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Analog Processes in a Digital World

In the age of the “digital childhood,” many illustration students have succumbed to a myth that tablets and computers will solve all of their conceptual, composition, and stylistic problems. Principles and elements of design, perspective, semiotics, knowledge of traditional mediums, color theory, and let’s not forget endless imagination, are all necessary components for the articulation of powerful and engaging visual language. An artistic foundation comprised of sound drawing and painting skills, conceptual problem solving, and strong design application, ultimately result in successful hand created or analog solutions, and translate well into digital applications and output.

Artistic patience is an essential strength in an instantaneously gratified society. Social media is in full throttle, and illustrators must be visual entertainers as well as artists to maintain their cultural relevancy. Illustration education must encompass a new understanding of the psyche of today’s consumer. Students must create according to both sides of the question — What point of view am I communicating, and what is the viewer’s perception of it, in a society where digital platforms and social media are the focus? A variety of answers to these questions and more can be found through traditional or analog methods of creating thumbnails, sketches, and experimenting with a variety of hand done medium, which will help to guide the development of digital processes.

In the last 25 years of teaching, I have seen a major shift in students' depth of imagination, conceptual reasoning and critical thinking skills, brought on in part by the increased use of the internet, and digital devices such as tablets, computers, and phones. These digital devices have contributed to a lack of focus, and the consumption of ready-made imagery found on the internet masquerading as "ideas." I often ask, "Why are you working on your computer this early in your process?" The answer is usually one of two replies. "I am searching for ideas," or "I'm looking for references." Students are frequently "stuck" on their own ideas, and think they need stimulation or early references to create thumbnails. Ideas are generated using imagination and the research of the subject matter, and reference material built by photographing their own images when possible to support original ideas. If students can't imagine the final image, they aren't willing to "waste their time" on processes they are convinced will not yield that exact solution. The problem-solving journey is full of "work process," and does not have much to do with drawing skills.

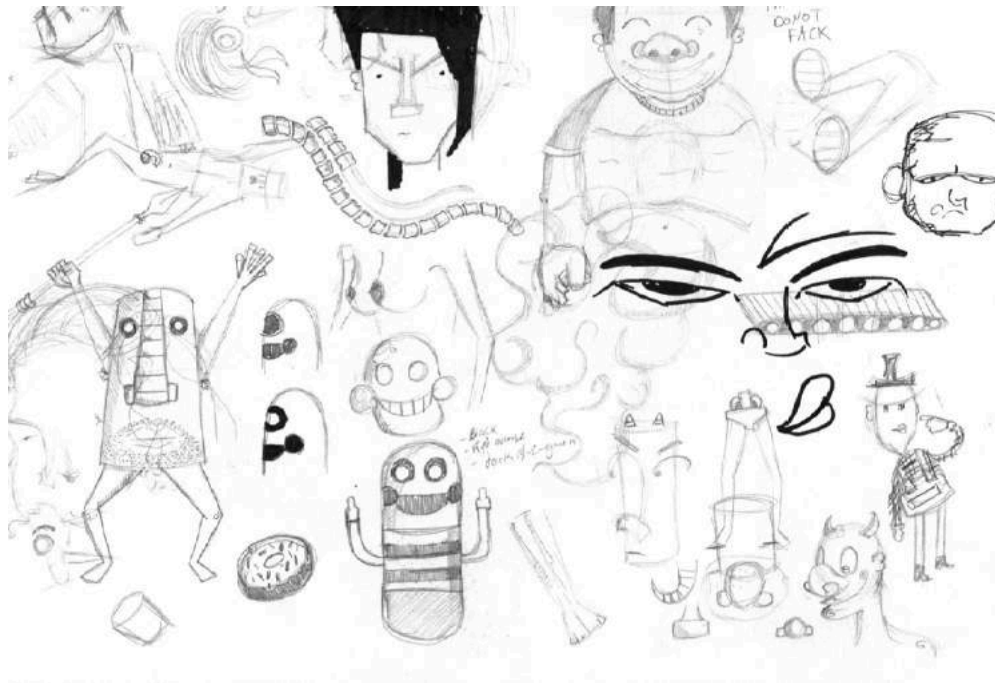


Figure A. Thumbnail Drawings, © 2015 Dupree Bostic

The overabundance of internet imagery saturates the mind with visual imprints without the means to categorize them properly. The more frequently students rely upon the internet, the more their confidence erodes in communicating through their individual language. The internet helps breed simplistic and limited ideas, based on what others have posted. Students begin to compare perceived inadequacies in their work to what they believe to be “good work,” on the internet, without clear knowledge, criticality, and criteria of “good work.”

