Drawing Stories:

Developing a Range of Illustration Styles to Enhance Graphic Storytelling

by Tyler Brown

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Thanks ya'll! - (read with a smile and a yankee tease)
Tyler Brown, 7-20-15

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ABSTRACT

This paper serves to document and support the art direction for a three part interactive comic titled, *Drawing Stories*. The piece tells a singular fiction story from three different points of view, each in a visual style that represents the personality of its protagonist. Using representational style as a metaphor for the subjectivity of perception, the work attempts to reveal the impacts of drawing style on communication in an artistic way.

By demonstrating style's effects, the project defends the design approach toward illustration, in which, an illustrator must work in a style most suitable for a given prompt and not rely solely on a single identifying manner of drawing. Additionally, the project puts forth a model for understanding illustration style and suggestions for developing a set of well-rounded drawing abilities in order to change one's style based on the needs of a project.

The supporting research includes an analysis of drawing for visual storytelling, with a particular focus on the development of stylistic trends within comics. Theories behind cartoon imagery are discussed, including levels of representation, visual stereotypes, visual metaphors, caricature, expressionism and the formal element of line. Pulling ideas from drawing for animation, industrial, graphic, and entertainment design, the paper argues that, when illustration style and content align, a more effective piece of communication is produced.

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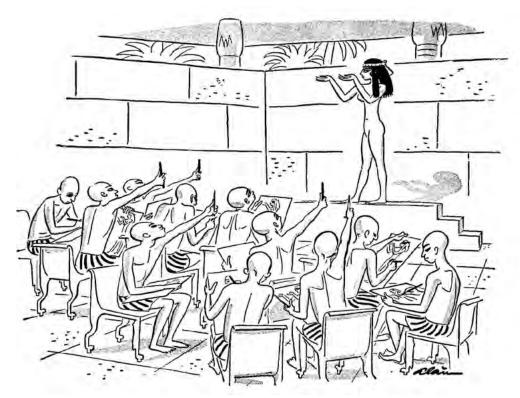


Fig. 1. Alain's Cartoon *The New Yorker, 1955*Alain's cartoon demonstrating the questions many developing illustrators

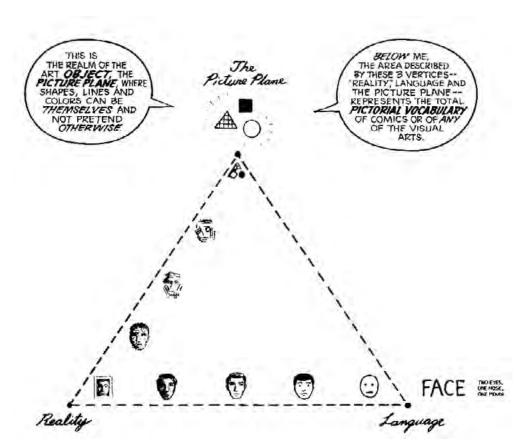


Fig. 2. McCloud's Big Triangle Understanding Comics, 1993 McCloud's "Big Triangle" model of all possible pictorial vocabularies.

INTRODUCTION

BACKGROUND OF STUDY

Through my studies in art and design, I have become fascinated with all forms of drawing. Fine art drawing, abstract painting, design sketching, concept art, cartoons, logo designs, and the simplest of doodles all demand my attention.

In particular, I have come to a renewed appreciation for the work of comic book artists. Telling stories adds another dimension to their drawings, but it is not simply the addition of a narrative that makes comics such a powerful art form. I feel, the most successful of these works are not only great because of what the artist chooses to draw, but the way they choose to draw it.

STATEMENT OF WORK

My interest in drawing often influences both my art and design work to utilize drawing when expressing myself or when solving visual problems for others. As a designer, I believe every visual style should be developed based on the content of its communication. However, the merging of the illustration and graphic design disciplines propose some challenging questions that developing illustrative designers must face.

Through research, practice, and experimentation this project attempts to find solutions to the following questions, which are perhaps best illustrated by Alain's 1955 New Yorker cartoon (see fig. 1).

Those questions being:

- 1 If everyone is drawing from the same visible world, how is it that such stylized representations of reality are produced?
- 2 Why are there style trends and patterns of

similarity?

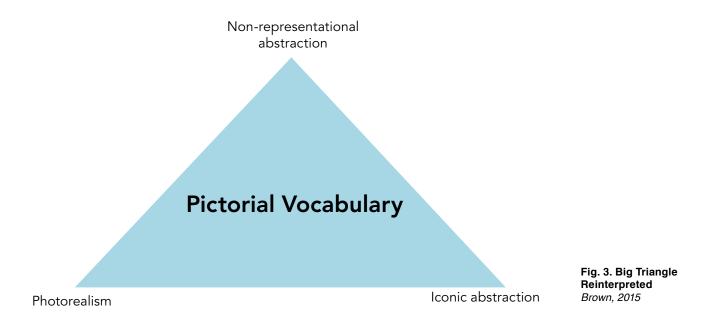
- 3 How do illustrators develop their own personal styles?
- 4 Can an individual learn to draw in many different ways?
- 5 What sort of effects does drawing style have on a viewer?

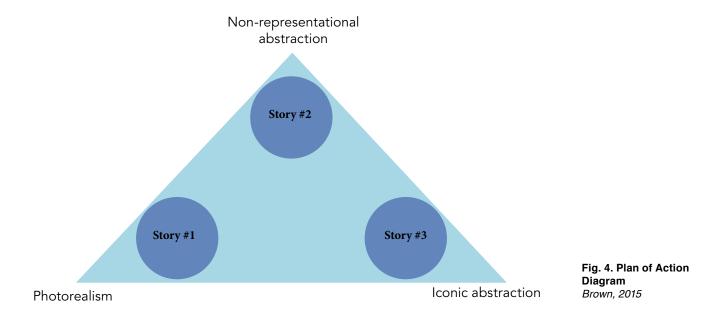
Defining Style

Style is a word that tends to be over-used in the visual disciplines and to refer to many different things. A definition is needed here to enable a common starting point. In her book, *Graphic Design Theory*, Meredith Davis defines style as: "a distinctive form or prevailing mode of expression. Often associated with an era or a culture, and having less to do with the subject matter of the communication than with how it is represented" (145).

In general, what I mean by *illustration style* is: the visual language used to represent something through the act of drawing. Comic book artist and theorist Scott McCloud defines this as an artist's pictorial vocabulary and has developed a model for thinking about it (see fig. 2). In his model, our pictorial vocabulary exists as a triangular gamut with the end points being reality, language, and the picture plane. In drawing, this can be translated as Photorealism, iconic abstraction, and non-representational abstraction (see fig. 3).

It was with this information that my understanding of style and the project began. I proposed that by illustrating three stories that took place in the furthest corners of McCloud's gamut would provide an individual with an understanding of the most diverse range of drawing styles and could artistically demonstrate some of the effects of illustration style on





communication (see fig. 4).

An additional personal goal of the project was to gain a better understanding of my own artistic voice through the creation of an original comic story and to demonstrate a competency in a variety of illustration methods for future client-based graphic design work.

PAPER SUMMARY

This paper serves to document and support the creation of the project. After this initial introduction, it begins with a chapter on generating stories. In which, research into writing stories based on my style prompt is discussed and a connection between the storytelling device of the "Rashomon Effect" is made. My story creation process is then documented and why each

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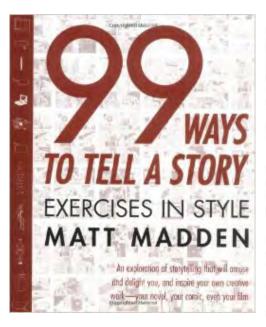
story is enhanced by the chosen illustration style is identified. Lastly, some non-traditional narrative ideas are discussed and why comics is the best format for my stories to be told in is proposed.

The next chapter explores some of the theories behind cartoon imagery which really start to answer through research some of my questions on style development, including topics about varying levels of representation, visual stereotypes, metaphors, caricature, expressionism and the formal element of line. Pulling ideas from drawing for animation, industrial, graphic, and entertainment design the chapter points out the academic importance of studying cartoons.

The following chapter documents the development of drawing style within comics and identifies its stylistic trends, from the art form's inception from Rodolph Töpffer's picture stories to the explosion of digital comics today. A case is made that, especially in comics, a more effective form of communication is created when style and content align.

Next, my creation process is documented, beginning with the iconic abstract story, then the photorealistic, and finally the non-representational abstract. The entire creation process is recorded, design choices are explained, and additional research points are made. Most importantly, why the illustration style of each story enhances the content of its communication is clearly explained. The chapter ends with a documentation of the process of adding interactivity to the iconic story with Adobe Edge Animate to demonstrate an interactive proof of concept.

The paper's conclusion includes reflections on the project, specifically what I learned from experiencing it, and important points that other developing illustrators can take away. Future work is discussed, and how the ideas explored in this project can be applied to a variety of new projects is hypothesized. Finally, the significance of this project to comic creators and developing illustrative designers is explained.





Figs. 5-12. 99 Ways to Tell a Story *Madden, 2005*

A variety of sample pages from the book.













STORY GENERATION

As previously stated, the final artifact of this project was intended to be three different stories, each illustrated in a different style. The full range of McCloud's "Big Triangle" was to be explored and each developed style needed to emphasize the content of its individual story.

FORM AS CONTENT

As such, my initial challenge was to create three stories that would be best visualized in my suggested photo-realistic, iconic, and non-representational styles. Backwards to the traditional approach, in which illustration styles are decided based on the content of a story, I was now creating content based on the form I wanted it to take. After some searching, I was inspired by the work of Matt Madden, an author, professor, and comics practitioner who had created a book entitled *99 Ways to Tell a Story*.

Matt Madden's 99 Ways to Tell a Story

Matt Madden teaches comics at the School of Visual Arts and Yale University. Along with his wife Jessica Abel, they have written multiple books on the practice of making comics, including Drawing Words and Writing Pictures, and Mastering Comics. One of Madden's more popular creations is his book, 99 Ways To Tell a Story, in which he presents the same single page comics story in 99 different styles. Inspired by Raymond Queneu's 1947 literary work Exercises in Style, Madden's book addresses the question, what is style within the comic book form? The formal exercise is very impressive also pointing out that style in comics can mean more than the way in which the pictures are

drawn. His rather formalist experiment demonstrates numerous effects of style on story.

In his introduction to the book Madden reflects on his creation writing: "Rather than rehashing the eternal battle between form and content, style and substance, I hope this work questions those tired dichotomies and suggests a different model: form as content, and substance inseparable from style" (1).

This quote perfectly addresses the basis of this paper and Madden's project is a great example of an art academic creating a project to better understand illustration style. His project serves as excellent precedent, however I wanted to push this idea further and wanted to not only explore many different styles but use multiple illustration styles to enhance storytelling.

Futurama "Reincarnation" Episode

The 2011 *Futurama* episode entitled "Reincarnation," does this. In it, the cartoon's creators use three different animation styles to tell a three-part story (Ehasz "Reincarnation"). The first segment of the story is told in a black and white Fleischer Studio inspired style. Complete with constant bobbing up and down movement of all characters and buildings. The story features around Fry, the protagonist, trying to obtain a piece of a beautiful diamond comet to propose to Leela, his love interest. Instead of blasting off a piece to make into a ring he inadvertently blows the comet in half. One half flies towards the sun creating a rainbow seen on earth and the other half flies into the rainbow creating an entirely new color (see fig. 13-14). The irony is that the "new color" is just another shade of gray because of the animation style.

The second segment is rendered in an "8-bit" style

of low-resolution computer graphics. Using the debris from the diamond comet in the first segment, Professor Farnsworth creates a microscope lens powerful enough to see the tiniest unit of matter. By viewing this piece of matter the professor is able to explain all the mysteries of the universe. The comedic irony is, in the style used the "tiniest most intricate unit of matter" is visualized as a single black square pixel (see fig. 15).

The third and final segment is rendered in a traditional anime style. In it, aliens who can only communicate through body language are angered by the destruction of the diamond comet from the first segment. After going to earth and confronting the crew about its destruction, the crew is unable to communicate properly. Finally, after much initial teasing, the mistreated supporting character, Zoidberg, removes his shell and performs the dance of peace. Again, the ironic comedy is that the awe-inspiring dance is shown as a still image of Zoidberg's body with the camera panning all around dramatically (see figs. 16-17). This is typical of the anime style of animation, which is closely related to manga style comics.



Fig. 13. Futurama "Reincarnation" Episode still Ehasz, 2011



Fig. 14. Futurama "Reincarnation" Episode still Ehasz, 2011



Fig. 15. Futurama "Reincarnation" Episode still Ehasz, 2011



Fig. 16. Futurama "Reincarnation" Episode still Ehasz, 2011

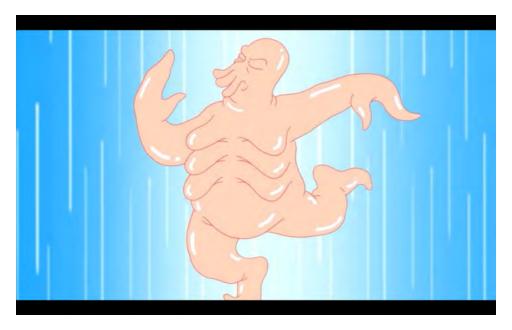


Fig. 17. Futurama "Reincarnation" Episode still Ehasz, 2011



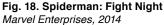




Fig. 19. Spiderman: Fight Night Marvel Enterprises, 2014

Marvel Knight's Spiderman

Another project that uses illustration style to enhance its story is the 2014 Marvel Knights Spiderman: Fight Night trade paperback. In it, Spiderman fights ninety-nine villains in a drug-induced state. His enemy, Jack O' Lantern, drugs him at the outset of the book and the rest of the story is rendered in a cacophony of different styles adding immensely to the jarring effect simulating the effect of the poison visually (see figs. 18-19). The art and story are reminiscent of contemporary artist, Bryan Lewis Saunders who creates self-portraits while on different types of drugs in which each portrait ends up looking radically different. The visuals of the Spiderman book combine beautifully with the story; however, the changing style and effects are extremely jarring and results in an intentionally difficult read.

Cartoon Kevin and Mike Holmes Self-portraits

Furthermore, style has become subject matter itself, as seen in these works by cartoonists Mike Holmes and Kevin McShane.

Adventure Time and Bravest Warriors cartoonist Mike Holmes has created a large series of over 100 self-portraits of himself and his cat in different animator and cartoonist styles (see fig. 20). A number of the popular portraits can be seen on his website. Kevin McShane, a multi-disciplinary artist and designer has completed a similar exercise showcasing all of his self-portraits on his website as well (see fig. 21). These formal exercises are interesting studies and demonstrate the popularity of the same character re-imagined in multiple styles.



Fig. 20. Self-portraits *Holmes, 2014*

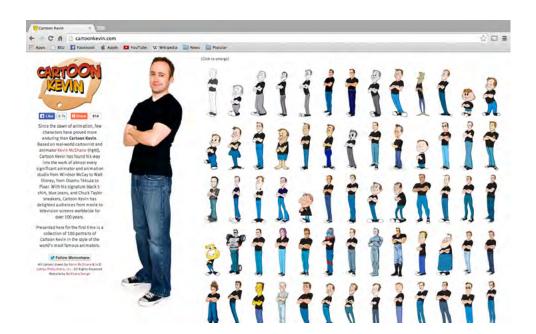


Fig. 21. Self-portraits *McShane*, 2014

Powerpuff Girls "The Bare Facts"

The 1999 *Powerpuff Girls* episode "The Bare Facts" (McCacken "The Bare Facts") features three different visual styles in addition to its usual animation style. The story is told from the point of view of the mayor of Townsville, a side character, who is abducted from his office by the villainous monkey Mojo Jojo. As the mayor is taken, he is blindfolded, at which point the screen goes black but audio still plays. As we listen, we hear a battle taking place between the evil monkey and the Powerpuff Girls (the heroines). After the mayor is returned to his office, the blindfold is removed from us and him (the screen now showing visuals again) and he

questions what happened. The girls, in turn, each reply with their own version of the story animated not in the shows usual style, but in a related style influenced by each of the girl's individual personalities (see figs. 22-24).

This episode takes full advantage of the multi-style narrative, addressing an interesting thought about how all people see the world differently. This idea became the basis of my stories.







Fig. 22. Powerpuff Girls, "The Bare Facts" *McCacken, 1999*

A still from the episode showing Blossom's version of the story.

Fig. 23. Powerpuff Girls, "The Bare Facts" *McCacken, 1999*

A still from the episode showing Bubbles' version of the story.

Fig. 24. Powerpuff Girls, "The Bare Facts" *McCacken, 1999*

A still from the episode showing Buttercup's version of the story.



Fig. 25. Rashomon Poster *Kurosawa, 1951*



Figs. 26-28. Stills from the film Rashomon, 1950

THE RASHOMON EFFECT

After further research, I found this this type of self serving reportage had been given the term - the *Rashomon Effect* named for Akira Kurosawa's 1950 film *Rashomon* (see fig. 25). Often discussed in journalism ethics, the Rashomon effect is contradictory, self serving interpretations of the same event by different people and has been used many times over in plays, film, and television.

The film *Rashomon*, in the most general of terms, is the story of a love triangle gone awry that takes place

between a woman, her samurai husband, and a bandit. The film begins after a conflict has taken place which has led to a trial for the murder of the husband. During the course of the film each party recounts contradictory events that led to his death (see figs. 26-28).

Photorealism

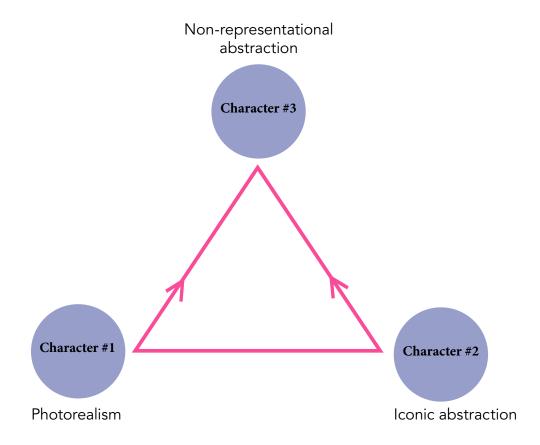


Fig. 29. Character Plan Diagram *Brown, 2015*

Character plan diagram demonstrating the love triangle that takes place throughout the stories.

Non-representational abstraction BEAUTY BEAUTY GEORGE

Fig. 30. Character Plan Diagram *Brown, 2015*

Character plan diagram with concept sketches demonstrating the love triangle that takes place throughout the stories.

Iconic abstraction

STORY CREATION PROCESS

I decided to use the love triangle plot device that would feature three different characters who each see the interaction in very different ways. Character #1 would be illustrated in a photo-realistic way, character #2 would be illustrated in an iconic style, and both would be interested in pursuing a relationship with character #3 who would see the world in a non-representational abstract way (see fig. 29).

After giving this a great deal of thought, I determined that the photo-realistic character would see himself as a lowly grub living in a post-apocalyptic world who attempts to find love and sees George as a threatening monster, and beauty as a butterfly love interest. It was my belief that, because this story would be illustrated in a photo-realistic way, the horror and macabre of a dystopian post-apocalyptic world could really be felt by the viewer. That the harsh brutality of his life could only be described with significant disgusting details of the world in which he lived. This also reflects my personal views in that, sometimes the world just seems like an awful place that I sometimes want to take no part in.

Next, I decided the iconic character would see himself as a lonely kid who is only searching for a friend, and sees Grub as a schoolyard bully and Beauty as the cute girl in his class. I thought that this story would be enhanced by its iconic illustration style because the visuals would reflect the simplistic understanding of the world as seen through a child's eyes.

Finally, I determined that the non-representational character would see herself as an abstract form of beauty who is forced to deal with two other aggressive abstract beings fighting over her (see fig. 30). I believed this story would be enhanced by being told in an abstract style because it could reflect the personality of a caring and feeling character who bases her actions on her emotions and would focus her story not on any physical conflict but instead on an inner emotional conflict.

I then began writing draft after draft, pulling from personal experience and thematic ideas that I found interesting until I came up with each initial short story written in a word document. The following is how each story read at this point in the project.

Story 1: Grub

In a post-apocalyptic world at war where people have been turned into grotesque mutations of themselves and animals, a lone grub-man is only interested in survival and maybe, just maybe, companionship. His world is gritty, dirty, brutally real, harsh, and is a generally scary place.

A small meal worm-human mutant hybrid crawls out of a forest into a clearing of grass fearfully looking over his shoulder, seemingly ever vigilante for the dangers that lurk around every corner. He spies a beautiful butterfly and falls immediately deeply in love/lust with her.

After gaining the courage to approach the beautiful creature, he stops midway when he sees a giant fat spider mutant about to pounce down on her! Grub screams out, "Look out! A monstrous spider is about to devour you!" Unbelievably, she turns clearly seeing the monster, but looks back uncertainly toward Grub. How could she not understand, he wondered. "Why doesn't she fly away back to where beautiful things dwell? She must not understand the danger she is in. I must save her!"

Heroically grub scrambles forward and continues to yell profanities at the hideous creature. Grub succeeds in taking its attention off the butterfly but now the it's focused on grub! A chase ensues, ending with the spider knocking grub down, catching him. The spider-like creature begins winding him in a web when the butterfly screams out "STOP!" (emphasized with the opening of her wings to reveal a fierce feminine face).

Snapping out of his hunger-induced trance, the spider scurries away looking over its shoulder at the wing-spread butterfly and his abandoned dinner. Grub, wiggling out of webbing, turns to the butterfly with a brave smile, wondering what his reward for saving her life might be. Instead, she looks down at grub frowning for a moment, turns, and flies away.

Grub, watching her fly away is at first baffled, then angry. He screams after her, "Stupid B*tch! I didn't want you anyway!" Grub turns back toward the forest. Through watery eyes, he stares at a lone beautiful flower. He approaches, then angrily steps on it, crushing it completely as he walks back into the woods.

Story 2: George

This story takes place in a world of simplistic childhood shapes, colors, and imagery. It's message is that through your own innocent actions you may hurt people, which can lead to a relatable feeling of (perhaps unjustified) remorse.

In the center of a crowded middle school recess kids are playing games, laughing, running, basketball, swings, gossiping and giggling. fences.

During middle school recess, George, a big fat kid, contemplates asking out the prettiest girl in school. George has always had body-image issues but never discusses them, instead he puts up a false front of toughness often intimidating the other kids. During this afternoon however, we find him at a crossroads. He doesn't want to open himself to ridicule but he desires the companionship of this girl so much. After much deliberation, and most of recess, he decides that maybe, just maybe there's a possibility she could like a blob like him.

Just as he was approaching the girl, a smaller, skinny-built kid shouts to her, "Look out! Fatty's gonna eat ya!" The girl feigns ignorance, pretending she didn't hear the rude boy. George barely manages to control his anger and keep his courage, but he does and continues his approach. Unbelievably, the little sh*t starts shouting obscenities at him, calling George all sorts of vile names. Flushing with anger, embarrassment, and a whirlwind of emotion, George charges the rude boy, shoving him to the ground.

In a fit of rage that surprised even himself, George continues to punch the boy lying on the ground. The girl, silent until now, screams "STOP!" George's eyes meet hers and he snaps back to reality. The little boy in front of him is cowering, and the girl he so desired is staring, shocked at the sequence of events that have taken place. Realizing the horrific thing he had just done and feeling an overwhelming amount of shame, George runs away - never having gotten the chance to say a word to her.

After finding a remote location behind the school dumpsters, George does something he never allows himself to do. He cries. Alone, curled in a ball, his entire body weeps letting all his pent up emotion out. As he gets up he doesn't realize he had crushed a flower beneath his crying form.

Story 3: Beauty

On an astral plane higher than our own, people no longer resemble themselves but are abstract shapes that represent their personality/character

A beautiful glowing shape is minding her own business in space when two ugly abstract shapes approach, obviously in awe of her. When the ugly shapes notice each other, one insults the other, who responds by physically attacking the first shape. As they roll around space beating each other the beautiful shape looks on until she can take it no longer. She flares up shouting "STOP!" and the two quarreling shapes stop. One, obviously embarrassed of his actions runs off upset. The other, turning to her appears proud of his actions and what's more, he seems to expect a reward. This is more than the beautiful shape can bear. She turns and floats away, aware of a burst of anger that emanates from the remaining shape.

She floats away quickly but normally at first. Then, her movements become more and more erratic and the scene grows darker and darker. Finally, as she reaches the height of her frantic movements, she pulls out a sharp looking smaller shape. After holding it momentarily above herself, she brings the blade down with directness. As she slices her own form we see her beauty fade. She pulls the blade all the way through, then stops. She drops the blade and it falls, with a few drops of herself, to the floor.

Thumbnails

Next, I used a Wacom Intuos graphics tablet to create some thumbnails in Adobe Photoshop as a combination of image and text to clarify my thoughts and give the stories initial visual form (see figs. 31-33). The highlighted section shows where each character interacts with the others in their versions of the story and the diagram (see fig. 34) demonstrates that when all three characters meet the conflict occurs.

So, after many rewrites my final character stories at this point can be summarized as follows. Grub, who is unmotivated beyond mere survival and prides himself on only needing the basic necessities sees himself as an insignificant lowly grub that takes a chance at life meaning something more and fails, making him an even harder and more bitter person.

