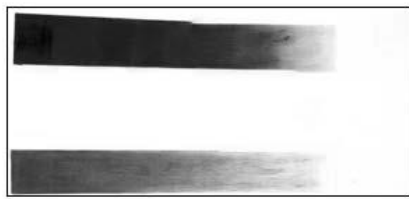


Dahyun Kim, *Charcoal Drawing* and Cooper Sewell, *Parallel Drawings*





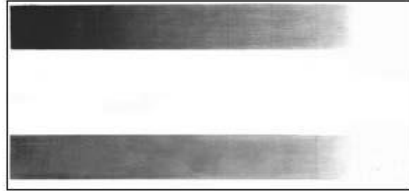
Mercedes Campilango, *Texture: From Drawings to 3-D Artifacts*



ITERATIONS TONAL SCALE |

1

Tonal scales show the variations of lightness or darkness through bright white and black shadows. The tonal scale can alter how we perceive objects and is generally used to denote major planes of an object.

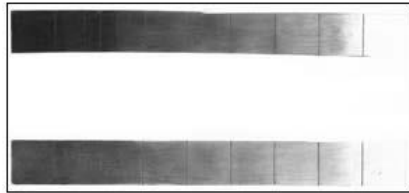
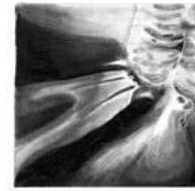


2

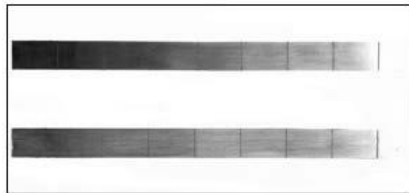
PICTURE STUDY



TONAL STUDY VIGNETTE



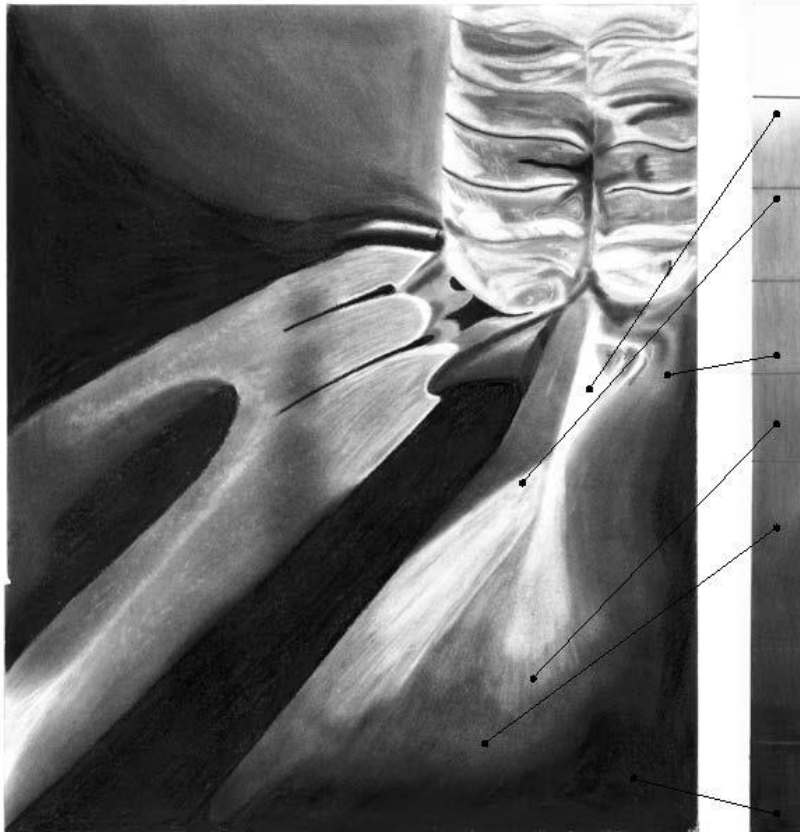
3



4



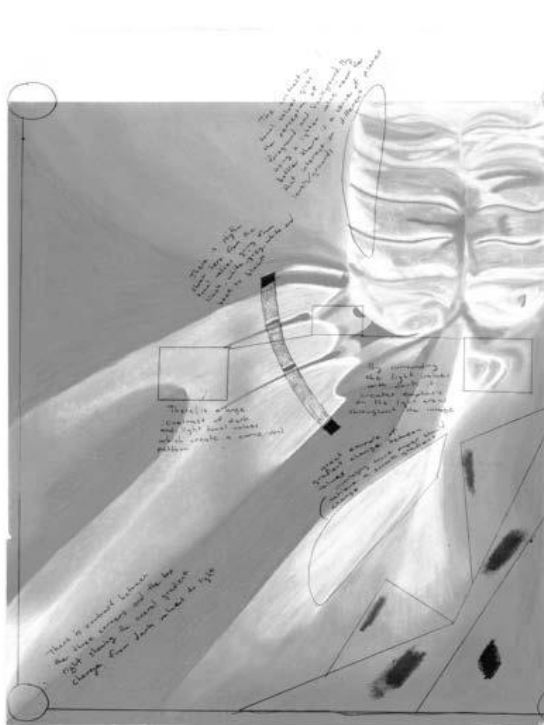
5



TONAL VALUE CHARCOAL DRAWING FINAL

6

Fernando Asamoa, *Drawings and Analysis*



STUDY ON TONAL VALUES



Parti 01 |  
Study of  
curvature in  
tonal values.



Parti 02 |  
Study of  
foreground,  
middleground  
and background.



Parti 03 |  
study of  
contrast in  
tonal values.

7



#### THE TONAL ARCH |

The tonal arch combines aspects from each three parti studies to create a 3-dimensional space that is occupied by tonal values discovered from the charcoal and vine iterations and picture studies. As one moves through the space they will interact with a series of tonal values which will introduce the perception of compositional order | space and forms as tones and planes.



8

Fernando Asamoa, *Transformation from Drawings to Three-Dimensional Artifacts*