When using a pencil, pen, or some kind of mark making tool, anyone can make a personal statement without using text. The quality of line, shape, and placement of the mark or marks has meaning beyond words and is specific and unique to them. Preserving this unique visual fingerprint is necessary to keep individuality in visual language and thus in the field of illustration. Variety, originality, and higher quality creative output is necessary to maintain relevancy in today’s digitally driven world.

Thumbnail drawings and their tactile hand created nature utilizes the individualized mark making process and solicits patience on the surface, but the hand is a true and natural extension of the working mind. This special connection must be cultivated, utilized often, and preserved, in order to maintain working criticality throughout the illustration process. Thumbnail drawings facilitate conceptual understanding of image, meaning, and analog methods of problem solving through principles and elements of design flushing out the relationships between concepts, form, and space. Visual forms are composed of elements such as line, shape, texture, color, etc. Principles are methods by which elements organize themselves spatially with one another in art or design. By using these rules, students can formally develop and orchestrate meaning

through specific visual representation, organization of forms, their contexts, and the space they occupy.

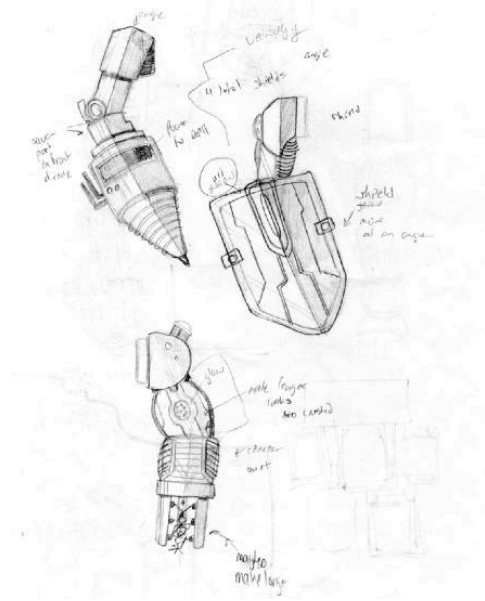


Figure B. © 2015 Dupree Bostic

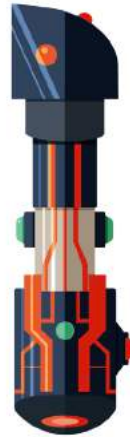


Figure C. © 2015 Dupree Bostic



This is a daunting task for many, as this process is seen as somewhat of a “chore.” In many cases students don’t see the valuable results of many quick small drawings over a few labored detailed ones, not realizing investing a lot of time comes with emotional attachments, among its drawbacks. They don’t want to let go of the many hours they have invested into the piece while secretly and simultaneously realizing their creation doesn’t solve their original problem. I frequently recommend setting a timer for 30 – 45 seconds to facilitate less detailed drawing and more mind hand connection. The sequential nature of creating thumbnails, critical analysis, creating more thumbnails specifically addressing problem areas in the previous iteration, is a work-process method aimed at retrieving the best understandable visual statement as quickly as possible. A common misconception is that thumbnails can be created to partially represent a concept, with composition design encapsulating the complete concept at a more final point. Another aspect of this problem is that thumbnails are

harder for students to create because they tend to envision the final without substantiating it with some visual representation, and don't see the power thumbnails possess, and ultimately find them unnecessary.

One of my favorite analogies for the thumbnail process is "long hand math." Math teachers love to see a student's process, which enables them to work out a problem through several steps too complicated to be done mentally. There seems to be a belief that if one can draw, there is no need to work things through before creating a final illustration, by hand, or digitally. The "real work" of the assignment resides here. Imagination and point of view make raw ideas come to life. The computer and the internet's pervasiveness have created an environment based on the immediacy of now. Once students thoroughly comprehend these various components and find solid footing in diverse analog ways of problem solving, they can be effectively translated into digital methods with more satisfying and entertaining results.