George, who is the weird, gross, fat kid in class that nobody likes and is only comfortable when he is

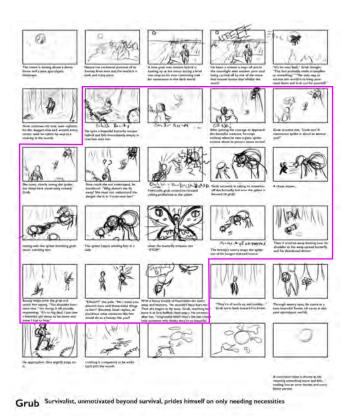


Fig. 31. Grub's Version Brown, 2014



George Jr. Large, obsessive, emotionally unstable, quick to anger, child-like but large

Fig. 32. George's Version *Brown*, 2014

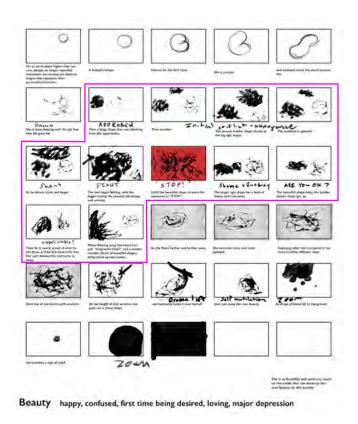


Fig. 33. Beauty's Version *Brown*, 2014



Fig. 34. Character Interaction Diagram *Brown*, 2015

at home in his bedroom playing video games, finally begins to interact with others, but as soon as he does, he is ridiculed and ends up beating someone up putting him even further from having friends than if he hadn't tried to make a friend in the first place.

Finally, Beauty who is a true abstract gestural representation of beauty and is joyful, curious, and loving but ends up caring about these two other characters so much, that when she finds her beauty is the cause of their conflict, she removes it from herself in a harmful way.

NON-TRADITIONAL NARRATIVES

This subjective, personal approach to storytelling is not always in line with the traditional story arc. However, with some research and understanding of traditonal storytelling, writing imagined stories becomes more natural. Narrative theory itself, examines how stories help people make sense of the world and how people make sense of stories. This project will be communicating an invented story through a digital comic. This section of the chapter gives a general overview on the theories and ideas behind story development.

Basic Story Structure

On the most basic level, a story has three parts: the beginning, the middle, and the end. Also defined as the exposition, conflict, and resolution. The exposition of a story communicates the facts needed to begin the story. This type of information could include identifying the main character personalities, the plot and situation, or time and place. Expositions do not only occur at the outset of a story, but can be built in and added as new elements are introduced. The conflict and climax typically make up the largest portion and are the middle part of a story. Conflicts can be internal or external. Internal conflicts take place within a character and revolve around an emotional struggle. External conflicts take place outside of a character in a physical struggle. Stories can contain both internal and external conflict or one or the other. The climax of a typical story occurs at the height of the overarching conflict when a final choice or action must be made. The resolution occurs when the climax is complete and

allows the audience time to recover from the intensity of the climax and reflect on the story's conflict (Block 225).

The story structure graph is a visual device used to map the intensity of conflict that occurs over the duration of a story. The horizontal axis represents time and the vertical represents intensity level. The conventional approach to storytelling is represented above (see fig. 35). In it, there is initially little to no conflict, but through the course of the story it builds more and more until its highest point of climax. After which, the resolution occurs and the conflict is resolved. The traditional character comes out of the experience changed from their original state.

My Story Structure

Figure 36 depicts a diagram of my stories on the same story structure graph. You can see how much they vary from the traditional story arc and instead try many different approaches. The reason my stories do not follow the traditional story arc is because the message of my overarching story is about demonstrating how different people see the world, showing that there are no inherently good or evil people.

This more realistic form of storytelling is becoming more and more popular and is exemplified by the author George R.R. Martin's work. In speaking about his work he is quoted as saying:

"You don't just have people who wake up in the morning and say, "What evil things can I do today, because I'm Mr. Evil?" People do things for what they think are justified reasons. Everybody is the hero of their own story, and you have to keep that in mind. If you read a lot of history, as I do, even the worst and most monstrous people thought they were the good guys. We're all very tangled knots."

Thoughts on Plot

A story's plot is defined as the main events that occur and their design through time. It is the 'what happens?' and 'how it happens.' In his book Story, Robert McKee attempts to explain the different varieties of plot by mapping them in a triangle diagram (see fig. 37). At the top of the triangle is the classical designed Archplot. McKee defines Archplot on page 45: "Classical Design means a story built around an

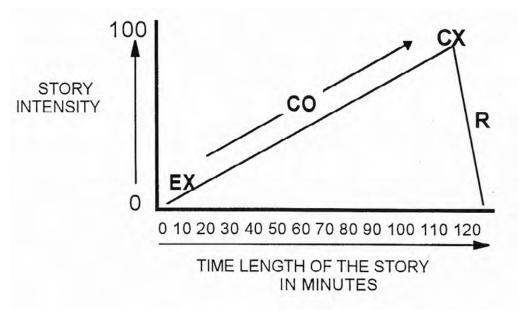


Fig. 35.Bruce Block's Diagram *Visual Story, 2008*

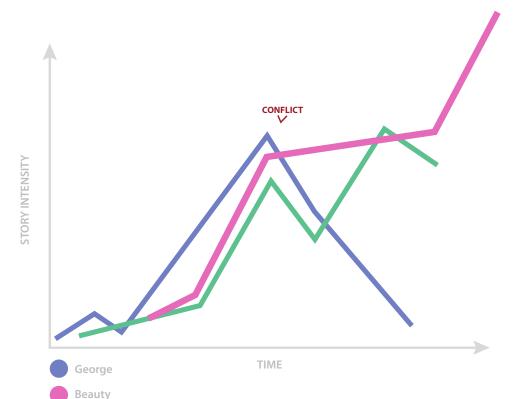


Fig. 36. My Stories Diagram *Brown*, 2015

active protagonist who struggles against primarily external forces of antagonism to pursue his or her desire, through continuous time, within a consistent and causally connected fictional reality, to a closed ending of absolute, irreversible change." In the lower left corner he places all examples of minimalism defined as Miniplot. He explains Miniplot as a story that begins with the classic Archplot design but then shrinks,

Grub

reduces, and compresses the elements into a variety of short forms. In the bottom right corner of his triangle he places the Antiplot or an anti-structure design of story. In it, a storyteller reverses the classical design structure contradicting traditional forms to exploit or ridicule the idea of formal principles (McKee 46).

In his next model (see fig. 38) McKee adds another dimension to his storytelling map. Within his first

diagram all stories are clearly about change. In his added Nonplot model, change may not occur or it may remain unseen. On page 58, McKee writes about Nonplots explaining, "Although they inform us, touch us, and have their own rhetorical or formal structures, they do not tell story. Therefore, they fall outside the story triangle and into a realm that would include everything that could be loosely called 'narrative.'" In his attempt to understand plot he has put forth the question of what constitutes a story. For him, it must have a beginning, middle, and end (although not always in that order) in which a character undergoes change.

My personal storytelling ideas are more influenced by independent artists and writers that are not concerned with receiving necessary financial return. These thoughts are perhaps best exemplified by the sage advice of the great American writer, Kurt Vonnegut. In the preface to his book, *Bagombo Snuff Box* he lays out his eight rules for "Creative Writing 101." They are as follows:

- 1) Use the time of a total stranger in such a way that he or she will not feel the time was wasted.
- 2) Give the reader at least one character he or she can root for.
- 3) Every character should want something, even if it is only a glass of water.
- 4) Every sentence must do one of two things reveal character or advance the action.
- 5) Start as close to the end as possible.
- 6) Be a sadist. No matter how sweet and innocent your leading characters, make awful things happen to them in order that the reader may see what they are made of.
- 7) Write to please just one person. If you open a window and make love to the world, so to speak, your story will get pneumonia.
- 8) Give your readers as much information as possible as soon as possible To hell with suspense. Readers should have such complete understanding of what is going on, where and why, that they could finish the story themselves, should cockroaches eat the last few pages.

However, Vonnegut ends with the following note: "The greatest American short story writer of my generation was Flannery O'Connor... [and she] broke

practically every one of my rules but the first. Great writers tend to do that."

CHOOSING COMICS

I had always been leaning toward doing this project as a series of comics but was unsure why. In *Understanding Comics*, Scott McCloud continuously relates the form back to the whole of visual art so I knew there was something there. It was not until I read a book by comics critic Douglas Wolk, that I knew comics was the perfect form to do this in. In his book, *Reading Comics* Wolk writes:

"... cartooning is, inescapably, a metaphor for the subjectivity of perception. No two people experience the world the same way; no two cartoonists draw it the same way, and the way they draw it is the closest a reader can come to experiencing it through their eyes" (21).

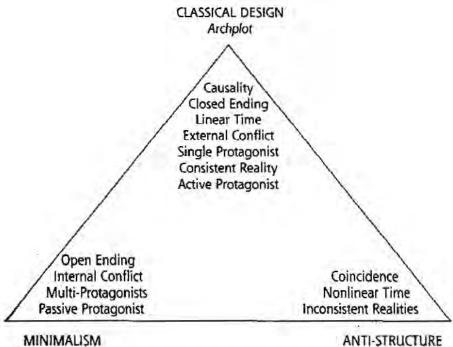
Wolk's quote embodies the intentions of my story and, in a way, the overarching message of the entire project.

CHAPTER SUMMARY

This chapter was focused on generating stories. In which, we looked at a variety of precedent works that utilized style as a component of storytelling including: Matt Madden's 99 Ways to tell a Story, an episode of Futurama entitled "Reincarnation," the 2014 Marvel Knights: Fight Night trade paperback, Cartoon Kevin and Mike Holmes' self-portraits, and a Powerpuff Girls episode entitled "The Bare Facts."

The *Powerpuff Girls* episode turned out to be based on the "Rashomon Effect" named for the critically acclaimed 1950 film, in which multiple sources give contradictory self-serving re-tellings of a story. This effect was used as a prompt to generate the project's three stories and my writing process was explained.

To end the chapter, a note was made on non-traditional storytelling and why comics was the perfect form for this project to take.



Miniplot

NTI-STRUCTURE Fig. 37. McKee's Story Diagram
Antiplot Story, 1999

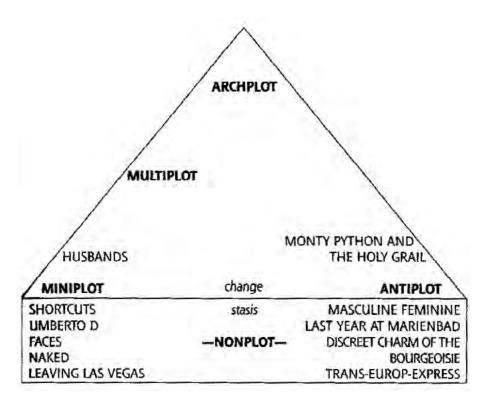


Fig. 38. McKee's Story Diagram Reiterated Story, 1999

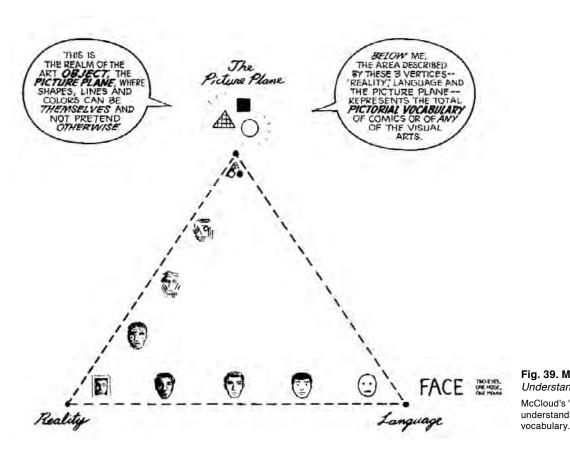


Fig. 39. McCloud's Big Triangle Understanding Comics, 1993 McCloud's "Big Triangle" model for understanding visual art's pictorial

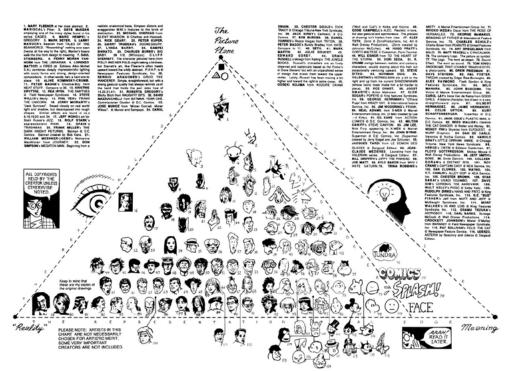


Fig. 40. McCloud's Big Triangle Understanding Comics, 1993

McCloud's "Big Triangle" model for understanding visual art's pictorial vocabulary with a number of prominent cartoonist's styles mapped.

THEORETICAL ASSUMPTIONS

Academic study on the theory behind cartoons may initially strike the reader as ludicrous, its usefulness questioned, its applicability both in and out of the academy absurd beyond measure. This is perhaps a reason why serious scholarship on the subject has been relatively slow to develop (Meskin xxviii). Recently however, scholars are finding the form is not as simple as it initially seems. Inspired by Scott McCloud's 1993 ground-breaking book *Understanding Comics* and subsequent works, in addition to Will Eisner's earlier instructional books on the form, academics are now seriously analyzing the comics medium. Areas of scholarship on comics are being undertaken in Studies in Popular Culture, Literature Studies, Film Studies, Communications, and History among countless others.

Comics cover an astounding array of disciplines including any and all theories of communication, image making, and literature. To study the entirety of comics is a massive undertaking. The theories and philosophies investigated in this chapter will focus directly on understanding how cartoonists' decide how to draw their work and the underlying theories behind cartoon imagery. Focus will be placed on trying to uncover the power of these simplified line drawings and analyze their use in a variety of related disciplines.

This chapter includes theories and philosophies of thought on levels of realistic representation, visual stereotypes, metaphors, caricature, expressionism, and the formal visual element of line.

The chapter also attempts to extrapolate the relevant information from a variety of related disciplines as that apply specifically to comic book imagery. It will examine animation's visual language through the development of a related history to current exemplary practice, including its principles and drawing processes

Finally, the chapter will analyze the role drawing plays in a variety of design disciplines and how their varying theories and practices relate to a range of representational imagery in digital comics.

LEVELS OF REPRESENTATION

To reiterate, we have already discussed Scott McCloud's big triangle of drawing's pictorial vocabulary which is made up of reality, language, and the picture plane (see fig. 39). Later in his book, *Understanding Comics*, McCloud maps different cartoonists' illustration style's within the triangle further demonstrating the concept (see fig. 41). Additionally, he explains how the same thing could be done with all of the movements in art and design history.

Upon further reflection of McCloud's triangle I am under the impression that an elliptical gamut would be a more useful map (see fig. 39). Douglas Wolk agrees, stating in his book, *Reading Comics*, that:

"I can't quite buy into McCloud's evenly spaced, triangular continuum of realism, geometrical abstraction, and symbolic abstraction - the latter two categories seem closer together than he proposes" (Wolk 120).

In thinking about the idea further, this gamut is a great representation of the development of western art! For centuries western art was interested in representing the world as the eye sees it and art historian E.H. Gombrich notes that as soon as we perfected photorealism, the arts took off in another direction

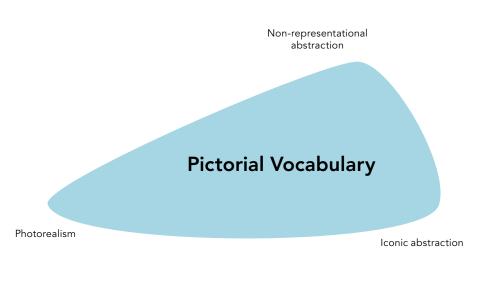


Fig. 41. Modified Pictorial Vocabulary Gamut *Brown*, 2015

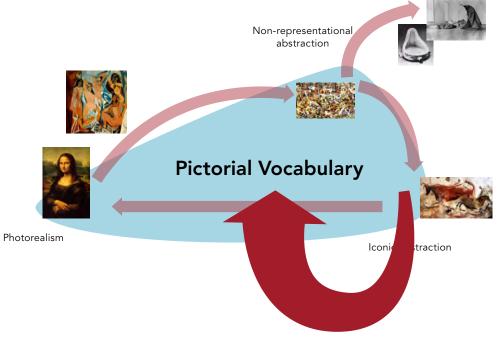
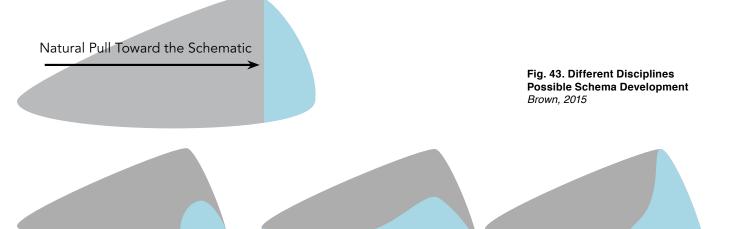


Fig. 42. Development of Western art mapped to my Modified Pictorial Vocabulary Gamut Brown, 2015

Includes images from early Lascaux Cave paintings, Da Vinci's Mona Lisa, Picasso's Les Demoiselles d'Avignon, Pollock's Convergence, Duchamp's Fountain and Beuyss's I Like America and America Likes Me.



searching for something more than mere copying reality. From there, the idea became more important and we leave the drawing gamut, but we also reflect back on and find delight in the work of what was once considered primitive art. Now, I feel, and as McCloud's thinking demonstrates, that artists and designers today are zooming out and looking at the whole history of drawing to decide where they want to work. The best of these creators, I propose, are the ones that do this with purpose (see fig. 42).

We now better understand what constitutes the vocabulary of comics but still do not know how various levels of representation are developed and how they are used. For this, we turn to some of Sir E.H. Gombrich's theoretical ideas. In his book, *Art and Illusion*, Gombrich introduces many concepts and theories about why and how artists develop various styles of pictorial representation, and as an art historian, he demonstrates the ideas through a multitude of examples from the history of art. His approach is based on his understanding of the psychology of perception. The book is a treasure trove of information and to distill it down into a few paragraphs is difficult. However, the following is an attempt at just that.

The Medium

True representation of reality on a picture plane is arguably impossible, but photographic representation is not. To achieve a realistic representation in any form of drawing or painting is a difficult task. *Mimesis* as the Greeks defined it, has not always been and is not the goal of many artists. When analyzing the history of art however, we find it has been of major influence.

One of the main determining factors of artistic style to Gombrich is the medium. Specifically, he states all images are dictated by the degree to which the medium allows relationships of light and shade. In line art, light and shade is either on or off/black or white. Gombrich suggests these relationships are essential for us to decode an image. He also notes that a medium's ability changes with time and advancements in technology, quoting Wölfflin he states, "not everything is possible in every period." In his preface to the 2000 edition of the book Gombrich states:

"Whenever a current style is modified in the direction of realism, our mental set over-reacts; it

is the unexpected degree of realism that will surprise and captivate contemporaries, much as we have observed in our entertainment industry."

The first attempts at realistic representation took place in paint just as they are taking place on the computer today. As the level of realism increases to perfection will we immediately abandon it once again? Gombrich does not believe it was a coincidence that almost as instantly as painters' techniques reached a full level of realistic representation that they abandoned the practice in search of something more. Perhaps the most influential art form of entertainment's future will be cartoons rather than simulated reality, could this explain some of Pixar's popularity today? It is impossible to tell, but I cannot help but recall the general belief, that it is a fact of human nature that we will always want more.

An Artist's Schema

In his book, Gombrich also describes the concept of a "schema," that as viewers of art we come with a set of preconceived notions. Related to what psychologists call a "mental set" he describes it as the relationship between our expectations and our experiences (Gombrich 60). His thoughts on schema contributed to Visual Culture Theory, which analyzes how the images of daily life influence the lives of the people exposed to them. Gombrich takes it another step by applying the concept to the artist himself, stating, "He begins not with his visual impression but with his idea or concept..." (Gombrich 73). The artist's ideas and concepts are influenced by all previously viewed images. The artist's schema or canon of conventionalized representations all influence what he creates. Gombrich suggests all artists when creating an image, start with their personal schema and through trial and error, and correction from observations from life can create convincing representations of reality. If an artist's purpose is to represent different aspects of reality rather than how it appears from a fixed point in space (realistic art), they still start with their set of personal schemata and go from there.

For a cartoonist this explains how various artists create uniquely and repeatably stylized works. It also explains how some artists can create similarly styled work, such is the case with the generic "mainstream"

super-hero" style. The artists working within it all have a schemata based around other superhero art conventions they have seen in the past. In his book, *Reading Comics*, Wolk identifies Marvel's 1978 book, *How to Draw Comics the Marvel Way* as a major influence on an entire generation of cartoonists (50). It is unimportant to debate whether this is a good or bad thing. The item to note from this example is, that past works, for better or worse, impact what people expect from comic art.

The Pull of the Schematic

In his analysis of vision in art Gombrich is in line with McCloud's big triangle admitting that all representation can be arranged along a scale, which extends from the schematic to the realistic impression. Furthermore, he points out the natural pull toward the schematic which representational artists are successful in overcoming. Discussing artists who have not overcome the pull toward the schematic are often given the term "primitive art." (It sounds derogatory and perhaps is, calling all art unconcerned with realistic representation "primitive" but the term suffices and is in use in art history textbooks.) Primitive artists oftentimes adhere to the notion of making over matching, relying on the minimum schema needed to "make" a house, a tree, a boat that can function in the narrative (Gombrich 295).

Conversely, realistic artists who have overcome the pull of the schematic often neglect the essential characteristics of the object represented. It is the distinctive features of an object that become conventionalized as a mental set for all including the primitive artist. Realistic rendering is sacrificing the "unique identifiers" associated with a thing to instead present it from a life-like fixed position. Cartoonists use this idea when they examine how effective a silhouette is. They use shapes and silhouettes that better identify an object or character's unique characteristics. The scientific term identified by Thöuless for this phenomenon of artists as "regression toward the real object." Unexperienced cartoonists, perhaps unknowingly, have used their lack of drawing skill to better communicate their intended message.

When we visualize the pull of the schematic to our style gamut diagram we can see that everyone's understanding begins at the basic level of stick figures, smiley faces, and scribbles. But, people's understanding can grow in many different ways because there are many approaches to teaching drawing and different professions value different skills. The diagrams in figure 43 represent some of the possible ways an artist's schema may develop.

Guided Projection

A final interesting theory from Gombrich discusses the idea of "guided projection." He states:

"All representation relies to some extent on what we have called 'guided projection.' When we say that the blots and brushstrokes of impressionist landscapes 'suddenly come to life,' we mean we have been led to project a landscape into these dabs of pigment (203)."

Effectively, Gombrich is explaining we are aware that the artist is trying to represent an object through his medium and we project, in our own minds, that object to the visual shorthand of the artist. This is an interesting concept to consider, perhaps explaining why the evidence of an artists' hand is desirable in an age dominated by digital images.

In fact, Gombrich suggests that when allowing the viewer to project,

"The artist gives the beholder increasingly 'more to do,' he draws him into the magic circle of creation and allows him to experience something of the thrill of 'making' which had once been the privilege of the artist (202)."

He develops the idea further, suggesting two conditions that must be met in order for an artist to engage the viewer's imagination through projection. One, the viewer must be left no doubt about the way to close the gap, and two, the artist must give the viewer a "screen," defined as an empty or ill-defined area onto which they can project the expected image. Chinese art theory exemplifies projection through its power of expressing through absence of brush and ink. Gombrich quotes: "figures, even though painted without eyes, must seem to look; without ears, must seem to listen.... There are things which ten thousand brush-strokes cannot depict but which can be captured



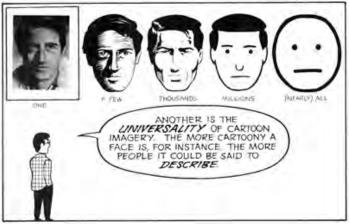


Fig. 44. McCloud's Theory about the Universality of Cartoons Understanding Comics, 1993



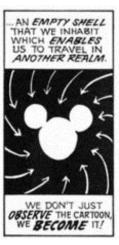






Fig. 45. McCloud's Theory Illustrated Understanding Comics, 1993

by a few simple strokes if they are right. That is truly giving expression to the invisible." The Chinese phrase - "i tao pi pu tao - idea present, brush may be spared performance" exemplifies the idea (208).

Projection is another key component of simplified cartoon imagery that McCloud has some thoughts on. He theorizes that the lack of detail in cartoon drawing allows for a more universal acceptance of characters that more people are able to identify with and project themselves onto (see figs. 44-45). This, he suggests, gives cartoons a head start when attempting to break into popular visual culture!

Scott McCloud and E.H. Gombrich's theories have been immensely helpful in understanding the vocabulary of comics and the how and why various styles of pictorial representation are developed. The remainder of this chapter will focus on theories that attempt to answer the question of how cartoon art can best be used and how it is being used by related disciplines.

EXPRESSIONISM

Another important theory behind cartoon imagery relates to the art movement of expressionism Expressionists represent the world from a subjective point of view distorting reality for emotional effect to evoke certain moods or ideas in a viewer (Heller 83).