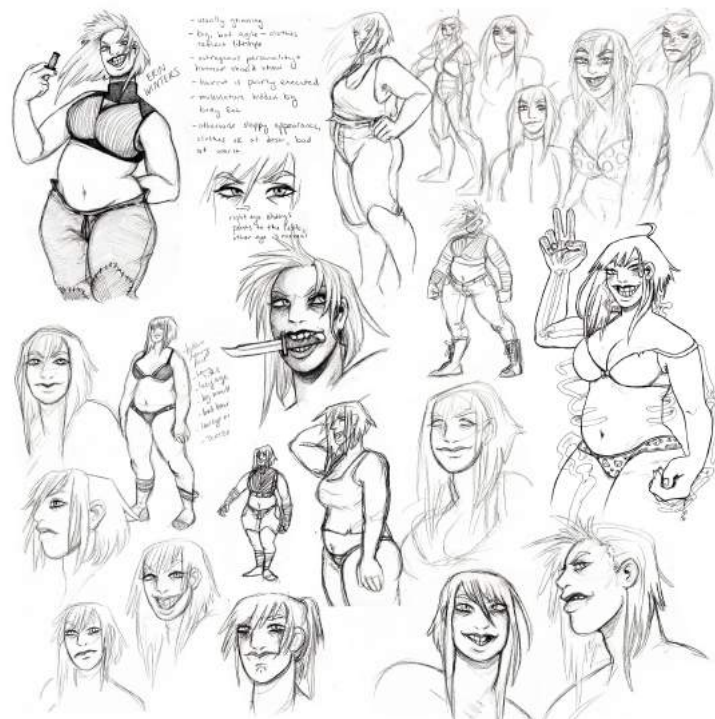


Figure D. Character Development, © 2017 Aubry Eve Arnold

In these character development thumbnails in *figure A.*, Eve Arnold, a recent student in Illustration Narrative at the University of Delaware, explores facial expressions, body type, posture, and clothing of her character. Her drawings include notes to help figure out the characteristics of this character for the narrative. The knowledge of anatomy, and line quality, one of the elements of design, is especially important for movement here. They help the character come to life and are important skills transferable to digital platforms. This type of drawing is important to visual communications industries such as in film, gaming, and animation, because they flush out the appropriate narrative for the client.

The animation industry relies heavily on the use of analog processes when developing characters, scenes, and many other aspects of the production process. So much so that former John Lasseter, the Creative Director and Founder of Pixar, a leader in the animation industry wrote:

Many people don't realize that we have almost as many artists...working in traditional media – hand drawing, painting, pastels, and sculpture – as we do in digital media. Most of their work takes place during the development of a project, when we're working out the story and the look of the film. The wealth of beautiful art created for each film is rarely seen outside the studio, but the finished film we send around would never be possible without it." (Jessep, 2012)

Currently, there seems to be a disconnection between imagery and its meaning and purpose. Students often begin their assignment process by verbalizing descriptions of what they are materially going to create, and how they plan to create it. This dialog usually includes color and medium, and a comfort level having previously used that particular medium. The stumping point is the depth of a student's research, and the lack of iron clad concepts. The drawings based on this conversation tend to be very

straightforward, don't contain much originality, or purposeful hierarchy based on conceptual problem solving.

Stories must be told, and images created to give them life to continue to feed and provoke our appetite for the unknown. A successful response to this is based in part on the constant manipulation of concepts, their meaning, and images to coincide with them. The theory of semiotics is at the center of this process, as the science of signs is applied in various visual communication fields. (Crow, 2016)

Writing can facilitate a student's visual communication analog process by slowing critical thinking to promote concept generation while helping them understand the semiotic text and image relationship. Without concept imagery has little meaning. Before students understand this process, they believe any image they create is automatically comprehensible to others. "I know what it means, so everyone else does too."

"The Emblematic" is an assignment I give my first year Core Design students to facilitate early understanding of semiotic methodology. All facets of our Art & Design Department rely on these important foundational building blocks. The upper level students have had this experience with image and meaning and expand upon it in the illustration courses. The assignment asks students to imagine owning their own island, and to create an emblem for use in a variety of official ways, such as a flag and stationary letterhead.

To begin the assignment, students write a half-page paragraph about themselves, making sure to use nouns, adjectives, and verbs throughout. It is important for a

concept to include nouns, because they can be visually represented by images. Adjectives can describe the nouns, and verbs suggest whether the nouns should be passive or active in the composition. Students underline those nouns, adjectives, and verbs throughout the paragraph, and number the nouns according to their conceptual hierarchy. This writing component reinforces a concrete concept visually representational to them.



Figure F. "Emblem Assignment," © 2016 Courtney Polidoro

It is difficult to create imagery only based on adjectives, such as "happy" or "sunny" without a noun visually leading the way, so realism and abstraction become hot topics here. Most students would draw some version of a smiling face, which is very unoriginal. Using adjectives alone may provoke a non-realistic visual response, or perhaps a noun with no relevant meaning in the paragraph, but instead try to

represent a “feeling,” leading to more subjective imagery much more difficult to decipher by very many.

I require them to thumbnail images in their natural stylistic visual language, roughly twenty per noun. This is the tough part. Once all nouns are represented adequately, they choose the most original and appropriate representation to photocopy in various sizes, from very large to very small. Most students have never used or seen a copier, so there is a verbal introduction to it. A few have never heard of one.

Size relationships between forms can speak to metaphor, hierarchy, or other interesting ideas and perspectives. Size and scale are easily forgotten components of composition when working on screen. Designing multiple images in a composition that successfully represent a concept is difficult when there is no variety in image sizes. The ability to exchange sizes is helpful when immediately processing visual relationships. Physically printing images changes the perception and relationship with the intended image and its surroundings. (Ambrose and Harris, 2015) Using a photocopier for reduction or enlargements is recommended over redrawing or using a computer or scanner, because copies are a much quicker printed output, therefore speeding up the brain’s image processing time and physical work time.

Students then work on the light tables in the building, and construct their emblem with the photocopies using overlapping, size relationships, negative positive space, and many other principles and elements of design discussed in class. Using the light table to physically explore principles of design with photocopied images without constant drawing produces very creative composition iterations in their own stylistic language while simultaneously carrying meaning from their paragraphs. This process

actively engages cropping, overlapping, size, repetition, hierarchy, etc.— thinking through the act of doing. Physically responding to composition developmental changes brought about by critical thinking, produces more imaginative results using less time and energy. Students can use their phones to compositionally crop, save, and use them to compare and critically analyze the various compositions created on the light table.

When students move forms around on the computer screen as opposed to a light table, they unconsciously design within the horizontally confined frame of the computer screen, and rarely save their compositions or critically analyze them. Creativity is stumped by way of no active cropping, creating awkward negative space within the composition, and adding to the difficulty of effective and efficient visual communication. The computer belabors the process by infusing too much logical overthinking instead of a more intuitive thought process, classic left-brain right brain conflict occurs.

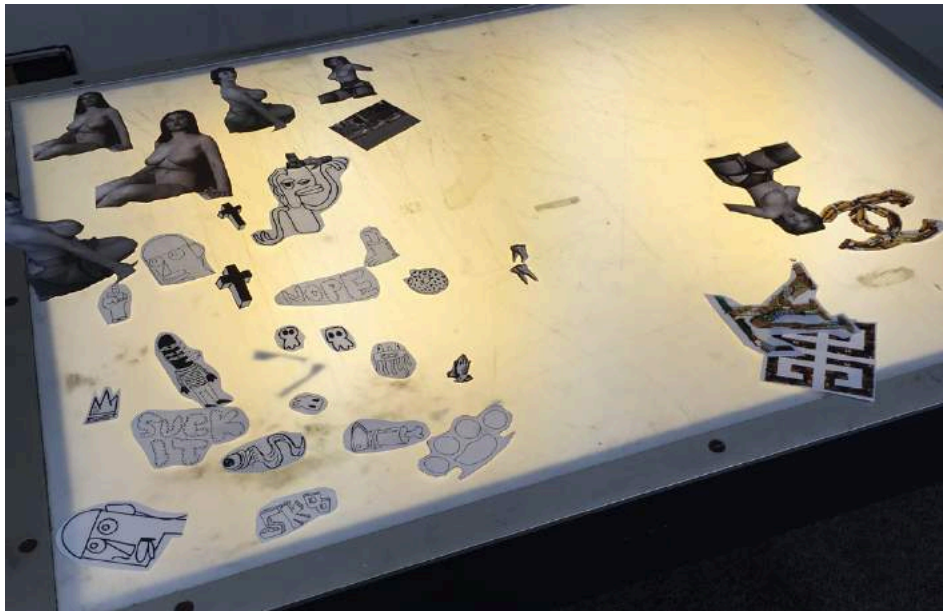


Figure G. Photocopied Analog Created Imagery on a Light Table, © 2015 Dupree Bostic