Caricature

Caricature is a form of this, in which the depiction of a person's features are exaggerated or overly simplified in a way that attempts to represent the uniqueness of the individual more fully than a photograph could. McCloud explains it s a form of "Amplification through Simplification," stating that

"When we abstract an image through cartooning we are not so much limiting details as we are focusing on specific details to amplify meaning in a way that realistic art can't" (see fig. 46).



Fig. 46. McCloud's Theory of Amplification through Simplification Understanding Comics, 1993

McCloud takes the theory a step further explaining the most abstracted concept of an image would be a word. In figure 46 the next step would read F-A-C-E.

Both Scott McCloud and Will Eisner point out the development of language from its earliest forms as ancient pictograms to the unrelated abstract lines of English today. Some languages however, like Chinese and Japanese through calligraphy retained more aspects of their original imagery, combining both pure visual imagery and a uniform derivative symbol (Eisner, Comics 8). Essentially describing the art of typography, Eisner states: "Letters of a written alphabet, when written in a singular style, contribute to meaning" (Eisner, Comics 9).

It seems comic art is an art of communication rather than pure visuals. However, the level of visual profundity can vary greatly. I find myself deciding one of the greatest parts of comics is looking at the drawings. However, I do not fall under the assumption that the greater the level of realistic representation the greater the work. A successful drawing for a given story could be mapped anywhere within McCloud's big triangle and be any combination of photo-realism, nonrepresentational abstraction or iconic abstraction.

A caricature is the depiction of a person in which their features are exaggerated or overly simplified in a way that attempts to represent the uniqueness of the individual more fully than a photograph could. Caricature in practice, it seems, is essentially what McCloud calls cartooning and his theory of amplification through simplification can be applied.

Tom Richmond, a traditional caricaturist, identifies three elements a caricature needs in order to be

successful, including: Recognizability to the original subject, Exaggeration of distinguishing features, and Statement. Statement is the term he uses to cover multiple factors. He describes it as the personality of a subject or the intangibles that make the subject a living, breathing person (Richmond 5). Capturing a person's personality is the most challenging it seems as it includes identifying a character's typical expression, movements, and body language.

A caricaturist is distorting the realistic features of a subject for emotional effect. Determining what that emotional effect should be is the difficult part and would fall under Richmond's successful caricature element of Statement. Gombrich interestingly points out the relationship of Expressionism with facial expressions stating:

"We respond to the face as a whole: we see a friendly, dignified, or eager face, sad or sardonic, long before we can tell what exact features or relationships account for this intuitive impression. I doubt if we could ever become aware of the exact changes that make a face light up in a smile or cloud over in a pensive mood simply by observing the people around us." [because] "The very immediacy of the impression stands in the way of analysis, and so the discovery and simplification of facial expression provide the best example of the course taken by artistic invention (344).

By the simplification of facial expression Gombrich is referring to those of modern illustrators. He points out the simple dots for eyes and single line for a mouth of

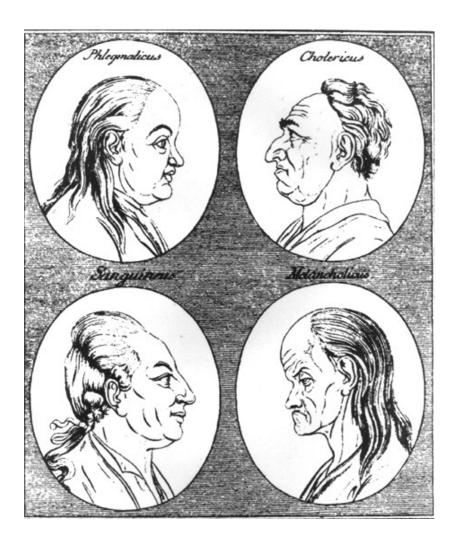


Fig. 47. Lavater's Physiognomy Woodcut Physiognomische Fragmente zur Beförderung der Menschenkenntnis und Menschenliebe, 1775

cartoonist convention. In a way, he is saying the smiley face, which I can now express through two keystrokes:) offers the greatest example of artistic invention.

Visual Stereotypes and Metaphors

In Will Eisner's *Graphic Storytelling and Visual Narrative*, he has a short chapter discussing the use of "Images as Narrative Tools." In it, he touches on cartooning's reliance on stereotypical images. Eisner states: "In film, there is plenty of time to develop a character.... In comics, there is little time or space. The image or caricature must settle the matter instantly." While the use of stereotypes may be initially hard to accept, it seems to hold true and appears to be in line with Gombrich's theory of a viewer's schema.

When the idea of schema is applied to people rather than objects we become wary because of the often derogatory term 'stereotype'. Indeed stereotypes can be derogatory and untrue and it is typically dangerous to generalize anything about groups of people.

Nevertheless, they still exist within our culture and are often used in art to visually depict character. Perhaps the term "archetype" borrowed from literature is more appropriate. But then again, what is a stock character in literature but a stereotypical two-dimensional character used to quickly further the plot?

As it turns out, the use of visual stereotypes in art predates the term stereotype itself. Physiognomy was a popular science in the 19th century that attempted to explain the relationship between a person's outer appearance and their personality. Specifically, the field was interested in expressing the character of a person through their facial features (see fig. 47). The idea can be traced through history in many different forms back to the writings of Aristotle. Since that time however, it has been proven false. Still, it gives the artist a great starting point for designing characters.

In 1852, Dr. James W. Redfield published a book on the topic entitled, *Comparative Physiognomy or Resemblances Between Men and Animals* that uses the



"The miller was a stout carl, deep of tones,
Right large he was of brawn, and eke of bones;
With shoulders broad and short—a knob or gnarr—
There was no door but he'd heave up the bar,
Or break, by running at it with his head;
His beard, as any sow or fox, was red!"

The ox is the very personification of repulsiveness, indicated in the size and strength of the spinal marrow, and by the extraordinary strength imparted to the muscles of the back. Emerson says of the Englishman, that "the axis of

Fig. 48. Image from Redfield's Book Comparative Physiognomy or Resemblances Between Men and Animals, 1852



Fig. 49. Image from Eisner's Book Understanding Comics, 2008

visual traits of animals to identify a person's character (see fig. 48). Eisner suggests the same approach in his book, explaining that it is his belief "...that modern humans still retain instincts developed as primordial creatures. Possibly the recognition of a dangerous person or responses to threatening postures are residual memories of a primitive existence" (Eisner, Graphic 14) (see fig. 49).

In *Making Comics*, Scott McCloud suggests some alternative techniques for designing characters. He proposes basing a character's appearance around a single idea, or a cast of characters on a theme. He lists a variety of ideas including using archetypes from myths and legends, the four elements, the four seasons, the five senses, finally stating anything goes. In his own '80s comic book *Zot!* McCloud based his characters on Carl Jung's four proposed types of human thought: intuition, feeling, intellect, and sensation. The idea of using personality type as a basis for physical characteristics is an interesting one.

The most contemporary psychological studies on personality are based on Jung's theories, including the popular Myers-Briggs Type Indicator. The study of personality predates psychology however, and many artists through history found inspiration in the Four Temperaments, a theory, inspired by Hippocrates, that proposes four fundamental personality types. They are: the Sanguine (pleasure-seeking and sociable), choleric (ambitious and leader-like), melancholic (analytical and quiet), and phlegmatic (relaxed and peaceful) (see fig. 47).

DRAWING IN ANIMATION

Animation is arguably the most related discipline to comics. It encompasses all the same fields of study as comics including drawing, painting, graphic design, narrative and cinematic techniques in addition to its unique design of movement (Amidi 8). Interestingly, animation has a much clearer documented history and is more appreciated by art academies and even it is not well accepted. However, comics and animation do share a very common history.

A Combined History

In D.B. Dowd's essay Strands of a Single Cord:

Comics & Animation, Dowd explains comics and animation's interconnected histories. He writes:

"Comics and animation share founding affinities and intertwined origins. Challenges of production and problems of distribution have shaped the development of both fields. And recent technological change has fostered historic new creative and distributive options for artists and producers."

Dowd proposes that

"the convergence of media and the intermingling of forms suggest a synthetic view of a larger subject."

The suggested elusive larger subject is of particular importance to the Art + Design's Animation and New Media program at NCSU. Additionally, in the introduction to the book *KRAZY*, Bruce Grenville discusses how todays animator or comic artist can move freely back and forth between the two mediums, using the best choice for the story that they would like to tell (22).

In Dowd's article he explains the related time period of Eadweard Muybridge's photographic motion studies, and Reynaud's praxinoscope, among other examples of describing motion in images as the origins of animation and further development of comics. Suggesting that both disciplines were born from the urge that things "ought to get moving somehow" stemming from the new Modernist viewpoints of the era. As a sublime example of comics and animation overlap, the work of Winsor McCay is discussed. McCay was a master draftsman and pioneer in animation, and despite his fantastical story lines, including such plastic sequences as a bed walking, the power of his work lies in the fact that it all relates back to the baseline questions of weight, mass, and physics. These same ideas later provide the iron laws of classical animation (Dowd 13).

The other major point Dowd makes is that significant commercial realities have played a role in the development of both forms. Comics aesthetics have always relied on the ability to be reproduced and disseminated through commercially viable printed options or remain unseen by the masses. Until

relatively recently there has been no other place for comics art - if you were unpublished you were not read. The production of a comic book could however, be accomplished by a single person. The same is more difficult to say for animation, which requires many more drawings and much more time to communicate even the simplest animated short. In order to be commercially viable, limited movements and simplified drawing approaches have been developed.

The distribution of animations have similarly, always dealt with commercial and technological limitations. An animation must be projected on a screen in order to be viewed; putting them at the discretion of theaters, television studios, and the like. With our current state of technology however, we are seeing these limitations on both mediums disappearing. Animations and comics can be viewed on the Internet on personal computers, tablets, or devices through free online services like *YouTube*, *Vimeo*, *Deviant Art*, and numerous blog sites. The earlier limitations of technology have disappeared and in fact, technology has made creation easier than ever with creativity-based software from companies like *Adobe* and *Autodesk*.

These digital innovations are also interestingly bringing back together the comic and animation disciplines, who for a time had drifted apart. The digital environment has become a metamedium, merging once separate disciplines as explained in the writings of new media theorist Lev Manovich and founded on the theories of Marshall McLuhan.

1950s Animation

The animation of the 1950s is notable for its creative visual solutions and unique aesthetics. Often misjudged as the era of "flat" design it was actually a time of great importance to the development of "cartoon" simplified imagery. Animation artists of the time created a bold visual style that was derived from the modern arts, incorporating principles of Cubism, Surrealism, and Expressionism into the realm of animation (Amidi 7). This type of animation is often said to be "designed cartoons." In a quote from Bill Hurtz in a 1977 interview Amidi writes:

"People say that a picture is "designy" when they recognize right away that it's under a control, and that it has definite emphasis on some elements or principles of art. A film is all textures, or a film is hard-edged shapes, or a film is limited to several colors. Any conscious limitation of elements, people right away notice."

I, myself, have theorized about this in my own work when trying to understand what constituted a "graphic" illustration. The conclusion I have come to, is that a realistic representation of reality uses all the elements of design - line, shape, color, texture, pattern in a way that resembles reality. When certain design elements are left out or changed in some way the image created becomes a "stylized illustration" and graphic elements become known. It is this inherent "drawingness" that attracts me to the form.

Designers of 1950s animation also faced a new challenge. Animation changed from being shown primarily as shorts in movie theaters before a feature film to being broadcast directly into viewers home television sets. In the mid 1950s animation was used extensively for commercial advertisements. The short commercial format demanded that animators communicate with audiences in a more condensed timespan, smaller screen size, and in black and white. As a result, a simplified more graphic visual language was developed that could be quickly understood yet retained appeal. Characters were designed with thicker outlines for legibility and disproportionately large heads and facial features to accentuate their expressions and allow viewers to engage with them emotionally (Amidi 12).

The 1950s were a high time for creative exploration and experimentation spurred on from the technological limitations of the time. Images today still use animation aesthetics of the 1950s despite the definitive lack of limitations of modern technology.

Pixar and Disney

The work of contemporary animation studios are dealing with a whole new set of technologies. Notably the contemporary practice of 3D animation. 3D animations are unable to utilize the same simplified 2D devices that give traditional animation a lot of its emotional strength, appeal, and viewer engagement. In *The Art of Up*, Tim Hauser documents and explains the creation process of Pixar's hit animated feature film *Up*. The term Pixar uses to describe successfully simplified animation imagery is "Simplexity" (Hauser

18). Defined by Pixar production designer Ricky Nierva,

"[Simplexity] is the art of simplifying an image down to its essence. But the complexity that you layer on top of it - in texture, design, or detail - is masked by how simple the form is. "Simplexity" is about selective detail."

The same ideas of Modernism that guided the development of cartoon imagery remain relevant in computer graphics.

In Up, Pixar artists addressed this issue in new ways. They chose to caricature and heighten the sense of shape of their characters and purposefully designed them to be stylized and graphic, in order to convey the idea that they lived in a world in which fantasy could happen (Hauser 19). The designs were based on the real-life feelings and emotions the story was meant to convey. Every shape was used as a symbol; circle representing future and the square symbolizing the past. All of the characters around Carl, the protagonist, had more curvilinear, circular shapes about them. Carl however, was more square and remained stuck in the past, least likely to change. The concept of associating shapes with personality is not unique to Pixar's work but is effectively exemplified of its successful use in modern digital visual storytelling.

The graphic simplification utilized in traditional 2D animation and comics uses various 2D "cheats" that can trick the eye. Hauser writes: "The graphic artist has the freedom to draw something that looks good on paper but wouldn't actually turn around in three dimensions." When things are abstracted and simplified in 2D space artists are able to utilize 2D tricks. Creating something for digital 3D space however, does not work the same way.

For Up, the Pixar artists pulled inspiration from stop-motion animation. Getting the feeling of hand-crafted worlds was an important part of their stylization process. The term they used to describe their styling process for this film was "chunkification." In which, they emphasized imperfections and made them oversized as they might appear in a stop-motion animation. Like a doll's house, strands of hair, eyelids, feathers, and fingernails were made thicker and larger as if made by hand. They took away small details and blew up textures and patterns on clothes to create a

"toy-like" quality (Hauser 20).

Prior to the rise of Pixar, a different animation studio dominated the past animated motion picture industry. In fact, Walt Disney Studios invented the feature length animated picture (with Snow White & the Seven Dwarves). Disney was so influential that they helped develop and define what are now known as the principles of animation. In the book The Illusion of Life, Frank Thomas and Ollie Johnston lay them out with the history and working processes of Disney animation at their most influential. The twelve principles they define include: 1) Squash and Stretch, 2) Anticipation, 3) Staging, 4) Straight Ahead Action and Pose to Pose, 5) Follow Through and Overlapping Action, 6) Slow In and Slow Out, 7) Arcs, 8) Secondary Action, 9) Timing, 10) Exaggeration, 11) Solid Drawing, and 12) Appeal. The following paragraphs in this section explain these principles that apply to comic book imagery. Some apply to all images, while others deal with depicting the passage of time.

Thomas and Johnston describe Squash and Stretch as animation's most important discovery (Thomas 47). Animators quickly realized that when anything moved across a page only the most rigid of objects would retain their proportions. Anything remotely organic based would show considerable movement within its shape when progressing through an action. The face in particular is alive with changing shapes in the cheeks, lips, and eyes during changing of expressions or movements such as chewing or speaking.

The principle of Anticipation, borrowed from theater, is more important to animation than comics but could still prove useful. It is achieved by preceding each major action with a move that anticipates what is about to happen; otherwise a viewer is unable to understand the actions taking place.

The third principle, Staging, again borrowed from theater relates to Anticipation and includes the presentation of any idea so that it is completely and unmistakably clear. Thomas and Johnston write:

"An action is staged so that it is understood, a personality so that it is recognizable, an expression so that it can be seen, a mood so that it will affect the audience. Each is communicating to the fullest extent with the viewers when it is properly staged."

Staging is essentially clear communication with an audience. In acting, this means only performing one action at a time or risk being misunderstood.

The fifth principle, Follow Through and Overlapping Action relates to both staging and comics. With clear communication as a goal, animators were starting and stopping actions all at once. This proved ineffectual and animators soon discovered 5 categories of Follow Through and Overlapping Action to make movements appear more real. 1) The appendages of a character will continue to move after the rest of the figure has stopped. 2) The body itself does not move all at once. 3) Loose flesh of a figure will move at a slower speed than its skeletal parts. 4) The completion of an action often tells an audience more about a character than the action itself. 5) The Moving Hold, in which a pose would be held for a moment or two for the audience to absorb the attitude of a character.

The sixth principle Slow In and Slow Out is specific to the presentation of movement and animation while the seventh, Arcs applies a little more broadly. It states that organic characters and creatures tend to move in arcs and are less capable of moving with mechanical precision.

The principle of Secondary action is fortifying an idea or action with a secondary related action and should add excitement without conflicting with the basic movement (Thomas 63).

The ninth principle, Timing is exactly that. Particularly important to movements, different timing uses differing amounts of in-between drawings. Related more broadly, it refers to choosing the timing of actions to achieve the desired effect on an audience.

The tenth principle, Exaggeration is specifically related to cartoon imagery. It could essentially be defined as caricaturing and is described by Thomas and Johnston as getting to the heart of anything and developing the essence of that thing. They write, "If a character was to be sad, make him sadder; bright, make him brighter; worried, more worried; wild, make him wilder." It is different than only distorting a drawing. It is distorting in ways that communicate a mood or idea in a more convincing manner.

The final two principles, Solid Drawing and Appeal are arguably the most related to creating cartoon images. In relation to animation, Solid Drawing's most important features are achieving a sense of weight,

depth, and balance in every drawing. This serves as a reminder that Disney's drawing style was based on solid, three-dimensional form. Another feature of solid drawing is being aware of "twinning" and actively avoiding it. Twinning is when both arms or legs of a character are parallel and doing exactly the same thing.

In addition, Johnston and Thomas explain that their main search when drawing, was for an "animatable" shape, that had volume but was still flexible, possessed strength without rigidity, and gave the opportunities for the movements to express their ideas (Thomas 67). They needed what they called a "plastic" form to convey the feeling of potential activity of a drawing capable of being shaped and formed into a living organic shape and ready to move.

The final principle, Appeal was important to Disney animation from the very beginning. Johnston and Thomas write, "Appeal is the pleasing and fascinating quality that makes a person enjoy looking at any drawing (68)." Essentially, appeal is anything that a person likes to look at. It could be a quality of charm, a pleasing design, a simplicity of communication, or anything. Opposite to appeal, the ugly and repulsive may capture your gaze but it will not be able to build character or allow viewer identification with a situation. There is shock value but no story strength. A live actor has charisma where a drawing has appeal.

The two continue on explaining their thoughts on drawing with line. The biggest problem with line drawing, they explain, is that the medium does not allow shadow patterns making it much more difficult to communicate reality. To combat this negative aspect of the technical limitations of the medium they focused on the acting and story structure. They found using simple and direct attitudes produced the best drawings. A final quote will end this section. Johnston and Thomas write:

"In the mid-thirties, we wished for shading, for textures, for areas with no outlines, but they were not practical. We had to find other ways of putting over the points in the scenes, and in so doing developed character animation into a communicative art that astounded the world."

Animation Drawing

Drawing stories is the key relationship between animation and comic book imagery. Animator's

drawings are mainly concerned with expressing movement and furthering the narrative. Its final creations can be drawings but also, its design processes utilize drawing to develop the final work. *In Drawing for Animation*, Paul Wells identifies seven forms and roles of drawing in animation. They include: observation, perception, memory, interpretation, representation, imitation, and experimentation.

Drawing from observation allows an artist to learn to truly see the world. Life drawing, emphasized in the fine arts, is very important to the development of an artist in animation. Often through their first attempts, developing artists realize the discrepancy between the way they think they see things and the way things actually exist. Observational drawings can be journalistic or a documentation of visual information as realistically as possible (Wells 16). Drawing from observation enables the artist to think carefully about what they are seeing and realize aspects of reality that they may have taken for granted.

Our perceptions influence every type of drawing we make. Perception determines how we observe reality and is influenced by an artist's knowledge, background, and visual literacy. Wells writes:

"The perception of a person or place is part of the marshaling of creative thought and is concerned with the implicit ordering of feelings and ideas. These are themselves influenced by memory, both of learned knowledge and recalled experience (23)."

Oftentimes, in animation a character sheet is created to allow many different artists to work with the same character free from the influence of their personal perceptions.

Memory is a resource many artists pull from when drawing. Interestingly, one's memory frequently recalls ways in which appealing material has already been expressed in other types of imagery (Wells 24). Artists are often influenced by artworks they admire and their own drawings will reflect the ways they have absorbed these influences and further developed them through reinterpretation.

Additionally, drawing can be used as a memoryaiding device. Through the act of drawing an artist records a moment in time including all the literal information involved and emotions felt or ideas expressed. Later on, the drawing can act as a visual reminder of the ideas, emotions, or information digested. This could, in turn, create an idea for a story.

Interpretation is a demonstrated point-of-view. An animator must fully understand the key thoughts and ideas that underlie an overarching vision of a piece and to translate those ideas into moving images (Wells 28). Interpretation then, is a way of understanding something and re-representing it. Representational drawing is using select ways of drawing subjects to communicate. The representation of subject matter in animation has historically been through stereotypical conventions. As time progressed these stereotypes have been challenged, yet some still persist in animation, as they are a way of communicating visual information quickly.

Imitation in drawing happens at many levels. An artist may copy images they are initially attracted to in order to investigate how their styling works and then reinterpret the styles in their own voice. Or, an artist may imitate aspects of reality around them to come up with identifiable characters or environments based on recognizable people or places. This is often the quickest way to come up with ideas (Wells 38). Imitative drawing can also suggest genres through working in a discipline's traditional style. In comics this can be the super hero aesthetic, in animation the Disney hyperrealist style.

The final form of drawing used in animation that Wells discusses is experimental. Drawing is a flexible mode of expression that allows many different approaches and encourages experimentation and risk-taking when developing ideas. Experimentation should take place in both figurative and abstract forms.

"Experimental drawing encourages personal research and investigation in the development of a particular style and mode of expression. Experimentation is the freest aspect of drawing: in having no rules, conventions or subjects, the artist is free to discover them, and their personal address of them, technically, aesthetically and thematically (Wells 43)."

Also, in Wells' Drawing for Animation, a selection of "animation notes" from master Disney animator Glen Keane are listed. His advice for drawing animation

reads:

- 1) Don't illustrate words or mechanical movements. Illustrate ideas or thoughts, with attitudes and actions.
- 2) Squash and stretch the entire body for attitudes.
- 3) If possible, make definite changes from one attitude to another in timing and expression.
- 4) Always ask: 'What is the character thinking?'
- 5) It is the thought and circumstances behind an action that will make the action interesting.
- 6) Don't move anything unless it is for a purpose.
- 7) Concentrate on drawing clear, not clean.
- 8) Everything has a function. Don't draw without knowing why.
- 9) Think in terms of drawing the whole character, not just the head or eyes, etc. Keep a balanced relationship between one part of the drawing and another.
- 10) Stage for the most effective drawing.

In another book, *Exploring Drawing for Animation*, authors Hedgpeth and Missal clearly explain the process of learning to draw for an animator and give some valuable information for developing line drawings. They explain that to represent the intricate value relationships of reality with only line is a difficult task. To combat the missing of value, color, texture, and other elements, they emphasize the importance of gesture drawing and establishing the overall action, structure, and understanding the internal dynamics and feel of an object before worry about outlining.

Hedgpath and Missal describe two types of line used in contour drawing. The first is the silhouette or what we usually mean when we say outlining an object. The use of outlining an object can be seen throughout art history in forms of "primitive" art and appears to be our general fallback for delineating 2D forms. Even children use this method. The second type of line is any line following the apparent edge of a form where that form is distinct from other forms either underneath or adjacent to it (Hedgpath 50). This means that not only the silhouette shape but any internal shapes can be described by line. On page 51 they write: "Where there is a significant change of planar direction (that is, where flat surfaces bend toward another direction), a line can be placed (if the change is sharp enough)." The

combination of these two types of line provide us with contour drawings.

The evolution of line drawing in animation is related to the development of quick sketching abilities required by the medium to produce many, many drawings. Outline is the quickest and most flexible way to represent an object because of its pure practicality. They explain,

"The trick is to utilize outline in such a way as to imply more interior structure than is actually drawn. This involves a careful analysis of what gives those clues, and trying out many preliminary drawings until the "feel" is just right." They stress the importance of a multitude of preliminary planning sketches to find that "just right"."

Developing drawings through line can be an end in itself or a developmental tool prior to the use of tone. In other drawing forms, line can take on many qualities and serve little to no function in representing form. In animation however, lines must be clean, defined, and to the point. Hedgpath and Missal emphasis the importance of life drawing to develop these approaches to drawing. They lay particular importance on understanding proportion and anatomy. They write:

"As a drawing develops, this previous knowledge of images of musculature and bone speeds up the process by "shortcutting" through observation. The trap here is when we completely substitute what we think we should be drawing for what we are actually seeing."