The working process outlined in this assignment extends to a working analog methodology for illustration by answering very important questions mentioned earlier concerning concept, control of image representation, and space activation. There are various ways to create imagery and reference material; drawing visual material from the imagination; using a digital camera to capture reference material to substantiate thumbnail and sketch information rather than using the internet, or when a camera is not feasible; creating visual language from references on the internet based on the concept is acceptable, only if it is changed to meet copyright requirements for reproduction. Reference photos captured on memory cards are easily transferred to the computer and printed or printed directly from the camera and ready for use. As with hand created imagery, print material can be sized on a copier, cut up, overlapped, cropped, etc. Constructed compositions can be input back into the computer and manipulated digitally to achieve higher levels of experimentation and originality. The more physical the mind hand process is, the more interesting and imaginative the results become. It is imperative that students understand how analog processes inform the digital world and contribute to more creative successful results.

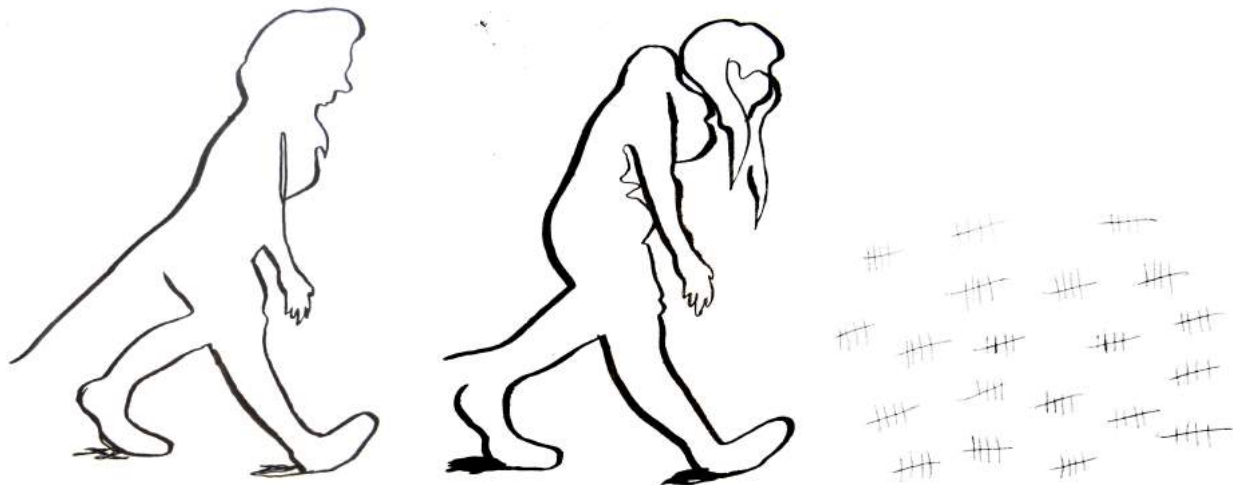


Figure H. Analog Visual Language for Arak Essay Article, © 2017 Emily Brymer

In *figure H.*, and *I.*, Emily Brymer, a recent student in my Narrative Illustration I course, used analog created forms and digitally composed four illustration compositions for an article in Arak Essays, a UD English Department online essay site. She brainstormed concepts by thumbnail drawing, then drew responsive imagery to those concepts in pencil, and finally inking them before scanning. Her knowledge of principles and elements of design informed her strategic choice to use spot color to enhance the figures' line quality and deliberately direct the viewer through the composition.



Figure I. Digitally Composed Composition Using Analog
Created Imagery for Arak Essay Article, © 2017 Emily Brymer

Once students gain invaluable fundamental knowledge of visual problem solving, it is transferable to digital equipment and programs. Some analog processes are more mimicked, immediate, and applicable through digital sketching, drawing, and painting programs, such as Photoshop, Procreate, Corel Painter, and Rebelle 2.1. They translate line, shape, color, medium, etc., on pads, tablets, and computers. For example, digital artists use a variety of digital painting programs to create work based

on the analog methods of painting where paint brush strokes can be deleted with the click of a button. Most successful digital painters have an in-depth knowledge of drawing, the relationship between light and shadow, perspective, and color, among others. It is widely believed that the key to a strong analog painting is really strong analog drawing as its foundation. "Those who use the computer without understanding the practice and the values of drawing by hand remain constrained by the default positions established by the programming team. The hand drawing, in contrast comes with no default positions: we express what we want; it may be quick or it may take hours to complete, the sketch pad and pencil are portable and go where we go, drawing as a procedure is immediate." (Treib, 2012)

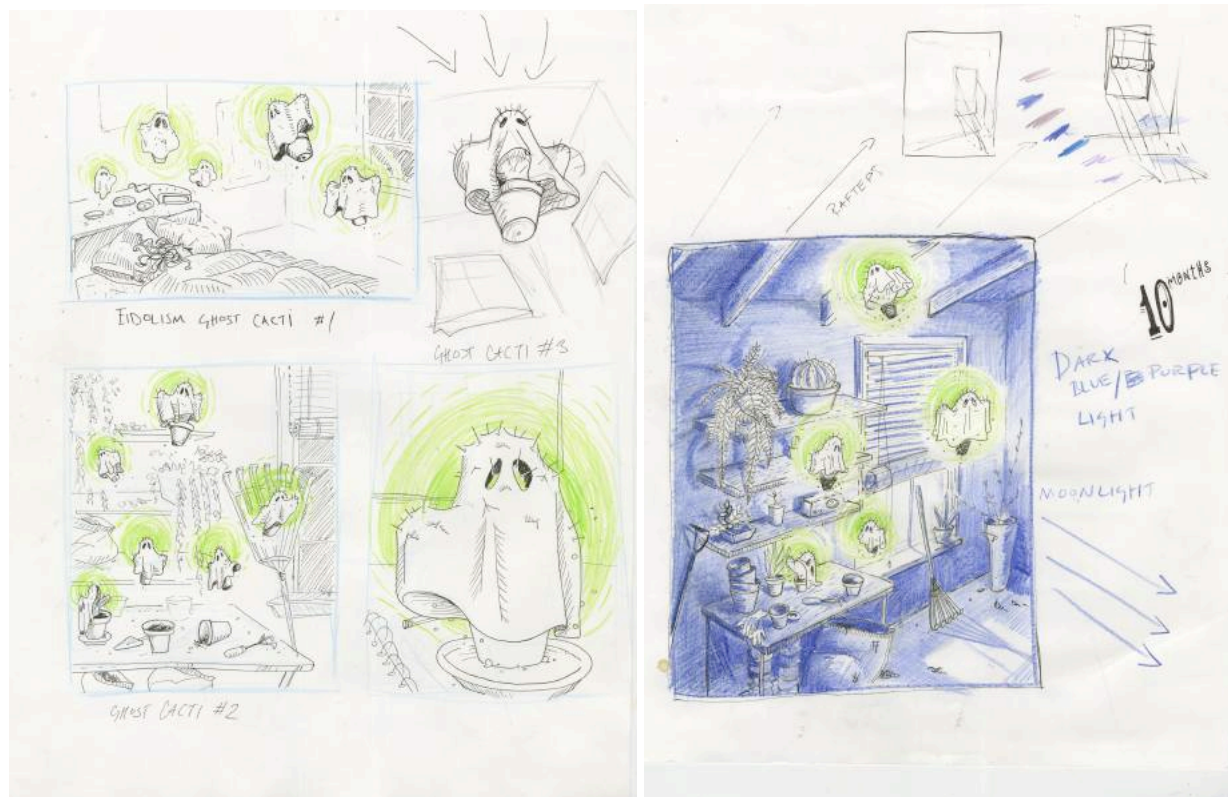


Figure J. Analog Composition Thumbnails and Sketches for Student Assignment in Illustration Narrative I Course © 2017 Blair Files