Drawing from the imagination is incredibly useful, but only after much preliminary study. As a final comment on drawing the figure with line they note: "By confining the contours to real anatomy, significant structure, and well-observed proportion, a line drawing can come to life if the artist avoids excessive generic observation."

LINE DRAWING

The Formal Element of Line

A mature use of the formal elements of design is a

necessity to make successful images. Alan Male in his book *Illustration*, identifies this as visual intelligence (Male 52). Demonstrating a knowledgeable use of all the elements and principles of design is important to the cartoonist. However, the most popularly used element used by cartoonists is that of the line.

McCloud theorizes that line keeps cartoons in the realm of ideas making a story more identifiable to a viewer than a fully rendered style would. The work of industrial designer's sketches and orthographic projections work on a related concept. When presenting ideas, the industrial designer is most concerned with clear communication and the simplicity a line drawing offers the clearest communication. Rodolph Töpffer, hailed as the inventor of the comic strip, has been quoted as saying:

"The line drawing is purely conventional symbolism. For that very reason it is immediately intelligible to a child, who might have difficulty in disentangling a naturalistic painting. Moreover, the artist who uses such an abbreviatory style can always rely on the beholder to supplement what he omits. In a skilled and complete painting, any gap will be disturbing."

The thoughts are interesting and offer explanations of the cartoonist's tendency toward line and its appeal.

The formal element of line has been studied extensively by the influential art theorist and painter, Wassily Kandinsky. In his book, Point and Line to Plane Kandinsky scientifically dissects all three of these "graphic" elements and in extensive detail records his findings. His work has influenced all thoughts on the elements of design. In Kandinsky's study of line he introduces it as the antithesis of the point stating that a point is transformed into a line through the application of force. The force determines direction and tension of a point's movement. I believe this movement is the strongest feature of line. Kandinsky continues in exhaustive detail on his findings though out the book. What is more interesting to the cartoonist is probably the abridged versions distilled from practice and experience discussed in books on basic design.

Lines convey mood and feeling through their appearance. They can be said to contain a quality determined by how we envision the artist creating them,

their orientation, direction, degree of continuity, and by the material used. Lines can define shape and form through outline (contour lines) or cross-contour lines running over and describing the surface of a form. They can be actual, implied, or psychic. An actual line is what one normally thinks of as a line. Implied lines are lines that come and go and are not literally connected on the paper but letting the viewer's mind complete the connection. Psychic lines are sometimes grouped with implied but have no physical starting or stopping. A figure's gaze, or a pointing finger would be considered a psychic line. Lines can run horizontal, vertical, and diagonal each giving its own feeling in relation to how we as human beings view the world or how the lines relate to the picture plane they are drawn upon. Lines can be precise or spontaneous. They can create monotony, unity, variety and emphasis. Lines can be used to create value through hatching or cross-hatching and appear as different tones when a viewer steps back. Finally, they can be subtle or explicit.

Explicit use of dark outlines like cartoonists use are often belittled in design as a crutch, and seen as if they are an unsophisticated, over-used design solution. "There is no doubt that a dark linear structure can often lend desirable emphasis when the initial color or value pattern seems to provide little excitement." (Pentak 142) I can see the point the argument tries to make, but disagree with it and feel that a bold outline's simplicity adds to the inherent "drawingness" of a piece. Like McCloud, I feel it keeps an image in the world of the idea and like Töpffer it creates the clearest form of communication. Wolk explains on page 123 of *Reading* Comics that, "In the real world, objects don't have lines defining their edges, they just end." He argues that because cartoon imagery usually relies on outline they are always seen as drawings. They do not suffer from trying to appear as the real thing, instead they fully accept that they are an interpretation of an object and a viewer is fully able to consider them as standing in for ideas. Outline is the strongest conveyor of ideas in drawing. What it lacks in realism it makes up for in many other ways.

Design Drawing

It was not long ago when designers were synonymous with the act of drawing. Being a designer simply implied you could draw. Now, the increased

focus on technology by the design disciplines tends to push drawing to the back burner. Digital creation techniques are important and should be embraced alongside traditional hand drawing skills. One should not take predominance over the other, in design practice or education. Too many schools are concerned with meeting the demands of the industry, which requires fast work, efficient use of the computer, mastery of the current fashionable visual language and the ability to sell ideas (Olpe 6). It is the ability to develop those ideas that are most important. The ability to master any visual language and create a new unique voice based on the communicator is developed through drawing. (The exciting developments of digital drawing with a pressure sensitive device foreshadows the future of design, effectively eliminating this debate.) Needless to say, the relationships between drawing and design are vast. The importance of their relationship applies much more broadly than the limited scope here, which is only on extracting information as it relates to cartoon imagery. This section pulls practical drawing information from the design disciplines of graphic design, industrial design, and entertainment design as it applies to drawing digital comics.

In his book, *Drawing for Graphic Design*, Timothy Samara shares some great tips on making visually rich drawings. His four "Universal principles of strong drawings" are as follows. The first is that, "a successful drawing expresses a specific, unified form language (24)." Designers develop a form language to represent a subject and make sure that language works together as a whole. A unified form language is aware of how it relates to itself and the subject it is representing. This is perhaps his most important principle. Despite the acceptance of post-modernist styled art, outsider art, or an anything goes approach, if you want something to look intentional, it needs to be visually cohesive. Creating visual variety within a cohesive language is considered one of the greatest challenges of the designer.

The second principle Samara identifies is: "successful drawings exhibit definitive structure that unites form and composition (36)." This is effectively taking into account the entire picture plane and the basics of composition. Samara's third principle is: "strong drawings exhibit dramatic positive/negative vitality (48)". Another proponent of composition,

Samara is suggesting a decided use of the positive as well as negative space of an image is considered and creates a dynamic rhythm. His fourth principle states: "a strong drawing creates the perception of illusory dimensional space (58)." Perspective drawing is one approach to this but also includes overlap or atmospheric perspective effects.

Graphic designers specialize in the creation of 2D artifacts. Samara's suggestions all apply specifically to the drawings themselves, meaning marks on a flat substrate. Most graphic design drawings are not required to exist through time or the illusion of realistic 3D space. Interestingly, a graphic designer's language uses the same elements as comics. They combine words and images to communicate messages to an intended audience. Samara himself realizes the connection between the two disciplines. A quote from the forward of his book reads:

"For all our fascinating, networked, and elegant technological modernity, drawing tells the stories that connect us at the deepest level to our own humanity, to our history and, ultimately, to the future."

In contrast to the graphic designer, industrial designers specialize in the creation of 3D objects. Architects are in this same world, and focus on space. They use drawings to develop ideas for their final creations which must be depicted in a realistic manner and emphasize the importance of perspective drawing. The design of real world objects, as opposed to only designing 2D final deliverables, is required of the realistic comic book artist. A knowledge of the elements of 3D design (plane, volume, mass, space, light, time) must be used in conjunction with the 2D (line, shape, color, texture, pattern). A realistically rendered story that takes place in 3-Dimensions must take into account more information and requires a better knowledge of linear perspective and clear communication.

In the book, *In the Future*, Scott Robertson explains how the entertainment design program began at the renown Art Center College of Design. He writes: "Until recently, students interested in working in the entertainment design field would pursue their studies at Art Center by mixing equal doses of illustration and

industrial design classes, with the intent of building a portfolio to get them concept design work in feature animation, video games or live-action film productions." Robertson was influential in developing a specific entertainment design program and notes the disparities between the entering students.

"Historically speaking, industrial designers skills tend to be weakest in several areas important to being a successful concept designer for the entertainment industry - figurative work, picture composition, color theory, and narrative illustration. Conversely, the illustration students have been historically weak in technical perspective drawing, object styling, model building and design methodologies."

Through investigation into these related design disciplines this project hopes to overcome these issues.

Robertson is mostly concerned with design for full 3D space. Games however, can live in a kind of 2.5D space. The side scroller game or a cut paper aesthetic is an example of this. Design for a 2.5D space pulls on all the elements of 2D Design and can pick and choose which elements of 3D design will best communicate its intentions. Animations can also live in this 2.5D world exemplified through the previously mentioned drawing "tricks" and "cheats." Also like animation, in the book *Drawing Basics and Video Game Art*, Chris Solarski emphasizes the importance of figure drawing in order to create successful game art. In addition to this, he provides excellent information on the practical design process and technique for creating shots/compositions, character design, and environment design.

CHAPTER SUMMARY

In summation, this project pulls ideas from all of the aforementioned disciplines. It uses the theories and principles of drawing for animation to convey a sense of time and motion and add a quality of life into its stories. Emphasis is placed on gesture and furthering the story through every drawing. Additionally, each story will utilize the different principles of design based on its level of realistic representation of three-dimensionality. The developed abstract style uses Samara's drawing for graphic design approach to create strong 2D drawings. The realistic style utilizes ideas and techniques of industrial design and architecture to create realistic drawings in the illusion of 3D space. Also, like video games and animation, the iconic illustration style uses a 2.5D space that pulls select elements from 2D and 3D space. This project will employ a diverse variety of ideas and techniques from a vast array of disciplines, demonstrating the enormous amount of thought that can go into cartoon imagery.

Additionally, the theories discussed earlier in this chapter are those that I have found most applicable to the contemporary cartoonist's pictorial vocabulary. I have looked at cartoon imagery through a variety of different perspectives on the topics of levels or realistic representation, visual stereotypes, metaphors, caricature, expressionism, and the formal element of line. McCloud's "Big Triangle" device for mapping visual art, and introduced his theory of "Amplification through Simplification" was explained. E.H. Gombrich's theories on the importance of the artist's medium and its ability to demonstrate relationships, his concept of an artist's "schemata" which attempt to explain how an artist works and why images can appear stylized was discussed. His idea of guided projection that lets a viewer in on the thrill of making and noted the ideas behind "primitive art" was introduced. The visual stereotypes from the pseudoscience of physignomy and its' four temperaments was explained. Will Eisner's and James Redfield's metaphors on the resemblance of humans to animals to identify character was analyzed. The role psychology on the study of personality can play in character design was noted. Caricature was explained through a professional's practical theories and compared with the Expressionist art movement. Finally, different theories on the role line plays and its applications in the practice of creating images was analyzed. Through this section of my literary review I have found cartoon imagery to be a deceptively simple complex theoretical topic whose popularity alone warrants academic scholarship.



Fig. 50 Self-portrait Töpffer, 1799-1846

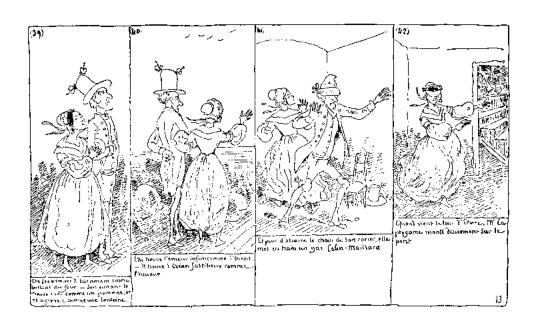


Fig. 51. Work Example Töpffer, 1799-1846

ILLUSTRATION STYLE IN COMICS

In this section of the paper the development of comics and the varying ways in which they have been drawn is examined from the original printed strip to the digital hybrid media experiments of today. Historic and contemporary influences on three major aspects of the project are identified and discussed. First, a collection of artists who have been influential to the development of the comic book aesthetic are surveyed including: Rodolphe Töpffer, Winsor McCay, Carl Barks, Osamu Tezuka, Jack Kirby, R. Crumb, Art Spiegelman, and Chris Ware. Second, some contemporary approaches to presenting comics digitally and how the digital format has impacted the way in which they are drawn is analyzed.

THE DEVELOPMENT OF THE COMIC BOOK AESTHETIC

In The Visual Language of Comics, Neil Cohn identifies the main "dialects" of comics' visual language in American and Japanese comics (137). He dissects the graphic structure of these dialects into four main categories represented by influential cartoonists to the development of said dialect. In American comics he identifies a superhero dialect based on the work of Jack Kirby, a cartoony dialect exemplified through the work of Carl Barks, and an independent movement multi-threaded dialect demonstrated through the works of R. Crumb, Art Spiegelman, and Chris Ware (among others). In Japanese comics, he identifies a Manga dialect derived from the work of Osamu Tezuka (Cohn 137-171). I will use these representative artists as a basis for examining the development of comics' pictorial vocabulary. Additionally, I have included an

examination of the pioneering cartoonists Rodolphe Töpffer and Winsor McCay to set the stage for the evolution of comics' style trends from the first printed newspaper strips to the contemporary creations of today.

Rodolphe Töpffer, Father of the Comic Strip

Rodolphe Töpffer (1799-1846), was a Genevan schoolmaster, university professor, writer, art critic, aesthetic philosopher, caricaturist, illustrator and author of innumerable sketches of landscape and genre scenes, and above all, the virtual inventor of the modern comic strip (Kunzle, Complete ix). Töpffer was an incredible multi-talented individual and intellectual (see fig. 50). He made numerous contributions to art theory indirectly effecting modernism (Heer 13) and influencing E.H. Gombrich to codify "Topffer's Law," which explains why the mind transforms almost any shape into the semblance of a living being by adding subtle clues to expression (Gombrich 342). However, his most influential impact on the world was his work that essentially invented the cartooning form (see fig. 51). However, Töpffer himself failed to realize the full potential of his invention, seeing it only as a diversion and hobby (McCloud 17).

Afflicted with poor eyesight as a child Töpffer evolved a manner of drawing as quick as thought and quick with ideas that mutated into pictorial storytelling (Kunzle, Father 3). There were other artists that created picture stories before Töpffer, in his own writings he explains the significant influence of William Hogarth's picture-stories (Heer 20). But Töpffer was the first to combine literary and artistic abilities into a hybrid art form and systematized and theorized the physiognomic doodle (Kunzle, Complete, x). Töpffer was surprised with the popularity of his self-published "comic strip"

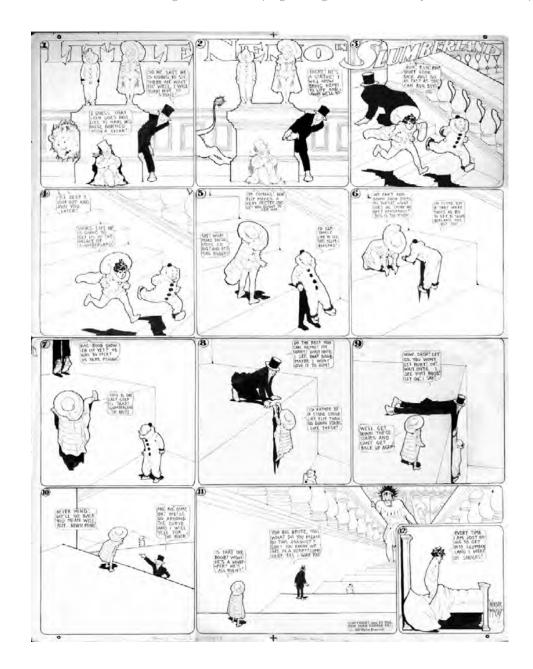


Fig. 52. Little Nemo in Slumberland *McCay*, 1867-1934

albums that he sketched and lithographed.

Winsor McCay Pushes the Medium

Zenas Winsor McCay (1867-1934) was an American cartoonist and animator best known for his comic strip *Little Nemo in Slumberland* (see fig. 52) and his pioneering animation, *Gertie the Dinosaur*. McCay is regarded as the first original genius of the comic strip medium and animated cartoons. "He did things in both media that no one had done before" (Harvey 21). His most well known comic, *Little Nemo in Slumberland*, began in 1905 and was the first work to explore almost all the possibilities of the medium in which

it was produced (Smolderen 149). He was the first to experiment with page layout, elongating and shrinking panels based on content and was acutely aware of the timing of action required to achieve certain effects on a reader. Above all, McCay was a spectacular draftsman. A quote from Winsor McCay reads: "The principal factor in my success has been an absolute desire to draw constantly. I never decided to be an artist. Simply, I couldn't stop myself from drawing." (McCay 1).

Carl Barks and the Disney Influence

Carl Barks (1901-2000) was an American author, painter, and cartoonist (see fig. 55). Barks is most

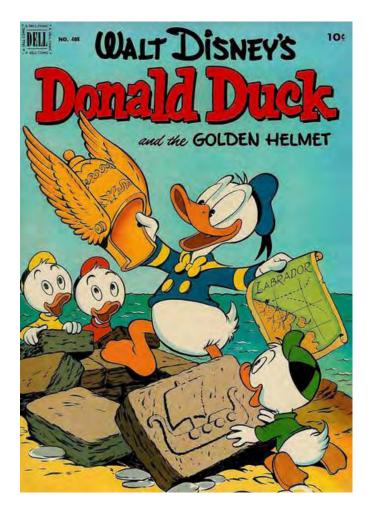


Fig. 53. Carl Barks Comic Cover Barks, 1952

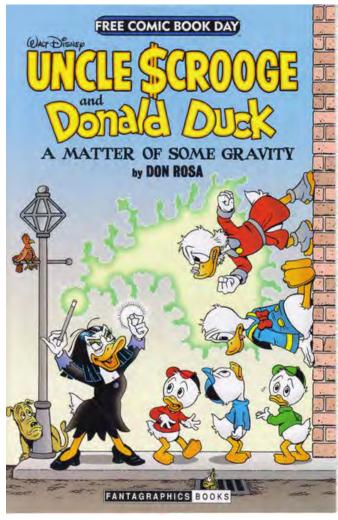


Fig. 54. Contemporary Comic Cover Fantagraphics Books, 2014

famously known for his Donald Duck comic books and as the creator of Donald's nephews Huey, Dewey, Louie, their granduncle Scrooge McDuck, and the world of Duckberg. In 1935 he started working at Disney, initially as an in-betweener on various animations (Andrae 32). After showing promise, Barks rose through the ranks to become a story-man on Donald Duck when it became its own animated series. Soon however, he decided to leave Disney animation and began his most celebrated work on the Donald Duck comic books (see figs. 53-54). Typically, the people who worked on Disney comic book licensees generally remained anonymous so stories could carry the Walt Disney name. However, Barks's work became recognized and celebrated by readers and became

known as the "good duck artist." Winsor McCay was among Barks's early influences and he has been quoted as saying that he learned to draw by copying cartoon art from the Sunday funnies, which featured McCay's Little Nemo in Slumberland (Andrae 22).

Neil Cohn's "Barksian Cartoony American Visual Language" can be seen in comic books, comic strips, cartoons, and animation. This "cartoony" style has many influences including Walt Disney and his animators, and early cartoonists such as: Rudolph Dirks, Charles Schulz, and Walt Kelly, in addition to Carl Barks (Cohn 141). While the cartoony style is diverse and varied it does have some commonalities. Chiefly among them are what Scott McCloud calls "Amplification through Simplification" (McCloud 30).





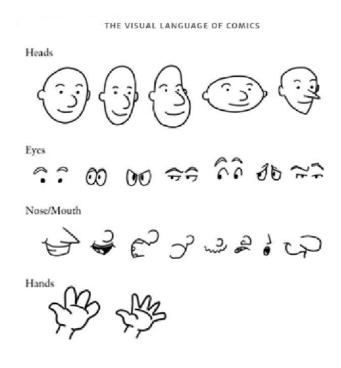


Fig. 56. Cohn's "Cartoony" Dialect Cohn. 2013

By simplifying images to their essential components cartoonists are able to exaggerate the remaining features to emphasize a feeling or mood through the design of their underlying forms (see fig. 56).

Osamu Tezuka and the Manga Phenomenon

Osamu Tezuka (1928-1989) was a Japanese cartoonist, animator, film producer, and medical doctor who never practiced medicine (see fig. 59). He was responsible for the Japanese boom in comics after World War II, and the growth of its animation industry (McCarthy 8). Often called the "father of manga" and the "godfather of anime," he is best known for his work, *Astro Boy, Kimba the White Lion, Black Jack*, and *Buddah*. Tezuka was greatly influenced by the drawing style of Walt Disney and his animators, but was also, interestingly, fascinated by insects as a child and produced numerous insect illustrations for textbooks in his formative years (McCarthy 20-23). Due to Tezuka's unprecedented popularity at the birth

of the contemporary Japanese manga industry many cartoonists have imitated his style (Cohn 156).

Neil Cohn's "Japanese Visual Language" is largely influenced by Tezuka's work and has become one of the most recognizable styles of representation in the world. Reaching beyond Japanese comics the style has permeated all aspects of visual culture including animation and advertising (Cohn 153). While manga today does not directly imitate Tezuka's drawing style, various pictorial vocabularies have developed from his influence and those of other authors to create conventional style templates (see figs. 57-58). Standard components of the style include big eyes, big hair, small mouths, and pointed chins (see fig. 60). Character archetypes are often portrayed the same way from story to story. The results can be confusing for the uninitiated but the same template of traits allows people familiar with the pictorial vocabulary to quickly identify what is happening in any given story.

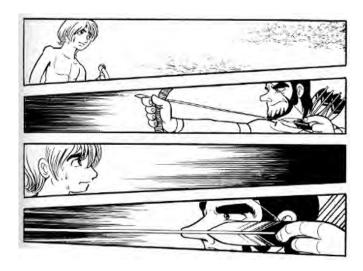


Fig. 57. Image from Buddah Vol. 1 *Tezuka, 1972*



Fig. 58. Image from the Popular One Piece Manga Oda 1997



Fig. 59. Self-portrait Tezuka, 1928-1989

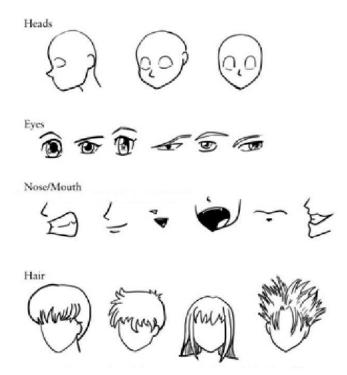


Fig. 60. Cohn's "Manga" Dialect Cohn, 2013



Fig. 61. Jack Kirby Avengers Cover Kirby, 1963



Fig. 62. Contemporary Avengers Cover Hitch (pencils), Neary (inks), Mounts (color), 2011

Jack Kirby and the Superhero Genre

Jack Kirby (1917-1994) was a comic book artist, writer, and editor (see fig. 63). He is regarded by many as the most influential artist to the comic book medium, most notably within the superhero genre. Kirby's initial art career started with a brief stint in animation as an in-betweener before he became displeased with the factory-like process and instead took a job in editorial cartoons eventually getting involved with comic books (Harvey, Comics 30). His most well known creations include: Captain America (with Joe Simon), the Fantastic Four (with Stan Lee), the X-Men (with Stan Lee), and the Hulk (with Stan Lee) and finally his own creation the Fourth World saga. Kirby's influence on

comics has less to do with any individual character he created and more to do with his impact on the way comics are drawn. Kirby added excitement and motion to the work that proved pivotal to the superhero genre and addressed the medium's static presentation on printed paper making up for the lack of time found in the animation medium. Coming to the comics from animation, he tried to bring the illusion of movement to a static medium and did so through highly dramatic poses and dynamic compositions which worked amazingly well to tell superhero stories (see figs. 61-62). Exaggerated movement and action, making more dramatic uses of perspective and panels, and punches with dynamic poses flying across panel borders are





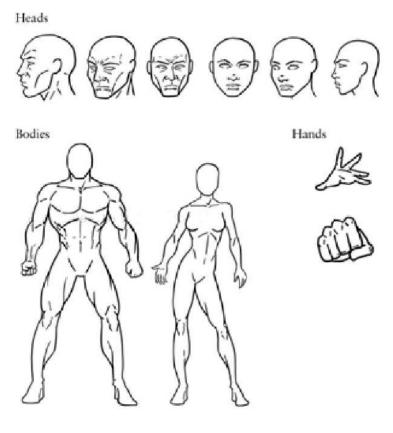


Fig. 64. Cohn's "Superhero" Dialect Cohn, 2013

all hallmarks of his style. The Superhero genre was responsible for the initial success of the American comic book and through most of comics history (Harvey, Comics 29).

Neil Cohn's identified "American 'Kirbyan' Visual Language" is also influenced by other prominent superhero artists including: Steve Ditko, Neal Adams, John Byrne, Jim Lee, and many others (Cohn 139). Typical of this pictorial vocabulary are physically exaggerated bodies, men with bursting muscles and women with exaggerated curves making everyone look like athletes and models (see fig. 64). The style uses dynamic compositions with figure poses that stretch slightly beyond the full point of action (Cohn 141).