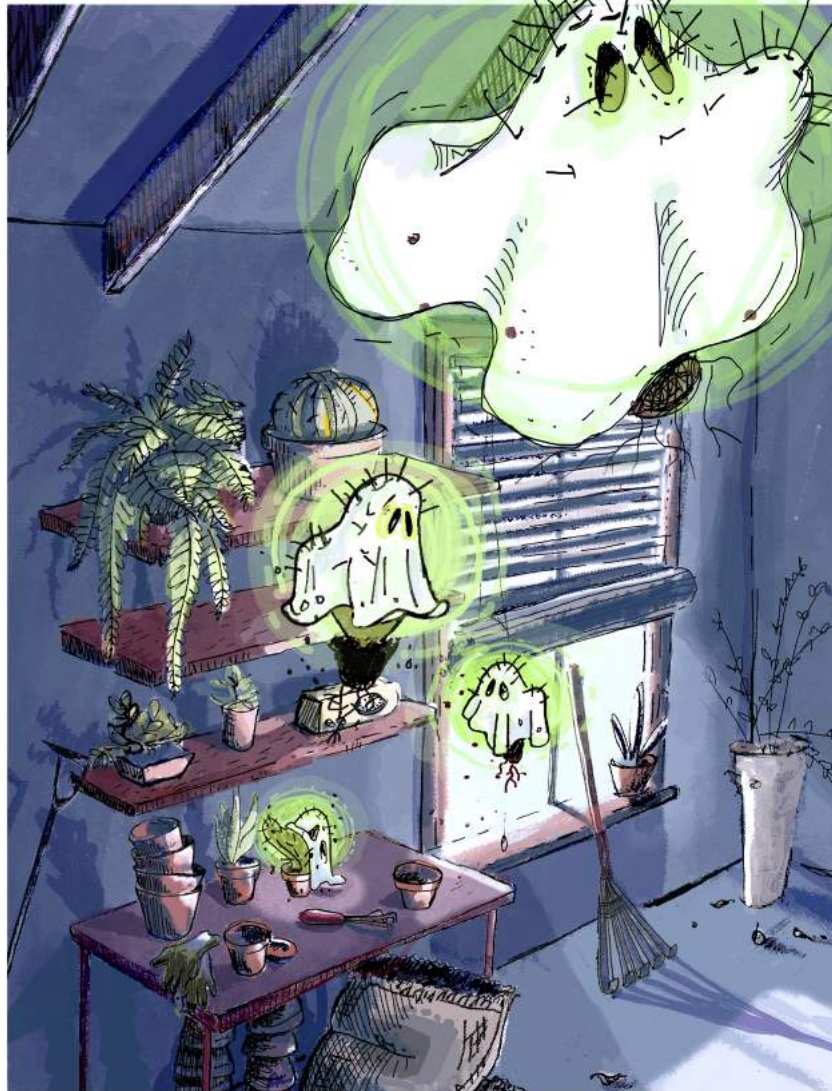


Figure K. Digitally Scanned and Colored Composition for Student Assignment in Illustration Narrative I Course © 2017 Blair Files

Alex Bostic, a portrait painter, illustrator, and associate professor of art, at Mississippi State University, illustrates several points in the relationship between analog and digital methods with student work from his new digital painting course. He relies on a student's foundation in photography, analog drawing, and painting processes. In their

first assignment he connects students with photography processes to create photo reference material of their own eyes to emphasis use of original photographic imagery in their own work.



Figure L. "Eye Pencil Drawing,"
© 2018 Imani Smith



Figure M. "Eye Painting in Watercolor,"
© 2018 Imani Smith

Bostic lectures about form, and light and shadow relationships, and good references. Focusing on the eye, a facial feature containing a variety of surfaces and forms, allows the instruction to comfortably move through some anatomy without getting into the entire body at this point. Then they must create value drawings by hand, example in *figure L.*, to understand shape, form, and light, an important fundamental aspect of analog painting. In *figure M.*, students develop watercolor or acrylic color paintings

based on value drawings and the photographs. Upon completion of these analog processes, they create the eye using digital programs such as Painter or Photoshop, in the *figure N.* example. The discussion expands to more anatomy dialog of the head, facial features, light, mood, and composition design, culminating in a digital portrait painting of a familiar celebrity created from a variety of internet reference material. (Bostic, 2018)