R. Crumb and Underground Comix

Robert Crumb (born 1943) is a cartoonist who rose to fame during the underground comix era of the late 1960s (see fig. 65). Reveling in controversy, his work

was an alternative to the mainstream Superhero style of the time and a direct reaction in opposition to the *Comics Code Authority*, established in 1954 to regulate the alleged explicit content in comics for children but also had the paralyzing effects of censoring all artists working in the comics form. Crumb was a regular contributor to the underground comix magazine *Zap* publishing many strips (Sabin 94). His most memorable strips included: *Confessions of R. Crumb, Mr. Natural, Fritz the Cat,* and *Whiteman.* In *Comics, Comix & Graphic Novels*, author Roger Sabin writes:

"Despite his flaws, every would-be underground cartoonist in the land wanted to copy Robert Crumb. So many tried to in fact, that Crumb's style is undeniably stamped on the era: he both invented and shaped the movement." (103)

Neil Cohn's final independent style visual dialect

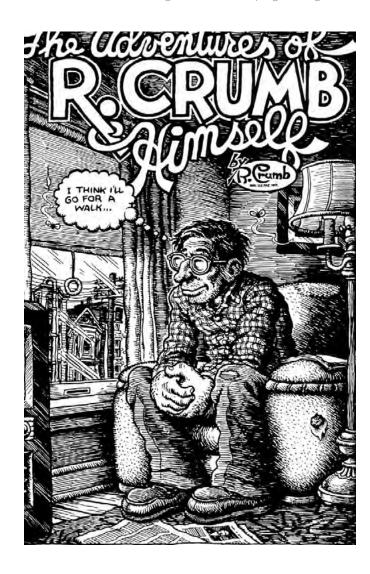




Fig. 66. Self-portrait Spiegelman, b.1948

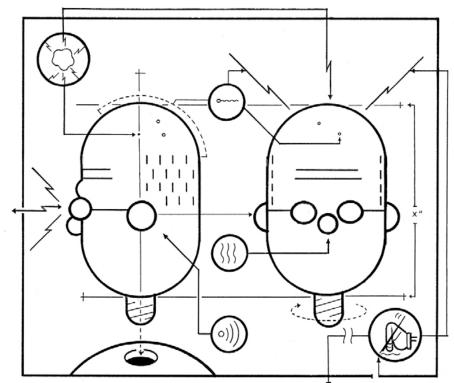


Fig. 65 (far left). Self-portrait *Crumb, b.1943*

Fig. 67. Self-portrait Ware, b.1967

covers a broad range of diverse cartoonists including R. Crumb and the next two artists discussed; Art Spiegelman and Chris Ware. This multi-threaded dialect is grouped by genres and traditions outside the mainstream. The first thread, including Crumb, Spiegelman, and Harvey Kurtzman often use a thicker line and cartoony yet deformed figures (Cohn 143). The second thread of this contemporary "Indy" style includes the works of Adrian Tomine, Daniel Clowes, and the Hernandez brothers feature more serious stories. Figures in their drawings retain relatively realistic proportions, even emphasizing the plainness of people in opposition to the mainstream exaggerated figures of the superhero style. Finally, Cohn identifies a third thread with highly stylized cartoony features but with serious subject matter such as the works of Chris Ware and Ivan Brunetti. Cohn acknowledges the "Indy" dialect becomes confusing because it is based on genre rather than specific drawing traits and attributes. This creates a problem when trying to systematically separate exclusively different visual language types. Like spoken languages there is some overlap.

Art Spiegelman's Literary Achievement

Art Spiegelman (born 1948) is a cartoonist and comics advocate who is best known for his graphic novel *Maus* which, to date, is the only graphic novel to ever receive a Pulitzer Prize. The graphic novel is about the true experiences of Spiegelman's father, a Holocaust survivor. Spiegelman used an interesting visual metaphor in *Maus* depicting Jews as mice and Nazis as cats through the duration of the story (see fig. 66).

In *MetaMaus* his book on the creation of Maus, Spiegelman discusses his search for a graphic style for his story. In it he states:

"The best description of style I ever read was in a book of interviews with Picasso. He says style is the difference between drawing a perfect circle and a circle the way he draws it freehand. ...[Picasso] was able to consciously shift styles more than most artists. It's more common now, when every postmodernist uses a palette of styles that quotes every way of making a mark that ever came before." (Spiegelman, *Metamaus* 141).

He goes on to explain the capitalist notion of making

a certain type of mark your trademark because cartoonists and illustrators operate in a marketplace and the marketplace rewards finding one successful way of drawing. Spiegelman continues on relating his own experience copying other cartoonists and how they would draw noses or other specific traits then ends the conversation stating: "Eventually it turns into a vocabulary of marks that one can lean on when trying to make different things felt." (Spiegelman, *Metamaus* 143).

The Great Chris Ware

Franklin Christenson Ware (born 1967), penname Chris Ware, is a critically acclaimed comic book artist and cartoonist (see fig. 67). His most notable works include the *Acme Novelty Library* series, *Jimmy Corrigan: the Smartest Kid on Earth* and *Building Stories*. Ware's stylistic influences are most noticeably from advertising graphics, and newspaper strip cartoonists including Winsor McCay, Frank King, and Charles Schulz. In the introduction to Ball and Kullman's collection of essays on Ware's work they write:

"For Ware, word and image are inseparably entwined in his creative process; he does not begin with a script and then create the images as an illustration. Rather, his compositions are improvised and developed on the page: "Writing and drawing are thinking. We're told in school that they're skills but that's wrong. Drawing is a way of thinking. It's a way of seeing." (Ball xix)."

Ware is one of the most celebrated contemporary comic book creators. His works and research into the form are highly regarded by the comics community.

CONTEMPORARY DIGITAL PRACTICE

The comic book aesthetic has long been governed by the technical limitations of printing processes for mass reproduction. Today however, technology is no longer limiting as much as it seems to be opening new avenues of exploration. Among these new areas, the web, with its worldwide accessibility, has opened the world to comics and comics creators like never before.







Fig. 68. A Softer World Home and Comeau



Fig. 69. Megatokyo Gallagher

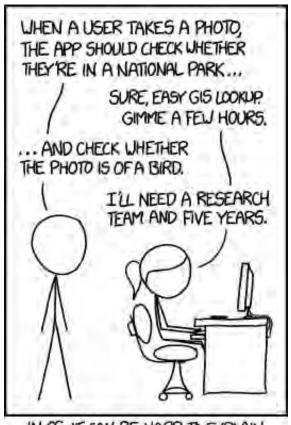


Fig. 70. Cyanide and Happiness Explosom

The Explosion of Web Comics

Webcomics are a contemporary comics form in which cartoonists create short episodic stories with recurring characters or themes. They range in quality from side projects of beginner's who take an anyone-can-draw mentality to internationally renown creations spawning financial enterprises. The pictorial vocabularies artists use in webcomics are wildly varied and an explosion of innovative, experimental trends are emerging. In the previous section printed comics style trends were discussed. In this section, the main visual style trends in webcomics are identified and analyzed through a range of examples.

The use of traditional artistic mediums has become an innovative trend in web comics that are created traditionally but scanned and displayed digitally. Emily Horne and Joey Comeau's *a softer world* (see fig. 68) uses beautiful, dramatic photography with an overlaid typewriter font adding to its serious feel. Fred Gallagher's images in *megatokyo* (see fig. 69) are entirely hand drawn in graphite. The only aspect making them webcomics is their presentation. This displays a lush evidence of a hand-made feel in the often cold, sterile digital environment. The use of "crude" artwork has become a popular trend in webcomics. Perhaps best representative of this category



IN CS, IT CAN BE HARD TO EXPLAIN THE DIFFERENCE BETWEEN THE EASY AND THE VIRTUALLY IMPOSSIBLE.

Fig. 71.xkcd Munroe



Fig. 72. Early Poorly Drawn Lines Farazmand



Fig. 73. Late Poorly Drawn Lines
Farazmand



Fig. 74. Magical Game Time Gorman



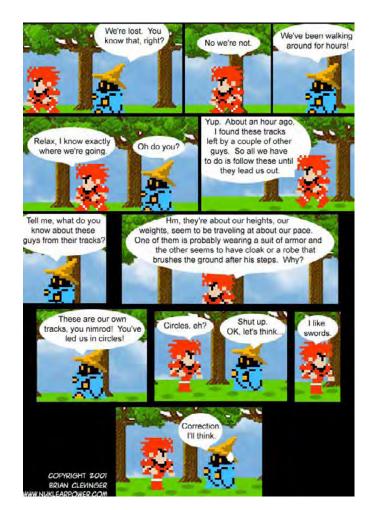
Fig. 75. Thunderpaw *Lee*

is the aptly titled Poorly Drawn Lines. While Reza Farazmand drawings could initially have been classified as crude, however, because of his continuing efforts, his skills now have gotten quite good developing into his own unique style that makes great stories (see figs. 72-73). Explosm's Cyanide & Happiness (see fig. 70) and Randall Munroe's xkcd (see fig. 71) are currently still representative of this "crude" style. Despite having different audiences, they both use a slight variation on stick-figure drawing relying heavily on the power of a well-told story. Their work demonstrates clearly that the idea is much more important than the visuals. Finally, the last "crude" artwork to discuss is Ryan North's Dinosaur Comics. His pictorial vocabulary consists of the same clip-art dinosaurs on a plain white background divided into panels for each strip. The only thing he changes from strip to strip is the text, which places all

the emphasis on the story or idea. This is similar to the Internet development of multi-user created memes which are themselves another form of "crude art" comics.

The use of looping Gifs as comic panels has become an experimental style trend in web comics. However, they are not necessarily restricted to a single visual style. Zac Gorman's *Magical Game Time* (see fig. 74) uses the looping effect only applying it for atmospheric effects, unafraid to leave it out of panels where it may become distracting. Jen Lee takes a more proactive approach with *Thunderpaw*, (see fig. 75) while she does not make everything move, she is not afraid to make the characters move.

The fourth trend was inspired by the computers the comics are viewed on as well as computer art history. A general design style trend, the 8-bit style lends itself



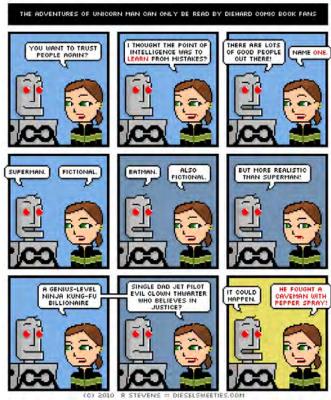


Fig. 76 (above left). 8-bit Theater Clevinger

Fig. 77 (above right). Diesel Sweeties
Stevens

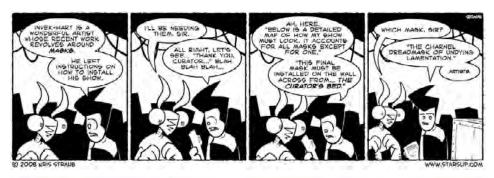


Fig. 78. Starslip Straub



Fig. 79. Penny Aracade Krahulik and Holkins







Fig. 80. PVP Kurtz



Smbc-Comics.com

Fig. 81. Saturday Morning Breakfast Cereal Weiner

well toward digital comic storytelling. Brian Clevinger uses it in his 8-bit Theater (see fig. 76) to represent the early game aesthetic of the RPG Fantasy genre his stories are based on. R. Stevens has made a successful career from the style utilizing it in his comic *Diesel Sweeties* (see fig. 77) but also applying it to other projects including a weekly series for Macworld.

The next trend, digital ink & color, has become one of the most popular styles in web comics. It is interesting to note that the artists discussed in this style, more than any other, have been able to earn a monetary profit from their work. A subsection of this group does not color their work, instead leaving it at a digital ink stage. Even though the full color spectrum is available to them, these creators continue to make their comics in black and white line art. A continuation of the comic's initial technical limitations have created a style all its own that modern cartoonists emulate. Starslip (see fig. 78) a recurring strip by Kris Straub is an example of this. The digital ink with full color style trend are strips that are both inked and colored digitally. They have a unique line quality (similar to the uncolored) with smooth lines and solid colors that give an impression of professionalism with a pixel-perfect level of craft. The most popular of these, *Penny Arcade* (see fig. 79) created by Mike Krahulik and Jerry Holkins has gone on to create massive gaming expos with merchandising and influence on the gaming industry (Stripped 2014). Style-wise it has very smooth and appealing lines, flat color, gradients and cel shading. If webcomics had a signature style this would be it. Scott Kurtz's strip PvP (see fig. 80) has a similar style and theme. Zach Weiner's Saturday Morning Breakfast Cereal (see fig. 81) has the most apparent digital aesthetic of any of these. He uses only flat colors, black lines and shapes, and varies his brush size sparingly. This could be considered as an underdeveloped drawing, but uses the



Fig. 82. Ava's Demon Czajkowski

medium for what it is. This gives the viewer a taste of what the actual digital medium looks like and there is a certain charm to that.

A digital painting style has become an interesting webcomics trend. Michelle Czajkowski's webcomic titled *Ava's Demon* (see fig. 82) is in a full color digital painted style. Vitaly S. Alexius's *Romantically Apocalyptic* (see fig. 83) is advertised as an online graphic novel and is presented as lavishly rendered digital paintings.

Finally, in the most traditional trend in web comics, the initial artwork is penciled and inked by hand then scanned in and colored with added effects digitally. *JL8* (see fig. 84) by Yale Stewart is a great example of this. The beautiful illustrations are originally done on paper and ink. On the computer, a dramatic color scheme invoking a sense of the past with an interesting paper texture is overlaid. Dave Kellet's *Sheldon* (see fig. 85) is another. In fact, after every strip Kellet makes, he sells the original artwork on his site to help earn a living as a professional cartoonist.

As we have seen, with the development of digital technologies and its financial availability to the masses along with the openness of web publishing, has made way for new artistic voices to be heard, both visually and story-wise.



Fig. 83. Romantically Apocalyptic *Alexius*



Fig. 84. JL8 Stewart



Fig. 85. Sheldon Kellet

STYLE AND CONTENT ALIGNED

This exciting explosion of web comics has had some unexpected consequences. By avoiding traditional publishing, the marketability filters have been removed, resulting in the deregulation of what is seen by viewers. While the freedom of expression is great for the artistic community, it now seems that, visually, anything goes. The most crude drawings and highly detailed representations of reality are on an equal playing field when it comes to conveying stories. Great stories can indeed come from any type of art style, but what makes those significant stories that come along every so often, so much more successful than the rest?

I propose, that the best comics occur when the style in which they are drawn works in unison with the content of the story to communicate more than either could alone.

The following is an example of what I mean by this and is taken from IDW's 2012 *Zomnibus*, a comic publication that has collected multiple zombie stories into a single volume. Figure 86 shows a spread from *Zombies!: Eclipse of the Undead*, by Sulaco Studios and is drawn in a typical superhero fashion. The style enhances the drama through some diagonal panels, active poses, and features clear realistic details. The image below (see figure 87) is a spread from *Zombies vs. Robots* drawn by Ashley Wood and is done in a style that enhances the crazy zombie attack content of the story, engaging the viewer on a much more emotional level than the first story. Not only is the content an attack but feeling is placed into every brush stroke and mark on the page.



Fig. 86. Spread from Zombies!: Eclipse of the Undead Sulaco Studios, 2012



Fig. 87. Spread from Zombies vs. Robots *Wood, 2012*



Fig. 88. Page from Batgirl #35 DC Comics. 2011

Figures 88 and 89 show an example of this drawing enhancing content idea by comparing two pages from DC Comics latest iterations of Batgirl and Batwoman. The page on the left is from the new *Batgirl*, a lighter, more youth oriented story and drawn in a way that reflects this. It boasts solid, highly saturated colors, clear delineation between objects and of right and wrong. The page requires little emotional turmoil but gives an engaging and beautiful read for its intended audience.

The page on the right is from a *Batwoman* story with more mature undertones featuring a similar fight scene, but is more more gritty and dark, with less distinct outlines. It features a limited color palette but has more variations in value contributing to a more "mature" aesthetic.



Fig. 89. Page from Batwoman #24 DC Comics, 2011

CHAPTER SUMMARY

In summation, this chapter has looked at the development of the comic book aesthetic from its initial inception of Rodolph Töpffer's "picture stories" to the main visual languages used in print comics to the explosion of contemporary webcomics. Major dialects within the visual language of comics was researched and some of the most popular of today's webcomics were surveyed.

In the end, I proposed that the greatest comics occur when the style in which they are drawn works in unison with the content of the story to communicate more than either could alone, and have visually demonstrated this through examples. This is a very exciting time in the history of comics. The availability of digital mediums that can speed up production time

and allow for numerous traditional media simulations, along with the openness of web publishing, have made this the perfect moment in time for this research into developing a range of illustration styles and how they can be used to enhance graphic storytelling.



Fig. 90. Wacom Intuos Wacom Co., Ltd



Fig. 91. Wacom Cintiq Wacom Co., Ltd

CREATION PROCESS

This chapter is focused on the actual making process of the project's final artifact. It begins with research into the various approaches to using the tools and techniques for digital drawing and then documents my individual creation process for each of my proposed styles including an iconic abstract style about the fat kid in class, George, who is looking to make a friend, a photo-realistic style about Grub, who takes a chance at finding love, and a non-representational style about Beauty, who is an abstract representation of beauty who must deal with George and Grub's advances. The chapter ends with a section about adding interactivity to the fully illustrated George story as a proof of concept, for the proposed multi-story interactive comic.

TECHNIQUES, TOOLS, AND MATERIALS

One of the tenets of the comic book art form is the lack of concern for archival quality of materials. Instead, whatever accomplishing a task necessitates will be performed. The following tools, techniques, and materials were available to be used for the creation of this project. This background research section will first examine the idea development and roughs phase of the project describing the tools and techniques used in digital drawing and traditional sketching. Hardware, software, and manual inclinations will be explained. It will conclude with a description of the tools and techniques that will be used in the final art production phase, including raster Adobe Photoshop images, vector Adobe Illustrator work, and a hybrid traditional and digital approach.

General Digital Drawing

Drawing digitally can be accomplished in several ways including the use of a traditional mouse and keyboard. Many digital artists may initially work this way but it is very difficult, a noteworthy description of this approach I've heard is that, "trying to draw with a mouse is like trying to draw with a potato." There are more specialized tools that can augment an artist's ability to draw directly on the computer. Among the most popular are a stylus and digitizing tablet, such as the *Wacom Intuos* (see fig. 90) that excel in translating gestural and pressure sensitivity to an image by capturing the strokes an artist performs.

Another popular, but more expensive tool is the *Wacom Cintiq* (see fig. 91) that has a built-in display. With it, an artist is able to draw directly on the screen with a pressure sensitive stylus simulating the mark making of a variety of traditional materials. Both perform a dual role: they can be used to point and click software commands, or to draw pictures (Pipes 97).

While there are other brands of digitizing graphics tablets on the market, Wacom is the most utilized today. They feature 2048 levels of pen pressure sensitivity and tilt recognition. They contain built-in ExpressKeys that can be customized to perform any keyboard command and connect through USB port to both Windows and Mac operating systems. Each come in a variety of sizes and utilize the same stylus. Multiple varieties of pen-types are sold and the standard comes with four different nibs that can be changed based on artist preference, each giving the stylus a different feel. The stylus comes with a built-in button that is oftentimes used for the most utilized shortcuts.

The personal stylus used for the creation of this project has the button removed and a full rubber grip

replacement. I was constantly bumping the button in its not-so-convenient placement popping up all sorts of unwanted windows. Initially, I simply turned the button off in the software settings and later found a rubber sleeve replacement sold through Amazon eliminating the annoying thing altogether.

Personal finances have limited the main tool for digital drawing within this project to the Wacom *Intuos*. Through many trial and testing processes, it is currently used with the spring-loaded pen nib, and a sheet of lightly textured copy paper taped over the input area of the tablet. The tablet can "read through" an impressive thickness and this gives the feel of working on paper allowing strokes to be somewhat slower and still remain crisp and accurate. Previously, my preferred working method had been to use the felt tip pen nibs directly on the input area. While this felt much better than slippery plastic on plastic it was not as effective as the current taped paper solution.

Through the College of Design, a *Cintiq* will be available for use, however, in a more limited scope conditional to open lab hours and the availability of machines. My preferred working method on those input devices include the plastic spring-loaded pen nib for additional pressure sensitivity control while wearing a modified winter glove. A thin winter glove, in which I cut all the fingers off except for the pinky. The remainder of the glove creates a soft cloth that slides easily under the palm-wedge of the hand allowing it to rest slightly and move smoothly across the surface of the screen while lending support to the stylus tip.

Possibly the most intuitive and easy-to-use software developed exclusively for sketching digitally is Autodesk's Sketchbook Pro. The latest version, Sketchbook Pro 7.0 was used in the idea development phase of this project. Its streamlined interface is maximized for effective usefulness with a stylus and limited number of keyboard commands that can be easily mapped to the ExpressKeys of the tablet. It features a natural drawing experience and great perspective drawing tools with rulers and ellipse templates. Its interface stays out of the way and commands can be accessed in multiple ways, letting the user focus on drawing. It comes with a set of default brush tools that can be customized by the user. A great new feature in the latest build is the steady stroke setting, giving the artist better free-hand control over

their strokes. *Sketchbook Pro* is essentially a simplified version of a raster image software application, like *Adobe Photoshop*, but developed around the act of digital drawing.

General Traditional Sketching

Oftentimes when an artist is trying to develop ideas it can be helpful to change the mode in which one thinks. This can be digitally accomplished by switching programs or tools, or physically accomplished by changing the medium an artist is working with. By switching from pencil to ink, line to shape the artist is forced to think about an idea in a new way. This creates an unlimited experimentation process and was utilized in the development of ideas for this project. In digital form the ideation process switched between *Sketchbook Pro, Photoshop*, and *Illustrator*. Additionally, a switch between digital drawing and traditional drawing was made.

Traditional sketching tools can be used for developing ideas through an alternative approach that does not rely on the necessity of a computer. In some respects traditional sketching can achieve a more controlled drawing, giving quicker fine tuned results, most noticeable in free-hand line drawing. In their book Learning Curves, authors Sjölén and Macdonald explain five reasons to sketch traditionally in the ideation process. First, for its speed, the better your sketch skills, the quicker one will be able to come up with design ideas. Second, for serendipity, by sketching traditionally a designer leaves themselves open to "happy-accidents" allowing new design ideas to take shape that you otherwise would not have purposefully created. Third, one can do it anywhere. It does not require electricity, the Internet, or a computer. You only need the most basic of tools, a piece of copy paper and a ballpoint pen will do and are actually the preferred method for many design sketchers. Fourth, it will not go out of date. Designers today are required to learn a tremendous range of digital tools that will undoubtedly change every few years. Traditional drawing abilities will always remain relevant. Finally, it's fun! Although admittedly it can be very frustrating at times, having fun while sketching make it much easier to be creative.

Many of the traditional artist's tools, like charcoal or oil paint, are not used in the design development process mainly because of their messiness, space

required, lengthy time requirements, or non-transferrable specialized skills unique to a medium. The focus here is on quick idea development. With that said, anything could still be theoretically used in the ideation process. For this project, the traditional ideation tools of ballpoint pens, markers, ink, fine-liners, brush pens, brushes, colored pencils, graphite, and white-out were all used. Copy paper and sketchbooks will be constant companions that allowed the project to be visualized in a variety of sketching mediums. A drawing table, light box, rulers and ellipse templates were also readily available.

Approaches to Working with Creative Software

The final art production process for this project used a diverse variety of tools and techniques. Specifically, each of the three illustration styles developed utilized one particular technique more than any other. For Beauty's more formal abstract visual language pastel and *Adobe Photoshop* was used for final production. For George's iconic visual language, the vector software application *Adobe Illustrator* was used more than any other. While Grub's photo-realistic style developed used a hybrid digital and traditional approach, using each media to achieve the best possible results.

Photoshop is a pixel-based program, otherwise referred to as a "raster" image software application. It depicts images via a combination of tiny pixels, generally around 72ppi (pixels per inch) for digital viewing that, when viewed from a distance, appear as a single continuous image. One usually works at 300ppi for an image to be viewed clearly when printed from a printing press. For common household printing, one can generally get away with working at 150ppi. The reason to work at smaller sizes is based on computer memory usage and performance. Working smaller means working faster. For example, it takes a much longer time for a computer to keep track of 300 pixels per inch of information than it does for 72. Additionally, each pixel usually contains 8 bits of information making a 72ppi image 576 bits of information per square inch while a 300ppi image would have 2400. The advantage to working with raster images, like *Photoshop* files, is their ability to be easily manipulated in many diverse ways. Vector images, which will be discussed later, always remain editable, restricting the amount of

manipulations to only those that can be performed and continuously readjusted. The final production art for this project was created at 300ppi allowing all work to be printed at press quality should the future need arise.

In addition to using most of the *Photoshop* software's default tools, this project will utilize a pack of brushes purchased online from a third party. The *Megapack for Photoshop collection* from Kyle T. Webster give a more traditional hand-made feel to the visuals of this project through utilizing and adopting his brush presets. It can be thought of as buying a pack of name brand physical brushes and using them in my own way. Webster is a multi-talented illustrator who has worked for many major publishers in the U.S. and abroad including: *Time, The New Yorker*, and *NY Times*. His brush packs are used by many professional artists and production companies.

Adobe Illustrator is a vector based graphics program that creates images via mathematical equations that can be continually adjusted. The Bézier curve forms the basis of all vector drawing programs in use today (Glitschka 3). They are made of anchor points and paths. When a path is curved it is a Bézier curve, which can be adjusted from one end or the other using handle bars that extend from the anchor points. The advantage to working with vector graphics are their relatively small file sizes compared to raster images because they no longer store all the color information as individual bits of data. Instead, a single mathematical equation makes up an image and is stored and recalculated for any adjusted portion of an image. Vector graphics are extremely precise and resolution independent, meaning they can be scaled up or down with no distortion. For these reasons, many design industries utilize vector graphics. Their largest negative is that they can take a long time to create if a lot of curves need to be made manually. They can also be a little too precise; colors are often flat or gradients are mechanically even. It is fairly easy to tell when one is looking at vector work unless a lot of time has been put toward masking the usual factors. On the other hand, when done correctly, the mechanical polish can demonstrate a professional quality of craftsmanship.

Illustrative designer Von Glitschka describes his *Illustrator* working methods in his book *Vector Basic Training*. His working process may vary depending on the intended result but the main tools utilized include

the shape, pathfinder, and pen tool. To create images via the shape and pathfinder tool, primitive shapes like ellipses, squares, rectangles, and polygons are overlaid and combined or intersected via the pathfinder tool.

The pen tool is at the heart of the *Illustrator* software in which an artist can manually create each point and the angle of the curve associated with it. Since the publication of Glitschka's book a few other tools have been developed within the program that were be used in the production of this project, specifically the width tool and the blob-brush tool. With the width tool, one is able to adjust the width of any line without having to convert a line to a filled shape and adjust manually the outer edges of the shape to the desired width. It is very effective for creating adjustable, symmetrical thick and thin lines. The blob-brush tool works like a regular paintbrush tool creating a stroke following the artist's hand, with the added feature of converting overlapping strokes into a singular outlined shape. It is very effective for creating a type of handdrawn quality in the software and especially useful in combination with a pressure sensitive graphics tablet. The core of the program however, is best utilized with the technical precision of a mouse and keyboard. *Illustrator's* flat shapes and mechanical precision were best utilized in the creation of this George's iconographic style.

A popular approach used by many contemporary artists is a hybrid traditional-digital process. In which, an artist performs part of their creative process physically with traditional materials then scans the work into the computer for further manipulation. This project used a hybrid approach for the creation of its photo-realistic style. In Freddie E.Williams II book, The DC Comics Guide to Digitally Drawing Comics, Williams lays out his three basic workflows for creating artwork for DC Comics. In his first, all digital workflow, Williams does his roughs, pencils/wireframes, and inks all digitally. In his second, pencil hybrid workflow, he does his roughs digitally, prints them in light blue on 11" x 17" bristol board, then pencils and inks traditionally. In his third, ink hybrid workflow, he does the roughs and pencils/wireframes digitally. He then prints on 11" x 17" Bristol board in black and inks traditionally on top of them. Printing in solid black single width lines makes part of the ink work already done. The latter two workflows take advantage of the ease and flexibility of

laying a comic page out digitally while still having a final piece of physical art.

The hybrid process used for this project began with rough drawings laid out digitally that were then printed out, traced and redrawn on copy paper and scanned back in. This allowed for incremental refinements working in sections and using each tool for its greatest advantage. The work was then inked on the computer in *Sketchbook Pro* with final effects being done in *Photoshop* and presented in its final digital format. This process allowed the ease of digital layout, combined with the look and feel of drawing lines traditionally and polished with digital flexibility yet precision.

The creation of this project used a diverse array of traditional and digital tools and techniques. It used whatever tools were necessary to accomplish the task at hand, any tool was considered and was open to experimentation. This section has examined the techniques and materials that will be used to draw and sketch both digitally and traditionally. Digital hardware, software, and personal inclinations were described. How the various softwares were utilized was examined. Digital graphic tablet technology was explained and practical considerations were addressed. This section has sufficiently analyzed the tools, materials, and techniques that were employed in the creation of the project. The next three sections of this chapter document the process of creating each developed visual style.

ICONIC ABSTRACTION

To reiterate, the iconic abstract styled story is about George, the gross, weird, fat kid in class that nobody seems to like, who is only comfortable at home playing videogames (see fig. 92). His story is about how he finally begins to interact with others and starts to make a friend in Beauty, but as soon as he does, he is ridiculed and ends up beating someone up putting him even further from his original goal. I had hypothesized that this story would be enhanced by its iconic illustration style because the visuals would reflect the simplistic understanding of the world as seen through the eyes of a child.

Upon further thought on this direction, I decided to map Neil Cohn's major dialects of comics visual



SURVIVALIST UNMOTIVATED BEYOND SURVIVAL. PRIDES HIMSELF ON ONLY NEEDING BASIC NECESSITIES. SEES HIMSELF AS A INSIGNIFICANT, WORTHLESS, LOWLY GRUB.

TAKES A CHANCE AT SOMETHING MORE AND FAILS, MAKING HIM AN EVEN HARDER AND MORE BITTER

Fig. 92. Story Overviews Brown, 2014



GEORGE

A.K.A. FATTY

THE GROSS WEIRD KID IN CLASS
THAT NOBODY LIKES.
SAD, SCARED, ANXIOUS, SWEATY

ONLY COMPORTABLE AT HOME PLAYING VIDEOGAMES.

STARTS TO INTERACT WITH OTHERS, BUT AS SOON AS HE DOES HE IS RIDICULED AND ENDS UP BEATING SOMEONE UP



BEAUTY

TRUE BEAUTY

AN ABSTRACT GESTURAL FIGURE.
JOYFUL, HAPPY, CURIOUS, LOVING,
CONFUSED, FIRST TIME BEING DESIRED,
ENDS IN A DEEP DEPRESSION

LOVES EVERYONE TOO MUCH, THAT SHE LOSES HERSELF. EMOTIONALLY STABLE UNTIL SHE FALLS, AND CUTS THE PHYSICAL BEAUTY FROM HERSELF.

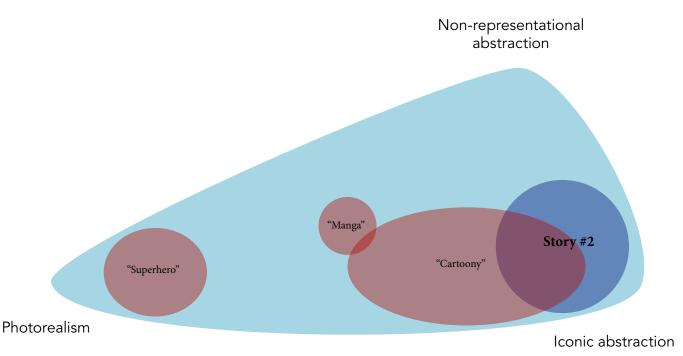


Fig. 93. Style Diagram with Overlay *Brown, 2015*

language to my modified style gamut and overlaid where I had intended for George's story to be. The diagram (see fig. 93) demonstrates, that when looking at what has been successful for these types of child protagonist stories in the past, overlaps with Cohn's "Cartoony" dialect.

I have already discussed the work of Carl Barks, who Neil Cohn appoints as representative of this visual language dialect. In short, his illustration style was very dependent on what has been called the surrealist



Fig. 94. Mood board Brown, 2015

Disney style and is considered the sort of mainstream of cartoon animation. Two exemplary books that discuss the style's development and explain and demonstrate how to draw within it are the previously dissected Frank Thomas and Ollie Johnston's *Illusion of Life* and Preston Blair's *Cartoon Animation*. Additionally, I was influenced by contemporary popular culture, games, artists and designers including Chris Ware, Takashi Murakami, Michael Heald, Von Glitschka, and objects found in nature like a potato (see fig. 94).

I used all this research, acquired knowledge, and visual influence to come up with what George would look like (see fig. 95). The design relies on the use of visual stereotypes and metaphors, which was discussed when we applied Gombrich's idea of an artist's schema to people. Figure 96 explains my reasoning behind George's iconic style design choices such as his potato-like hairs and body shape subconsciously associating him as a couch potato. His large wide eyes absorbing his surroundings giving him an alien look and highlighting his constant anxiety when he in public, and a target on his t-shirt signaling bullies to see him as a literal target for their aggression. His thick black outline, solid colors and simplistic shapes are meant to recall the visuals most often associated with childhood but with a fresh dynamic twist.

Figure 97 depicts what the process of his creation looked like. With his personality in mind, I drew sketch

after sketch of how he might look, trying things, failing miserably and retrying things until I came to his final design (see fig. 96).

Figure 98 shows the process I took in drawing his story. In the photograph, I am using Preston Blair's book to better understand how cartoon hands work. Every drawing in George's story began as sketches in purple erasable colored pencil working lightly to build up general form. Then, when I wanted to finalize a line, I would use a *Prismacolor Verithin* black pencil to do so (see fig. 99). I would then scan in the image and open it up in *Illustrator*, where I would use the pen tool to trace my outlines point by point. Then I added color and line variation, before adding a thick stroke and shading to give a sense of three-dimensionality but emphasize the outlined "drawingness" of the final image, containing the form but also allowing no doubt in the viewer that they are looking at a drawing (see fig. 100).

Figures 101, 102, and 103 show my final illustration style frames developed for George's iconic abstracted styled story. Note that they take place during the story's point of conflict, where all the characters come together. This was done, so that when all the final developed illustration style images are compared side-by-side, a variety of connections can be made. Also note how, in George's version of the story, he was only being friendly until he got teased by Grub which caused him to lose his temper (see figs. 101-103).

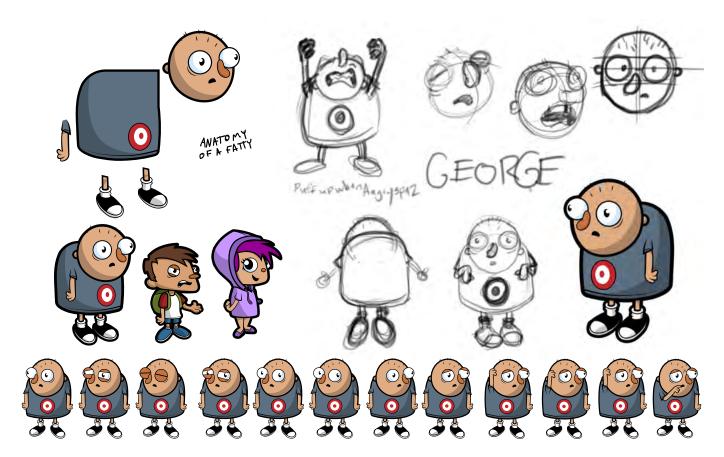
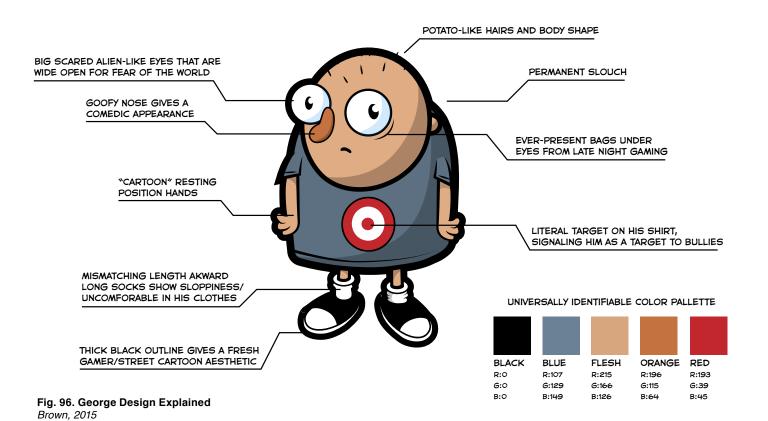


Fig. 95. George Brown, 2015



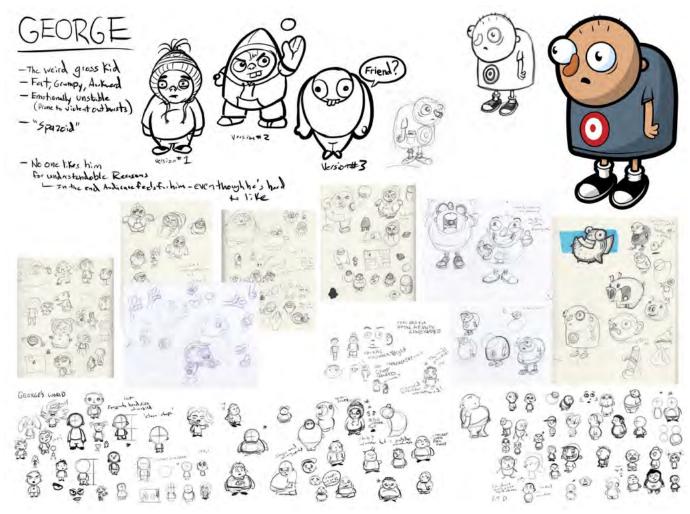


Fig. 97. George Development Process *Brown, 2015*



Fig. 98. Iconic Style Process *Brown, 2015*



Fig. 99. Iconic Style Process Tyler Brown, 2015



Fig. 100. Iconic Style Process Brown, 2015







Figs. 101-103. Final Style Frames *Brown*, 2015

PHOTOREALISM

This section will discuss the style development of my photo-realistic story. Which, to once again reiterate, is Grub's side of the story and he lives in a post apocalyptic world in which there is seemingly no hope at life meaning more than mere survival. Which is fine by him as he prides himself on needing nothing more than the bare essentials, until he comes across a beautiful potential mate and takes a chance at life meaning something more (see fig. 104).

I had also previously determined that the photo-realistic character would see himself as a lowly grub living in a post-apocalyptic world who attempts to find love and sees George as a threatening monster, and beauty as a beautiful butterfly love interest. It was my belief that, because this story would be illustrated in a photo-realistic way, the horror and macabre of a dystopian post-apocalyptic world would be able to be

better felt by the viewer. That the harsh brutality of his life could only be described with significant disgusting details of the world in which he lived. This also reflects my personal views in that, sometimes the world just seems like an awful place that I want to take no part in.

Grub's story takes place in the photo-realistic corner of our style gamut overlapping with Neil Cohn's "Superhero" dialect and shares common themes with comic book storytelling of heroes battling to survive within cruel worlds (see fig. 105).

In his book, Cohn identifies Jack Kirby as the representative artist of his identified superhero dialect. In researching Kirby's style development, as previously discussed, I found that he too had originally worked in animation, but as an in-betweener. Tired of the production-line type work of the animation studios of the day, he turned to comics as a way of having more control over the final works. Coming to the comics medium from animation, he tried to bring the illusion



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TAKES A CHANCE AT SOMETHING MORE AND FAILS, MAKING HIM AN EVEN HARDER AND MORE BITTER

Fig. 104. Story Overviews Brown, 2014



GEORGE

A.K.A. FATTY THE GROSS WEIRD KID IN CLASS THAT NOBODY LIKES. SAD, SCARED, ANXIOUS, SWEATY ONLY COMFORTABLE AT HOME PLAYING VIDEOGAMES.

> STARTS TO INTERACT WITH OTHERS, BUT AS SOON AS HE DOES HE IS RIDICULED AND ENDS UP BEATING SOMEONE UP



TRUE BEAUTY AN ABSTRACT GESTURAL FIGURE. JOYFUL, HAPPY, CURIOUS, LOVING, CONFUSED, FIRST TIME BEING DESIRED, ENDS IN A DEEP DEPRESSION

LOVES EVERYONE TOO MUCH, THAT SHE LOSES HERSELF. EMOTIONALLY STABLE UNTIL SHE FALLS, AND CUTS THE PHYSICAL BEAUTY FROM HERSELF.

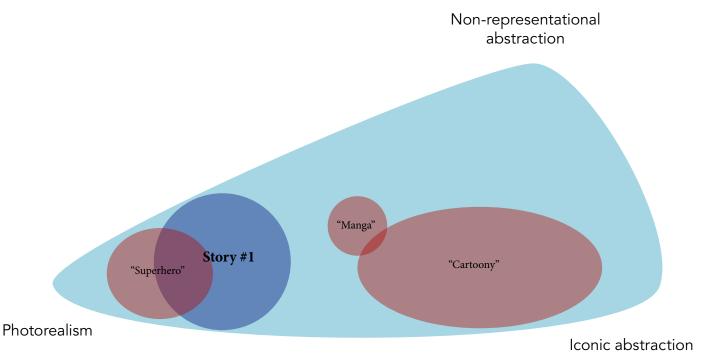


Fig. 105.Style Diagram with Overlay Brown, 2015

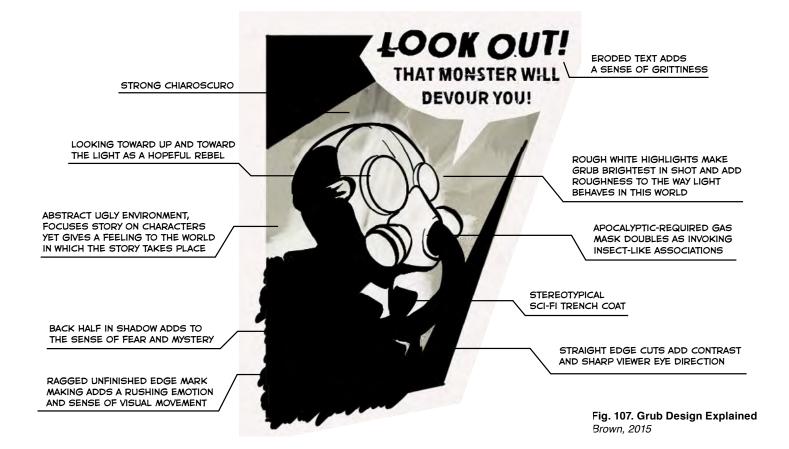
of movement to a static medium and did so through highly dramatic poses and dynamic compositions which worked amazingly well to tell superhero stories.

Perhaps one of the most influential how to draw book on the superhero dialect is the highly successful

comics publisher Marvel's 1978 book, How to Draw Comics the Marvel Way by Stan Lee and John Buscema. This book solidified a canon of superhero conventions that are still drawn on today, and made its way into all budding artists schema's of an era. Figure 106 shows



Fig. 106. Mood board Brown, 2015



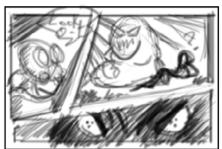
some of my influences on the development of Grub's story illustration style, exemplifying visual culture theory, that all of an artists creations are influenced by what he has previously seen.

It was at this stage in the process that I decided

Grub would no longer be a mutant grub hybrid but instead, he would be a man in a post apocalyptic/ science fiction type body suit that resembled a grub and the other human-type characters would be in similar gear that slightly resembled other insects.



Fig. 108. Grub Process Brown. 2015



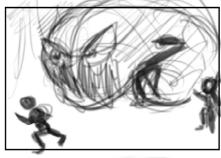




Fig. 109. Grub Story Thumbnails Brown. 2015

Figure 107 shows my initial style frame from Grubs story clearly showing how the preceding visuals from my mood board (see fig. 106) including Jim Fitzpatrick's *Che Guevara*, Sheperd Fairey's *Hope* poster, DC's animated *Batman* series, Marvel Comics recent *Guardians of the Galaxy* film, and traditional chiaroscuro oil painting all influenced the style and character development. This result is a hopeful, iconic image, with strong chiaroscuro that invokes associations and a feelings of a helpful rebel trying to save the Beauty character by warning her of the danger she is in, while keeping the mystery and fear of the unknown within the shadowy world of some dark super heroes and crime noir stories.

The following images show my creation process

for developing Grub's world. Figure 108 shows what my workspace looks like, note the slightly textured copy paper taped to the graphics tablet, as previously discussed. Figure 109 illustrates the beginning of my illustration process, which began with generating numerous thumbnails and choosing the best, which are shown here, to use as a guide. After thumbnails I shot and collaged together reference photos to get the realism I desired, and followed a digital variation on the typical comic creation method, (only digitally) of pencil roughs, inks, and final colors and effects.

Figures 113-115 show the final illustration style frames developed for the project. Note that Grub is the hero in this story, and how he heroically gets George the monster's attention away from beauty. I find the



Fig. 110. Photographic Reference *Brown*, 2015

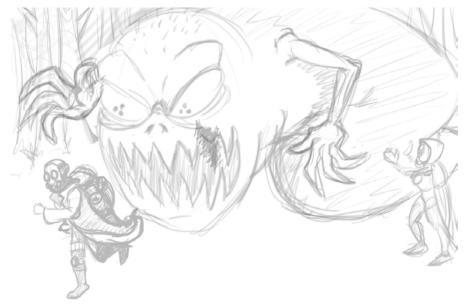


Fig. 111. Digital Pencils *Brown*, 2015



Fig. 112. Digital Inks Brown, 2015







Figs. 113-115. Final Style Frames *Brown*, 2015

point where a push becomes a scratch really interesting reminding me of childhood fights with siblings that become exaggerated when recalling the events to one's parents.

NON-REPRESENTATIONAL ABSTRACTION

Finally, I want to discuss the style development for Beauty's side of the story. To clarify, by the title of this style non-representational abstraction, I do not mean to say that the visual language will not be representative of anything. It is, after all, representative of Beauty's side of the story. What is meant by the term is that the visuals will not represent anything that can be physically seen in the real world. Like the abstract expressionists, this style creates an aesthetic

representative of emotions and feelings.

Which made this perhaps the most experimental style to develop because, Beauty as an abstract representation of beauty, live in a world that exists on a higher plane than our own. In her story, this beautiful mark must deal with being an object of desire and ends up caring about the other two beings so much so that she harms herself to take away the cause of their fight.

I had already determined, and previously discussed, that she would see herself as an abstract form of beauty who is forced to deal with two other aggressive abstract beings fighting over her (see fig. 116). I had made the decision that this story would be enhanced by being told in an abstract style because it could reflect the personality of a caring and feeling character who bases her actions on her emotions and would focus her story not on any physical conflict but instead, it would focus



SURVIVALIST

UNMOTIVATED BEYOND SURVIVAL.
PRIDES HIMSELF ON ONLY NEEDING
BASIC NECESSITIES. SEES HIMSELF
AS A INSIGNIFICANT, WORTHLESS,
LOWLY GRUB.

TAKES A CHANCE AT SOMETHING MORE AND FAILS, MAKING HIM AN EVEN HARDER AND MORE BITTER

Fig. 116. Story Overviews Brown, 2014



GEORGE

A.K.A. FATTY

THE GROSS WEIRD KID IN CLASS
THAT NOBODY LIKES.
SAD, SCARED, ANXIOUS, SWEATY

ONLY COMPORTABLE AT HOME PLAYING VIDEOGAMES.

STARTS TO INTERACT WITH OTHERS, BUT AS SOON AS HE DOES HE IS RIDICULED AND ENDS UP BEATING SOMEONE UP



BEAUTY

TRUE BEAUTY

AN ABSTRACT GESTURAL FIGURE.
JOYFUL, HAPPY, CURIOUS, LOVING,
CONFUSED, FIRST TIME BEND DESIRED,
ENDS IN A DEEP DEPRESSION

LOVES EVERYONE TOO MUCH, THAT SHE LOSES HERSELF. EMOTIONALLY STABLE UNTIL SHE FALLS, AND CUTS THE PHYSICAL BEAUTY FROM HERSELS.

Non-representational

abstraction Story #3 "Manga" "Cartoony" Photorealism

Fig. 117. Style Diagram with Overlay *Brown*, 2015

more on her inner emotional conflict. In short, a person who made most decisions in life based on feeling, or intuition thus her world is best represented as marks with feeling, where the physical subject matter is of little importance.

In mapping this to our gamut with Cohn's dialects,

(see fig. 117) we see that the usual storytelling style trends do not fit where I wanted the story to be. After further research, I was able to find a book that had collected numerous abstract comics by many different artists, aptly entitled *Abstract Comics*. A mesmerizing collection of abstract comics from many prominent

Iconic abstraction

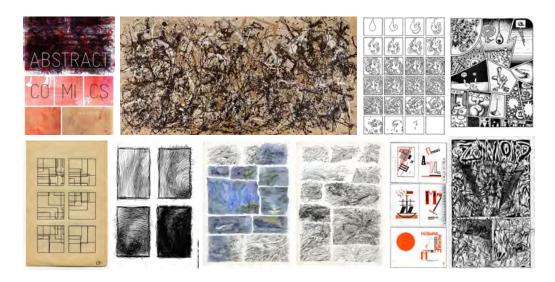


Fig. 118. Mood board *Brown*, 2015



Fig. 119. Abstract Character Sheets
Brown, 2015

cartoonists that book gave me a wealth of inspiration. However, I did not stop researching there, but also looked to art and design history for further inspiration (see fig. 118).

To provide some rules for this newest style I turned to the previously discussed book from Timothy Samara, *Drawing for Graphic Design*, advocating for more use of drawing in graphic design. In it, he explains four universal principles of strong drawings regardless of whether they are representational or not. Following his rules I created these sort of abstract shape

character sheets, creating a unified form language for each individual character but also across the whole cast. Following Samara's principles I created dynamic rhythm and interplay between forms and spaces through a variety of gestural mark making representing each characters personality (see fig. 119).

In figure 120, I more clearly explain some of my design choices. Such as: using curve forms to invoke a sense of beauty and to recall the human female form, working a great deal of contrast and variety into the mark making, and using pastel to give a wider range

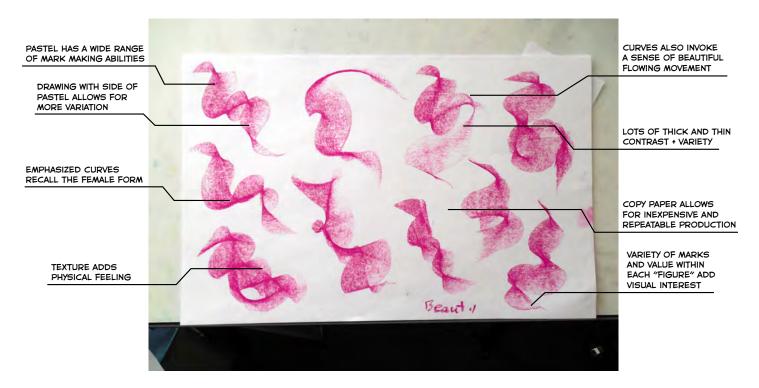


Fig. 120. Beauty Design Explained *Brown*, 2015



Figs. 122-123 (opposite). Final Style Frames Brown, 2015

Fig. 121. Beauty Process Brown, 2015

of mark making abilities and add a physical textural feel to the final character designs. I found that, not only did the final story pages have to work together as a cohesive design, but each individual character had to be interesting in itself. Illustration style, it seems, is the creation of a flexible enough design system that is able to successfully convey your story and intentions.