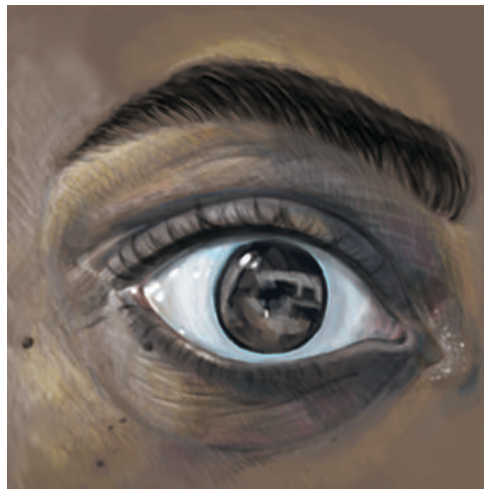


Figure N. "Eye Digital Painting,"
© 2018 Imani Smith

Creating a working methodology and design process is an incredibly worthwhile endeavor that will continue well into a professional practice. Arnold, whose work is represented in *figure D.*, invested in a tablet and stylus pen to transfer her analog drawing skills to digital input and output. She is currently working to improve her composition design skills and knowledge of color theory to strengthen her digital work. Her goal is to become a concept and character designer for the video game industry.

Even with the changes of the last two decades, students in our Visual Communications program, in the Art & Design Department, at the University of Delaware, have acquired strong problem-solving skills as a result of our program's boot camp-like

structure requiring hand-created methods of problem solving throughout all of our VC core courses. Students learn to utilize more exploratory options in the relationships between concept, medium, and application. It infuses their visual work with more conceptual originality and individualized direction than a more digitally driven curriculum. Students are sought after in various areas of the visual communications industry because of thinking skills they have acquired through a diverse level of analog experimentation.



Figure O. "Analog Thumbnail Drawings for Final," © 2018 Dena Solazzo

"In a world that is so diluted and suffocated with digital media, I find my eye is most attracted to visuals that have hand done elements. We are so accustomed to perfect straight lines, and full flood color, that the imperfections that come with work done by the human hand rather than rendered by a computer program is not just satisfying but also refreshing.

There is also a noticeable difference when something is designed initially on paper versus on the computer. I find in my own work and experiences that the computer, although it seems like its capabilities are endless, is actually more limiting. Paper lets your imagination free fall in a way that is unachievable when relying on just digital media.” — Dena Solazzo



Figure P. Photoshop Rendering and InDesign Layout (student assignment), © 2018 Dena Solazzo

“My process always begins with list making. All my sketchbooks, notepads, and pads of maker paper are a combination of words and images in an equal amount. Writing lists helps me to organize my thoughts, make logical connections between ideas, and gives me more places to pull imagery from. As a student in the Visual Communications program, I was taught to save the computer for the finishing touches. This has become a way of working for me, as I find it hard to begin making in the computer. I can’t create anything that looks interesting or meaningful until I write, sketch, scan, trace, erase, and try again. Even laying out information digitally is deceiving, because I almost always change my mind once I see it printed and physically displayed in its environment. I believe any good work has a strong mix of digital and analog mediums incorporated in it. As a visual creator, my best work begins in words, is

crafted on sketch paper, and tweaked on a computer. This is the way of working that has allowed me to grow as a visual communicator and an image maker.” — Hannah Reilly



Figure Q. Analog Thumbnail Drawings for Final Student Redesign of Spiked Seltzer logo, © 2018 Hannah Reilly

Each year art departments welcome a new freshman class, and with their entry comes difficulty balancing their relationship between analog and digital worlds. The digital world promotes a certain detachment from reality, and without analog processes and tactile and sensory relationships, can erode the critical thinking desperately needed to maintain imagination, creativity, and originality. The role of an illustrator is to narrate, invent, excite, discuss, ignite, and compose, among others. Using analog processes strengthens the use of digital methods and makes these goals achievable. The digital world will remain, but it should be the priority of educators to continue instilling invaluable analog processes into their curriculums to achieve greater success.

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