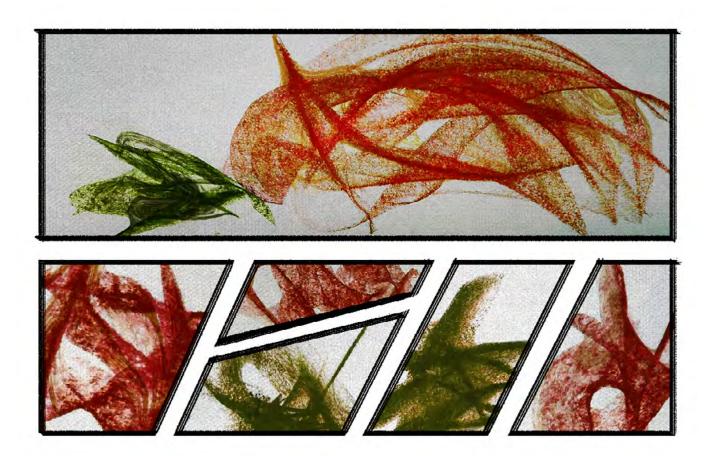


Fig. 124. Final Style Frames *Brown, 2015*

Figure 121 shows the rejected pile from my process showing the multitude of iterations I went through in my search for non representational abstract forms. Figures 123-124 show the final pages. To finish, additional effects were added digitally to further emphasize my intentions with Beauty's story.

In these, (see figs. 123-124) we feel a shout, an overflow of anger, a chase, and the initial contact with a battle of emotions. The final images included in this section (see figs. 125-130) allow for great reflection on the associations made between style, content, and story.

ADDING INTERACTIVITY

The remainder of this chapter will explain the process I used to create the interactive full version of George's story to show a proof of concept, demonstrating how the final full stories would work.

Initially, research was done on current digital comic forms and then my individual process for creating an interactive web comic using *Adobe Edge Animate* is explained.

Background Research

Ryan Woodward is a multi-talented artist and animator who has worked on many large budget Hollywood movies and cartoons. In addition to teaching, Woodward also creates his own fine art projects. Among them is a highly experimental animated graphic novel entitled *Bottom of the Ninth* (see fig. 135). Visually stunning, the piece has received numerous accolades from prominent reviewers. In it, Woodward tells a story in what simulates a graphic novel format complete with page turning animations on the digital screen. The major difference is his use of looping gif panels, individually 3D animated panels with play buttons, and sound. The results are stunning



Figs. 125-134. Final Style Frame Comparison *Brown, 2015*

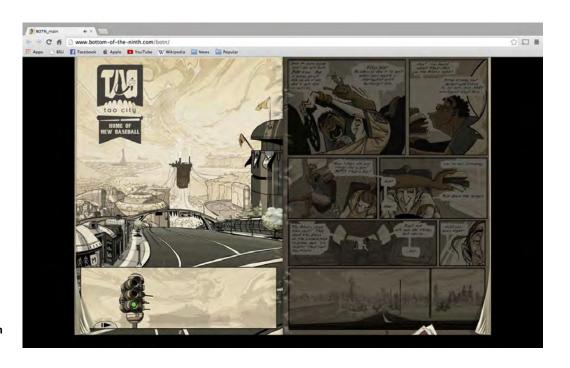
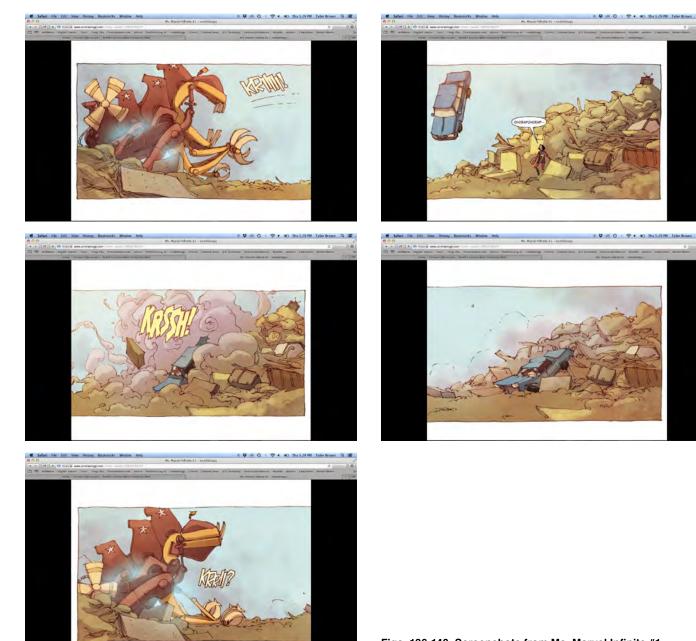


Fig. 135. Bottom of the Ninth Woodward, 2012



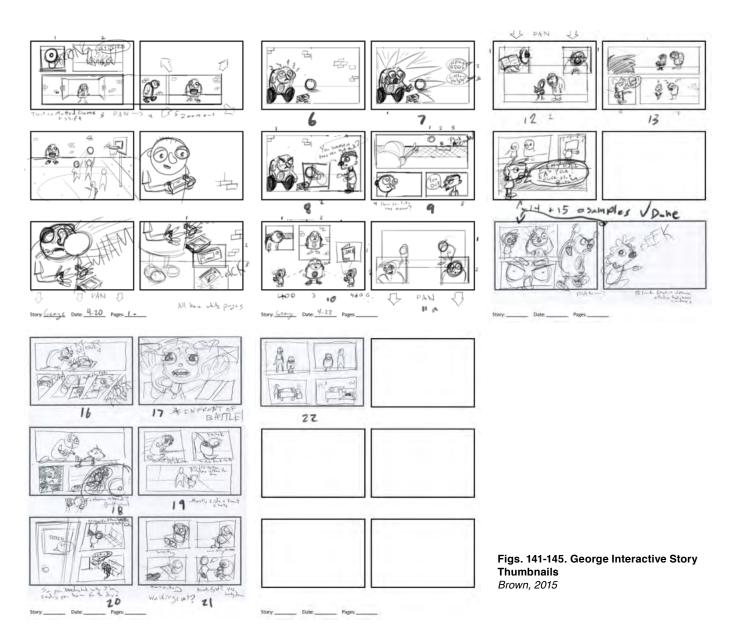
Figs. 136-140. Screenshots from Ms. Marvel Infinite #1 Marvel Comics, 2014

and his beautiful animation shines. However, when one tries to read the novel, the sound, animation, and lack of story depth can inhibit content comprehension.

I feel, the most successful examples of comics presented in a digital format are exemplified by *Comixology's*, the largest digital comics distributor, "Native Guided View." *Marvel* has the same system developed only entitling them "infinite comics" which are sold on *Comixology* and play within the native guided view format.

In this approach, comics are designed exclusively

for digital display and can do some very interesting things that take advantage of the digital medium. Among the devices effectively used are the overlaying of panels on top of previous panels, changing text without changing images to allow longer conversations to take place, and a few slick-looking animated "slides" where the camera or character drawing will slide to one part of the screen from another (see figs. 136-140). The drawings remain intact and the overall piece is still recognizably a comic. The added devices enhance the story in ways the traditional paper approach cannot.



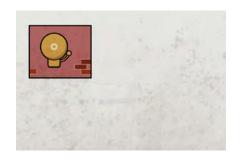
Process

I began the creation of this interactive piece by sketching more refined thumbnails of George's entire story, and planning how the interactions would occur. It was during this process that I had to devise a way to plan how the interactions take place. My final thumbnails ended up being half comic thumbnails and half numbered storyboards in order to compensate for how the final images would be seen on a digital device (see figs. 141-143).

I ended up creating the final images at 800 x 600 pixels at 150ppi and using the same process as previously discussed in the creation of George's illustration style, I went to work creating every image needed. The process was very time consuming as I

worked point-by-point with the pen tool, tracing every color pencil scanned drawing in *Adobe Illustrator* to make every image state required for the interactive story (see figs. 146-213).

In order for the comic to be interactive and viewable on as many devices as possible the final would best be disseminated via the Web. A relatively new software product from *Adobe* called *Edge Animate* was utilized. Through it, an artist is able to create an interactive experience with limited animations that conform to current Web standards without requiring a creator to become a professional Web developer. The software uses HTML5, CSS3, and Javascript to create the final output, ensuring its readability on most Internet capable devices. The exported comic was







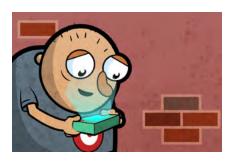


















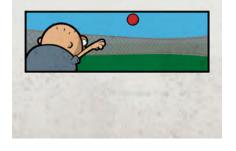


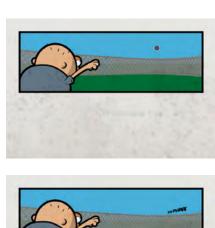


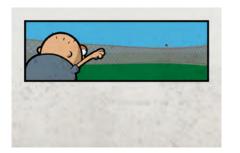




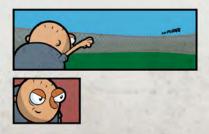




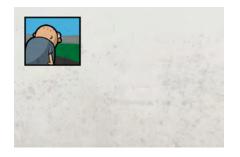


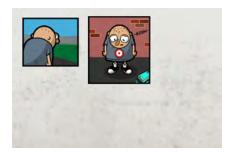


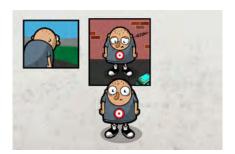


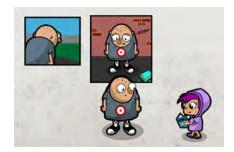


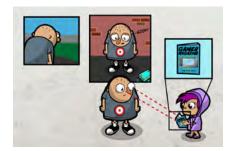


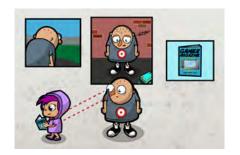




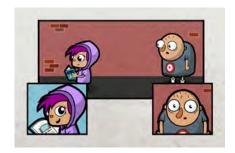


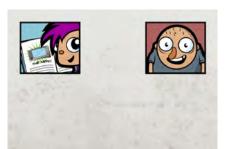




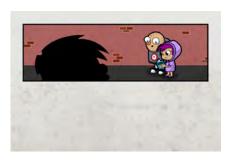
































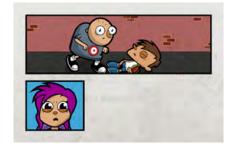


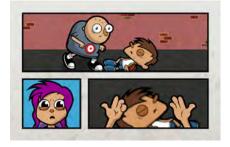




















then embedded into the HTML, (hyper-text markup language) and styled using CSS (cascading style sheets) on its own web page on my portfolio website. This enabled the comic to be viewed on the Internet from around the world. Setting up a site and hosting is outside the scope of this project and has already been

completed. The addition of the digital comic to a premade site required previous knowledge of basic web development techniques.

The resulting digital comic, allows the viewer to go through the story at their own pace, yet guides them through the read, making them more likely to read text,

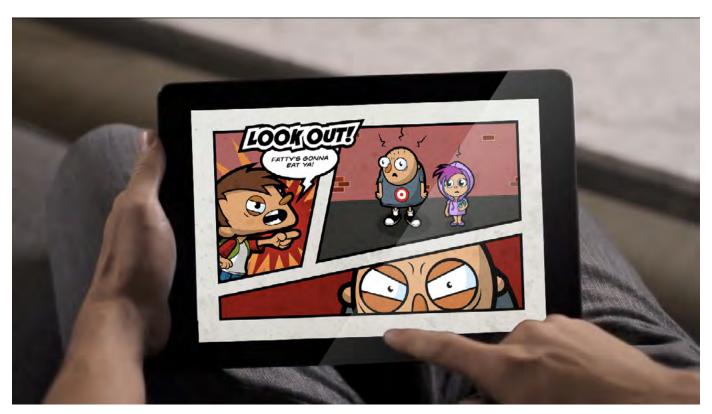


Fig. 214. George Interactive Mock-up *Brown, 2015*

and appreciate the image before moving on. The result in a unique interactive comic-like experience that is enhanced by the digital format it is in.

CHAPTER SUMMARY

The creation of this project used a diverse array of traditional and digital tools and techniques. This chapter has examined the techniques and materials that were used to draw and sketch both digitally and traditionally. Digital hardware, software, and personal inclinations were described. How *Autodesk's Sketchbook Pro, Adobe Photoshop, Illustrator,* and *Edge Animate* softwares were utilized was examined. Digital graphic tablet technology was explained and practical considerations were addressed.

Additionally, the chapter explained and documented my working process for the development of each of my proposed styles, including an iconic abstract style about the fat kid in class, George, who is looking to make a friend, a photo-realistic style about Grub, who takes a chance at finding love, and a non-representational style about Beauty, who is an abstract representation of beauty who must deal with George and Grub's advances. Design choices are clearly explained with annotated illustrations, and the final illustrations are all shown. The chapter ended with a section about adding interactivity to the fully illustrated George story demonstrating a proof of concept for the proposed multi-story interactive comic.

CONCLUSIONS

In this final chapter of the paper I want to share some of what I have learned through the completion this project. An initial summary of the experience is given, highlighting my thoughts on the difficulties of developing a multitude of illustration styles in a condensed period of time. Then, I make suggestions for how other developing illustrators can learn from what I have done in this project to develop their own set of well rounded drawing abilities and how they can benefit from the included research. After that, I explain how the knowledge I gained through the completion of this research project, will apply to my future work with an example of a piece already in progress. Finally, I end with a clearly written significance of work.

SUMMARY OF EXPERIENCE

To summarize my entire experience through the creation of this project and highlight all that applies to other developing illustrators is a difficult task. I am currently still trying to wrap my own mind around all I have learned and what exactly I have made. However, the following are some useful insights that could prove invaluable to the developing illustrator, alongside some moments of self-reflection that I hope others are able to learn from as well.

First, let us recall McCloud's initial "big triangle" of visual art's pictorial vocabulary and my reiteration of it for the discipline of drawing (see fig. 215). My initial neat triangle with each story perfectly pushed toward the corners to develop the most diverse range of illustration skills possible, has morphed into a gamut where non-representational abstraction and iconic abstraction are closer together and my final story styles

are not nearly as separate as I had anticipated (see fig. 216).

I believe the proposed gamut to be a great model for understanding illustration style and more accurately reflects a mental map of the abilities of the visual language of drawing than its predecessor. Additionally, being able to map one's own abilities within the gamut allows an artist-designer to evaluate their current skill level and see what requires more study if they desire a set of well-rounded drawing skills. Which, as this project suggests, are needed in order to fundamentally change one's illustration style based on the needs of a piece of work.

For example, if one's current drawing vocabulary primarily rests toward the right side of the gamut, they should study more from life. Knowledge of figure drawing, anatomy, and biology are immensely helpful in recreating an illusion of life. Additionally, one who finds themselves stuck toward the schematic can practice perspective drawing. These are two major developing factors that further unlock the full range of abilities that drawing offers. If conversely, an artist is stuck copying from life, or only drawing realistically, they should study the formal elements of design. An understanding of a medium's capabilities, in addition to composition, unity, variety, balance, scale, proportion, repetition, rhythm, and all the visual gestalt principles will make your drawings much better as you unlock the full potential of the top portion of the proposed gamut.

Through the creation of this project, I have pushed myself and come to better know the limits of my current abilities, and am now able to visually map them out (see fig. 216). A this point I feel it is important to address the mapped locations of my final stories. During the style development process, I allowed the stories a flexible

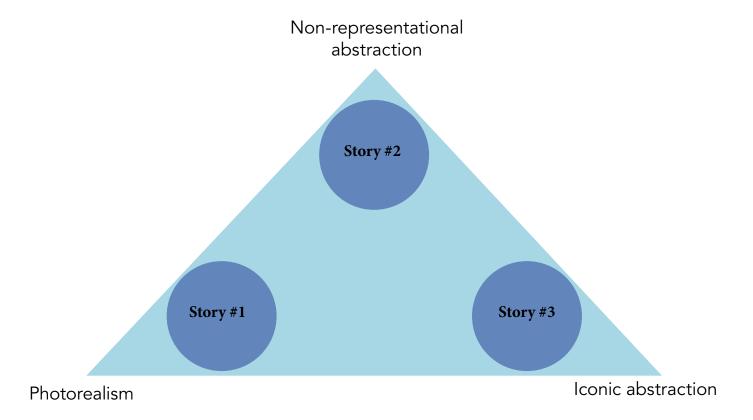


Fig. 215. McCloud's Big Triangle Reiterated *Brown*, 2015

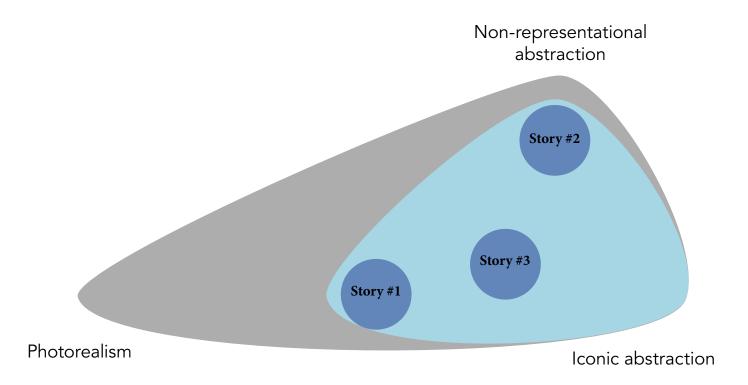


Fig. 216. My Style Gamut Plotted *Brown*, 2015

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amount of leeway, starting in a general direction, while acknowledging the limits of my current abilities, but striving to focus solely on the needs of the story. For example, George's story moved significantly away from the corner of complete iconic representation (imagine bathroom signage) and landed instead, toward the middle of the gamut. I did this because, after continuous sketching, I finally found what I was trying to convey with George's "character" in a slightly more realistic style somewhere between iconic and the Disney style.

In summation, once you map the whole of drawing's pictorial vocabulary, you can divide and conquer to gain an ability over it all. Additionally, mapping other artist's illustration styles within the gamut can show you contemporary trends, and who is working where. It then becomes your task to figure out why they are working there, and if it is successful for what they are trying to accomplish. This triangular gamut is what I was looking for as a developing illustrator, and was very excited when I found McCloud's *Understanding Comics* book with his "big triangle" map. I hope the style gamut suggested here adds a helpful modification to the idea and the project acts as a case study providing further evidence of its usefulness. Thinking about illustration style as a gamut has personally helped me, and I hope this project has pointed out the help it could be to other developing artists and designers.

Reflections

In no particular order, here are some further insights I would like to share that I came across during the creation of the project.

First, when trying to draw realistically, I quickly noticed the limitations of my current schema, specifically the fine details of the real world. Photographing myself in the required poses and using reference when drawing helped to overcome this.

Also, originally, I had planned on doing the abstract style entirely on the computer, but ran into problems with the limitations of the *Wacom* tablet. The tablet only allows for the computer to track point, line, and gesture. Further knowledge on the software one uses is required at an almost expert level in order to make these limited inputs resemble all the flexibility of physical medias. The results I was getting from a fully digital process was too far removed from the emotion I was putting into the physical creation of the marks. Switching to

pastel gave me more flexibility but with a level of control that dry media allows and I felt comfortable with. The point to take away: when things are not going well on the computer, step away and get your hands dirty. The computer is only one tool of many to express great ideas.

Next, I found it was much more difficult than I thought it would be switching, back and forth, from style to style. Each requires a lot of warm up and practice before getting comfortable creating any amount of sequential pieces of work. During my reading I came across a book entitled *Dream Worlds* in which Hans Bacher discusses working as a production designer in the animation industry. A point that stuck out to me, was when he discusses the development of a style guide for a feature-length animation, explaining its use to the numerous artists that are brought on to work on the various parts of the film. Bacher writes:

"They have to learn everything about the new look and get used to it. For about the next eighteen months, they will have to live in that new world. There is usually a training period of some weeks to allow the different artists to practice and create some test pieces. Sometimes new techniques have to be developed, especially for combinations of 2-D and 3-D (11)."

It seems a fair amount of practice is needed to begin drawing in new styles, even by the most experienced of practitioners.

Through my experiences here, I have also found that it can be mentally troublesome to not have a personal identifying style, leading to a sort of drawing identity crisis. This lack of confidence can often have a negative impact on my work, especially at the start of each project or style developed, when the very style you generate ideas in should be questioned. However, the best solutions seem to arrive when I am able to calm myself down and get into the project, reducing the stress level. On a related note, I have found it important to be okay with the limitations of my current skill set, realizing that the whole of drawing cannot be mastered in a single year (or three); but instead requires continual improvement throughout one's life.

Finally, as a designer, it was difficult for me to let go of the tiny details looking perfect at all times. Not



Fig. 217. Get Home Fatty Mock-up *Brown, 2015*



Fig. 218. Get Home Fatty Gameplay Mock-up *Brown, 2015*

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every drawing you make will be beautiful, and I have found it much healthier to my mental well being to take a more artistic approach, becoming comfortable with failure but continually trying to improve. This perhaps suggests the importance of developing illustration skills on self-initiated projects without the crippling stress of a commercial art setting.

In conclusion, I feel that the completion of this project marks only the beginning for me, and will be the first of many projects to come that utilize a wide range of drawing skills. I look forward to developing many more illustration styles based on the content they depict, to enhance communication in ways that other art forms cannot. This project has rigorously prepared me for a design career visualizing ideas for others, in addition to living a creative life sharing my own personal ideas through drawing and comics.

FUTURE WORK

While working on this project another opportunity presented itself in an interactive studio I was taking with professor Pat Fitzgerald. In it, we were creating interactive experiences that would utilize the new tilt functionality built into tablets. This became the perfect opportunity to expand on George's world by creating a mini-game entitled Get Home Fatty. A selfdirected project that is still in development, this art game is intended to be a form of personal expression while taking advantage of some of the new technical capabilities found within mobile devices. The game uses a tablet's tilt functionality to simulate the shifting weight of a "fatty's" movement as the player tries to "roll" himself home from school. Created as a sort of humorously exaggerated auto-biographical piece, the goal of the game is to race and beat the bus home as it carries your younger brother. You better be quick, because if he's there first, he'll consume the last of the chips for snack and you'll be stuck gnawing on carrot sticks!

This fun project demonstrates, that no matter the medium, when illustration style and content align, a more effective piece of communication is produced.

SIGNIFICANCE OF WORK

The art direction for comic books is not often addressed. I feel this is an oversight on the part of many comics creators. Rather than defaulting to the style of a particular illustrator, or a "house-style," I believe every story should have its own drawing style developed exclusively around it. With the advancing speeds at which artists are able to work through the means of new digital tools, it has become realistically feasible for individual illustrators to develop distinct pictorial vocabularies on a per story basis. This project serves as a case study, exploring what it takes for independent comic book artists to develop a full range of drawing abilities.

Furthermore, the concept can be applied by individual creators to develop a variety of illustration styles in fields outside of comics including: animation, video games, and graphic design. Developing a full range of stylistic skills from photo-realistic depiction, to iconic abstraction, and non-representational abstraction allows an individual to pick and choose which type of representation will best communicate the desired effect. A well-rounded illustrator blurs the boundaries between illustrator and designer in today's digital work environment. An artist-designer is able to think critically about a project in addition to producing the final artwork. They can formulate high concept project goals and ideas in addition to possessing the abilities needed to achieve those goals. The result is an individual creative professional who is capable of working on many different types of visual projects from concept to completion.

GLOSSARY

Animator: an artist who studies and simulates movement, including an artist who makes animated cartoons.

Anime: Japanese animated productions which are usually drawn in a recognizably similar style, similar to manga but in an animated form.

Cartoon: may refer to a simplified drawing or an animation that uses simplified drawings.

Cartoonist: an artist who makes cartoons or comics.

Cintiq: a professional level digitizing tablet with builtin display created and sold by Wacom that excels in translating gestural and pressure sensitivity input to the computer.

Comics Code Authority: a committee established in 1954 to regulate the alleged explicit content in comics for children but also had the paralyzing effects of censoring all artists working in the comics form.

Comix: the term refers to explicitly rated comic books and developed in direct opposition to the Comics Code Authority.

Expressionism: an art movement that emphasized the artist's expression of emotional experience rather than traditional mimesis.

Fleischer Studio: (Fleishcer Stuios, Inc.) was an influential early animation studio founded by brothers Max and Dave Fleischer

Illustration Style: the visual language used to represent something through the act of drawing.

In-betweener: a working position in the animation industry usually given to junior level artists who are to create the many in-between drawings required of full animation based around a senior artist's main pose drawings.

"Inks:" comic industry slang for the stage in the process of creating comics in which penciled images final lines are decided and drawn on top of with ink.

Intuos: one of the most popular digitizing tablets created by Wacom that excel in translating gestural and pressure sensitivity input to the computer.

Manga: Japanese produced comics which are usually drawn in a recognizably similar style, similar to anime but in comic book form.

Mimesis: the representation or imitation of the real world in art

Metamedium: McLuhan's term for the new types of media that are created with the development of new technologies.

"Pencils:" comic industry slang for the stage in the process of creating comics where, after the rough art, more finalized art is drawn in graphite.

Physiognomy: the assessment of a person's character from their outer appearance and facial features, historically considered a science that has since

been disproven. Although, most people agree that a person's face will "wear" in a way that reflects their most commonly used emotions. Also, recent research suggests we unconsciously imitate the facial expressions of those close to us.

Rashomon Effect: contradictory, self serving interpretations of the same event by different people and has been used many times over in plays, film, and television.

Style: a distinctive form of expression, more concerned with how a form of communication is expressed than with the subject matter communicated.

Töpffer's Law: codified to explain how the mind transforms almost any shape into the semblance of a living being by adding subtle clues to expression

Twinning: occurs when both arms or legs of a character are parallel and doing exactly the same thing, eliminating the illusion of life.

ANNOTATED BIBLIOGRAPHY

- Abel, Jessica, and Matt Madden. *Drawing Words & Writing Pictures: Making Comics: Manga, Graphic Novels, and Beyond.* New York: First Second, 2008. Print. Professional cartoonists and teachers, Madden and Abel's first book on creating comics.
- Abel, Jessica, and Matt Madden. *Mastering Comics: Drawing Words and Writing Pictures Continued: A Definitive Course in Comics Narrative*. New York: First Second, 2012. Print. Professional cartoonists and teachers, Madden and Abel's second book on advanced comics creation techniques.
- "Adobe Edge Animate CC." *Edge Animate CC Tutorials*. Adobe Systems Incorporated, n.d. Web. 3 July 2015. https://helpx.adobe.com/edge-animate/tutorials.html. Software manufacturer's training website.
- "Adobe Illustrator CC." *Graphic Design Software*. Adobe Systems Incorporated, n.d. Web. 20 Nov. 2014. http://www.adobe.com/illustrator>. Adobe Illustrator software website.
- "Adobe Photoshop CC." *Photo Editor*. Adobe Systems Incorporated, n.d. Web. 20 Nov. 2014. http://www.adobe.com/photoshop. Adobe Photoshop software website.
- Alexius, Vitaly S. "Entry_200." *Romantically Apocalyptic*. N.p., n.d. Web. 24 Sept. 2014. http://romanticallyapocalyptic.com/>. Site featuring the online graphic novel.
- Amidi, Amid. *Cartoon Modern: Style and Design in Fifties Animation*. San Francisco: Chronicle, 2006. Print. Prominent animation writer Amidi's survey of popular animation styles in the 1950s.
- Andrae, Thomas. Carl Barks and the Disney Comic Book: Unmasking the Myth of Modernity. Jackson: U of Mississippi, 2006. Print. Biography on "the Duck Man" and his history with the Disney comics.
- Bacher, Hans P. *Dream Worlds: Production Design in Animation*. Burlington, MA: Focal, 2008. Print. Industry veteran Han Bacher explains the production design process for his work on various feature films.
- Ball, David M., and Martha B. Kuhlman. *The Comics of Chris Ware: Drawing Is a Way of Thinking*. Jackson: U of Mississippi, 2010. Print. A wonderful collection of essays written about Chris Ware's work.

- Barks, Carl. *Walt Disney's Donald Duck and the Golden Helmet*. Sydney: W.G. Publications, 1953. Print. A Disney comic illustrated by the great Carl Barks.
- Baskinger, Mark, and William Bardel. *Drawing Ideas: A Hand-drawn Approach for Better Design*. New York: Watson-Guptill, 2013. Print. Bardel and Baskinger's approach to design emphasizing drawing and explaining theory, process, technique for better drawing in design.
- Beaty, Bart, and Stephen Weiner. *Critical Survey of Graphic Novels: History, Theme, and Technique*. Ipswich, MA: Salem, 2013. Print. A textbook on comics with great information on comics history, story themes, and creation techniques.
- Blair, Preston. *Cartoon Animation*. Tustin, CA: W. Foster Pub., 1994. Print. A great how-to draw book that clearly explains the ins and outs of the "surrealist Disney style."
- Block, Bruce A. *The Visual Story: Creating Visual Structure in Film, Television, and New Media*. Oxford: Focal, 2008. Print. An excellent book explaining the basics of visual storytelling and is applicable to many disciplines.
- Carrier, David. *The Aesthetics of Comics*. University Park: Pennsylvania State UP, 2000. Print. The first book by an analytic philosopher on the aesthetic problems posed by comics.
- Chiarello, Mark, and Todd Klein. *The DC Comics Guide to Coloring and Lettering Comics*. New York: Watson-Guptill Publications, 2004. Print. Chiarello and Klein explain the tools and techniques for coloring and lettering comics.
- Clevinger, Brian. "Nuklear Power » 8-Bit Theater." Nuklear Power RSS. N.p., n.d. Web. 24 Sept. 2014. http://www.nuklearpower.com/8-bit-theater/. Site containing the entire web comic series.
- Cohn, Neil. *The Visual Language of Comics: Introduction to the Structure and Cognition of Sequential Images*. New York: Bloomsberry Academic, 2013. Print. Through a semiotics viewpoint, Cohn dissects and discusses the visual language of comics in this approachable academic text.
- Czajkowski, Michelle. "AVA'S DEMON." *AVA'S DEMON.* N.p., n.d. Web. 24 Sept. 2014. http://avasdemon.tumblr.com/. Site featuring the recurring webcomic.
- Denbleyker, Rob, Dave McElfatrick, Kris Wilson, and Matt Melvin. "Explosm.net Home of Cyanide & Happiness." *Explosm Feedburner RSS*. N.p., n.d. Web. 24 Sept. 2014. http://explosm.net/. Site featuring the recurring strip.
- Dowd, D.B. "Strands of a Single Cord: Comics & Animation." *Strips, Toons, and Bluesies: Essays in Comics and Culture.* New York, NY: Princeton Architectural, 2004. Print. Dowd's essay on the related histories of comics and animation in the printed collection from Dowd and Hignite.

- Ehasz, Aaron. "Reincarnation." *Futurama*. Dir. Peter Avanzino. 8 Sept. 2011. Television. An episode of the animated series with an overall story arc told in three segments, each in a different style of animation.
- Eisner, Will. Comics and Sequential Art: Principles and Practices from the Legendary Cartoonist. New York: W.W. Norton, 2008. Print. This is one of the first and best books on the principles and fundamentals of comics from one of its greatest practitioners.
- Eisner, Will. *Graphic Storytelling and Visual Narrative: Principles and Practices from the Legendary Cartoonist.* New York: W.W. Norton, 2008. Print. This is one of the first and best books on the principles and fundamentals of visual storytelling from one of its greatest practitioners.
- Eissen, Koos, and Roselien Steur. *Sketching the Basics*. Amsterdam: BIS, 2011. Print. Koos and Steur explain theory, tools, and techniques for industrial design sketching.
- Farazmand, Reza. "Poorly Drawn Lines." *Poorly Drawn Lines*. N.p., n.d. Web. 15 June. 2015. http://poorlydrawnlines.com/. The site featuring the recurring strip.
- "For Desktop." *Autodesk Sketchbook*. Autodesk, Inc., n.d. Web. 19 Nov. 2014. https://www.sketchbook.com/. Manufacturer's website for the Sketchbook software.
- Gallagher, Fred. "Megatokyo." *MegaTokyo*. N.p., n.d. Web. 24 Sept. 2014. http://megatokyo.com/ The site featuring the recurring strip.
- Glitschka, Von. *Vector Basic Training: A Systematic Creative Process for Building Precision Vector Artwork.* Berkeley, CA: New Riders, 2011. Print. Illustrative designer, Von Glitschka demonstrates his working processes for a variety of vector-based illustrations.
- Gombrich, E.H. *Art and Illusion: A Study in the Psychology of Pictorial Representation*. London: Phaidon, 2002. Print. An excellent study on the psychology behind levels of realistic representation through the history of art.
- Gorman, Zac. "Magical Game Time." *Magical Game Time*. N.p., n.d. Web. 24 Sept. 2014. http://magicalgametime.com/>. Gorman's blog featuring his comics and other art.
- Guigar, Brad, Dave Kellett, Scott Kurtz, and Kris Straub. *How to Make Webcomics*. Berkeley, CA: Image, 2008. Print. A practical book about the production of webcomics by prominent web cartoonists.
- Guptill, Arthur L. *Rendering in Pen and Ink*. New York: Watson-Guptill Publications, 1997. Print. Guptill's classic text on drawing with pen and ink.
- Hartley, Lucy. *Physiognomy and the Meaning of Expression in Nineteenth-century Culture*. Cambridge: Cambridge UP, 2005. Print. A study on the popular science from

the nineteenth century.

- Harvey, Robert C. *The Art of the Comic Book: An Aesthetic History*. Jackson: U of Mississippi, 1996. Print. Harvey's second book on the history of comics focusing more specifically on the comic book format.
- Harvey, Robert C. *The Art of the Funnies: An Aesthetic History*. Jackson: U of Mississippi, 1994. Print. Harvey's first book on comics defines the term and discusses the history of the form with a focus on the comic strip.
- Hauser, Tim. *The Art of Up.* San Francisco: Chronicle, 2009. Print. A making of book with concept art and commentary for Pixar's feature-length animated film, "Up."
- Hedgpeth, Kevin, and Stephen Missal. *Exploring Drawing for Animation*. Clifton Park, NY: Thomson/Delmar Learning, 2004. Print. Exploration of drawing as it relates to animation.
- Heer, Jeet, and Kent Worcester. *A Comics Studies Reader*. Jackson: U of Mississippi, 2009. Print. A great collection of scholarly essays written about comics.
- Heller, Steven, and Seymour Chwast. *Graphic Style: From Victorian to New Century.* New York: Abrams, 2011. Print. A great illustrated reference book I used for clarifying my thoughts and ideas about art/design movements.
- Holmes, Mike. "THAT THING YOU DREW." *THAT THING YOU DREW.* N.p., n.d. Web. 25 Sept. 2014. http://www.mikeholmesdraws.com/>. Artist's blog site featuring a lot of his multi-styled self portraits.
- Horne, Emily, and Joey Comeau. "A Softer World: 1155." *A Softer World:* 1155. N.p., n.d. Web. 24 Sept. 2014. http://www.asofterworld.com/. The creator's website featuring the comic strip.
- Janson, Klaus. *The DC Comics Guide to Inking Comics*. New York: Watson-Guptill Publications, 2003. Print. Klaus explains his tools and techniques for inking comics.
- Janson, Klaus. *The DC Comics Guide to Penciling Comics*. New York: Watson-Guptill Publications, 2002. Print. Klaus explains the tools and techniques of penciling comics.
- Kandinsky, Wassily, and Hilla Rebay. *Point and Line to Plane*. New York: Dover Publications, 1979. Print. Research on the formal visual elements from the influential Wassily Kandinsky.
- Kellett, Dave. "Sheldon Comic Strip: Daily Webcomic by Dave Kellett." *Sheldon*. N.p., n.d. Web. 24 Sept. 2014. http://www.sheldoncomics.com/>. Site featuring the recurring strip.
- Kindt, Matt, Marco Rudy, Val Staples, and Clayton Cowles. Marvel Knights Spider-man:

- *Fight Night*. New York, NY: Marvel Enterprises, 2014. Print. This is a trade paperback collecting the full Marvel Knights Spider-man story and uses numerous experimental art styles.
- Krahulik, Mike, and Jerry Holkins. "[PA Comic]." *Penny Arcade*. N.p., n.d. Web. 24 Sept. 2014. http://www.penny-arcade.com/comic. Site featuring the extremely popular recurring strip.
- Kunzle, David. *Father of the Comic Strip: Rodolphe Töpffer*. Jackson: U of Mississippi, 2007. Print. A comprehensive look at an influential early comics creator who developed theories based on his "picture stories."
- Kunzle, David, and Rodolphe Töpffer. *Rodolphe Töpffer: The Complete Comic Strips.*Jackson: U of Mississippi, 2007. Print. A printed comprehensive collection of Töpffer's work compiled, translated, and annotated by Kunzle.
- Kurtz, Scott. "PVP." *PVP Home*. N.p., n.d. Web. 24 Spet. 2014. http://www.pvponline.com/>. Site featuring the recurring strip.
- Lee, Jen. "THUNDERPAW_INTRO." *THUNDERPAW_INTRO*. N.p., n.d. Web. 24 Sept. 2014. http://thunderpaw.co/comic/ The site featuring the comic .gif style stories.
- Lee, Stan, and John Buscema. *How to Draw Comics the Marvel Way*. New York: Simon and Schuster, 1978. Print. The influential 'how to' book explaining the way marvel drew comics in the late 70s.
- Ligon, Scott. *Digital Art Revolution: Creating Fine Art with Photoshop.* New York: Watson-Guptill, 2010. Print. Author's theories behind digital art, processes and techniques within Adobe Photoshop.
- Lowe, John. Foundations in Comic Book Art: Fundamental Tools and Techniques for Sequential Artists. New York: Watson-Guptill Publications, 2014. Print. Savannah College of Art and Design instructor John Lowe's book on the tools and techniques of comic book artists.
- Lowe, John. *Working Methods: Comic Creators Detail Their Storytelling and Artistic Processes*. Raleigh, NC: TwoMorrows Pub., 2007. Print. Comics professor Lowe, documents and discusses the creative processes of working comic book artists.
- Madden, Matt. 99 Ways to Tell a Story: Exercises in Style. New York: Chamberlain Bros., 2005. Print. A unique study in comics style, telling the same single page story in 99 different ways.
- Male, Alan. *Illustration: A Theoretical and Contextual Perspective*. Lausanne: AVA Academia, 2007. Print. An interesting theoretical examination of the illustration discipline with examples.

- Martin, Gary, and Steve Rude. *The Art of Comic-book Inking*. Milwaukee, OR: Dark Horse Comics, 1997. Print. Professional comic book inker, Martin explains his tools and techniques.
- Martin, George R.R. "A Quote by George R.R. Martin." *Goodreads*. Good Reads, n.d. Web. 15 July 2015. http://www.goodreads.com/quotes/701568-you-don-t-just-have-people-who-wake-up-in-the.
- Mateu-Mestre, Marcos. Framed Ink: Drawing and Composition for Visual Storytellers. Culver City, CA: Design Studio, 2010. Print. Influential animation and graphic novel artist Mateu-Mestre explains the considerations that should be taken when drawing visual stories.
- McCacken, Craig, and Amy K. Rogers. "The Bare Facts." *The Powerpuff Girls*. Dir. John McIntyre and Genndy Tartakovsky. Cartoon Network. 20 Jan. 1999. Television. In this episode, the girls tell the same story in different animation styles based on their individual personalities.
- McCarthy, Helen, and Osamu Tezuka. *The Art of Osamu Tezuka: God of Manga*. New York: Abrams ComicArts, 2009. Print. Comprehensive book on the works of Osamu Tezuka.
- McCay, Winsor. *Little Nemo in Slumberland: So Many Splendid Sundays*. Ed. Peter Maresca. Palo Alto, CA: Sunday, 2005. Print. A full size reprinting anthology of McCay's Little Nemo in Slumberland with annotations by Maresca about McCay's life.
- McCloud, Scott. *Making Comics: Storytelling Secrets of Comics, Manga and Graphic Novels*. New York: Harper, 2006. Print. McCloud's most recent book breaking down how comics are made, giving his own tips and advice.
- McCloud, Scott. *Reinventing Comics: How Imagination and Technology Are Revolutionizing an Art Form.* New York: Perennial, 2000. Print. McCloud's second book, part manifesto on what he thinks needs to change for comics to grow and part McCloud's thoughts on digital technology's impact on comics.
- McCloud, Scott. *Understanding Comics: The Invisible Art*. New York: HarperPerennial, 1993. Print. McCloud's first highly influential book about how comics work written in comic book form.
- McCloud, Scott. *Zot!: The Complete Black-and-white Stories, 1987-1991*. New York: HarperPaperbacks, 2008. Print. The influential comics theorist's major comic book trade paperback.
- McKee, Robert. Story: Substance, Structure, Style, and the Principles of Screenwriting. London: Methuen, 1999. Print. McKee's approach to theory and practice for creating stories.

- McShane, Kevin. "Cartoon Kevin." *Cartoon Kevin.* N.p., n.d. Web. 25 Sept. 2014. http://cartoonkevin.com/>. Artist's website featuring his 100 different animation styled self-portraits.
- Meskin, Aaron, and Roy T. Cook. *The Art of Comics a Philosophical Approach*. Malden, MA: Wiley-Blackwell, 2012. Print. A collection of scholarly essays on the various philosophies of comics.
- Molotiu, Andrei, ed. *Abstract Comics*. Seattle: Fantagraphics, 2009. Print. A mesmerizing collection of abstract comics from many prominent cartoonists.
- Munroe, Randall. "xkcd: En Garde." xkcd: En Garde. N.p., n.d. Web. 24 Sept. 2014. http://www.xkcd.com/ The creator's site featuring the recurring strip.
- North, Ryan. "Dinosaur Comics!" Dinosaur Comics. N.p., n.d. Web. 24 Sept. 2014. http://www.qwantz.com/index.php. The creator's site featuring the recurring strip.
- Olpe, Peter. *Drawing as Design Process: Courses, Themes and Projects at the Basel School of Design*. Basel: Verlag Niggli, 2006. Print. Book discussing the importance and use of drawing at the influential Basel School of Design in Basel, Switzerland.
- Pentak, Stephen, and David A. Lauer. *Design Basics*. Boston, MA: Wadsworth, Cengage Learning, 2012. Print. A college textbook on the basics of visual design.
- Pipes, Alan. *Drawing for Designers*. London: Laurence King, 2007. Print. An in-depth explanation of the ways designer's draw, their various traditional and digital tools, processes, and presentation techniques.
- Polson, Tod. *The Noble Approach: Maurice Noble and the Zen of Animation Design*. San Francisco, CA: Chronicle, 2013. Print. Polson combines the teachings of the influential animation designer Maurice Noble in this design book for animation.
- Potts, Carl, and Jim Lee. *The DC Comics Guide to Creating Comics: Inside the Art of Visual Storytelling.* New York: Watson-Guptill Publications, 2013. Print. Potts explains the process, tools, and techniques of creating comics.
- Raeburn, Daniel. *Chris Ware*. New Haven, CT: Yale UP, 2004. Print. Raeburn's interesting analysis of Ware's work.
- Redfield, James W. *Comparative Physiognomy; Or, Resemblances between Men and Animals*. New York: Redfield, 1852. Google Play. Web. <play.google.com>. An academic text from the heyday of physiognomy's popularity.
- Richmond, Tom. *The Mad Art of Caricature!: A Serious Guide to Drawing Funny Faces.*Burnsville, MN: Deadline Demon Pub., 2011. Print. A how-to book on caricature from the great practitioner.

- Robertson, Scott, and Thomas Bertling. *How to Draw: Drawing and Sketching Objects and Environments from Your Imagination*. Culver City, CA: Design Studio Press, 2013. Print. Influential entertainment designer and teacher Scott Robertson's book on tools and techniques of drawing with a focus on perspective and line drawing.
- Robertson, Scott. *In the Future: Entertainment Design at Art Center College of Design.* Culver City, CA: Design Studio, 2006. Print. Design work with examples and commentaries from the first students in the Entertainment Design program at Art Center College of Design.
- Sabin, Roger. *Comics, Comix & Graphic Novels: A History of Comic Art.* London: Phaidon, 1996. Print. Sabin's take on the history of comic art.
- Samara, Timothy. *Drawing for Graphic Design: Understanding Conceptual Principles and Practical Techniques to Create Unique, Effective Design Solutions.* Beverly, MA: Rockport, 2012. Print. Prominent designer and writer Samara's examination of drawing for graphic design.
- Saunders, Bryan L. "Bryan Lewis Saunders DRUGS." *Bryan Lewis Saunders*. N.p., n.d. Web. 25 Sept. 2014. http://bryanlewissaunders.org/drugs/. Artist website showcasing his work including his drug induced self portrait series.
- Sjölén, Klara, and Allan MacDonald. *Learning Curves: An Inspiring guide to Improve Your Design Sketch Skills*. Sweden: KEEOS Design, 2011. Print. Theory and technique for drawing better industrial design solutions.
- Smolderen, Thierry. *The Origins of the Comics: From William Hogarth to Winsor McCay*. English ed. Jackson: U of Mississippi, 2014. Print. A unique look at historically early comics.
- *Snow White and the Seven Dwarfs.* By Walt Disney. Walt Disney Productions, 1937. DVD. The first feature-length animated film.
- Solarski, Chris. *Drawing Basics and Video Game Art: Classic to Cutting-Edge Art Techniques for Winning Game Design*. New York: Watson-Guptill, 2012. Print. Solarski explains the art production process for video games with reference and in relation to historic art masters.
- Spiegelman, Art. *Maus: A Survivor's Tale*. New York: Pantheon, 1986. Print. Spiegelman's Pulitzer Prize winning graphic novel.
- Spiegelman, Art. *MetaMaus*. New York: Pantheon, 2011. Print. A comprehensive collection on the making of Maus with Art answering in print reader's most asked questions.
- Stevens, R. "Diesel Sweeties." *Diesel Sweeties by @rstevens*. N.p., n.d. Web. 24 Sept. 2014. http://www.dieselsweeties.com/>. The site featuring the recurring strip.

- Stewart, Cameron, Brenden Fletcher, and Babs Tarr. *Batgirl* #35. N.p.: DC Comics, n.d. Print. Ser. 2011 Batgirl #35 comic book in which she debuts her new costume and is illustrated in a new style, better representative of her character.
- Stewart, Mary. *Launching the Imagination: A Comprehensive Guide to Basic Design*. Boston: McGraw-Hill, 2008. Print. A college textbook on the basics of visual design.
- Stewart, Yale. "Jl8: A Webcomic." *JL8: A Webcomic*. N.p., n.d. Web. 24 Sept. 2014. http://jl8comic.tumblr.com/. Artist's blog featuring the recurring strip and other works.
- Straub, Kris. "Starslip by Kris Straub." *Starslip by Kris Straub*. N.p., n.d. Web. 24 Sept. 2014. http://starslip.chainsuit.com/. The artist's site featuring the recurring strip.
- Stripped. Dir. Dave Kellett and Frederick Schroeder. Prod. Dave Kellett and Frederick Schroeder. Perf. Bill Watterson, Jim Davis, Cathy Guisewite. Sequntial Films, Inc., 2014. DVD. A feature length documentary on comics, the artist's who make them, and the medium's move from print to digital.
- Tezuka, Osamu. *Buddha*. New York: Vertical, 2006. Print. Volume 1 of Tezuka's exaggerated retelling of the life of Buddah.
- "The Largest Creative and Tech Training Library on the Planet. Learn to Create Stunning Movies, Games, Projects and More with Professional Video Tutorials." *Tutorials & Training for Creative Professionals*. Digital-Tutors, n.d. Web. 17 Nov. 2014. http://www.digitaltutors.com/>. Online paid subscription based creative software training website.
- Thomas, Frank, and Ollie Johnston. *Disney Animation: The Illusion of Life*. New York: Abbeville, 1981. Print. One of the greatest books on the discipline of animation written by Disney's master artists.
- *Up.* Dir. Pete Docter. Walt Disney Studios & Pixar Animation, 2009. DVD. Critically acclaimed 3d animated film.
- Vilppu, Glenn V. *The Vilppu Drawing Manual*. Acton, CA: Vilppu Studio, 1994. Print. Vilppu's handbook for drawing the human form, used by many animation professionals.
- Vogler, Christopher. *The Writer's Jouney: Mythic Structure for Writers*. Studio City, CA: Michael Wiese Productions, 1992. Print. Vogler's book on narrative theory and structure based on Joseph Campbell's hero's journey.
- Vonnegut, Kurt. *Bagombo Snuff Box: Uncollected Short Fiction*. New York: G.P. Putnam's Sons, 1999. Print. A collection of Vonnegut's short fiction writing with creative writing tips in the introduction.

- "Wacom Global." *Discover Wacom*. Wacom, 2012. Web. 18 Nov. 2014. http://www.wacom.com/en/us/>. Wacom's commercial website, includes product information and manuals.
- Ware, Chris. *Building Stories*. New York: Pantheon, 2012. Print. An experimental comic that follows the lives of the people that live in an apartment building over time.
- Ware, Chris. *Jimmy Corrigan: The Smartest Kid on Earth*. New York: Pantheon, 2000. Print. Ware's comic that follows the life of Jimmy Corrigan as he meets his father for the first time.
- Webster, Kyle T. "Kyle T Webster." *Gumroad*. Gumroad, n.d. Web. 20 Nov. 2014. https://gumroad.com/kyletwebster>. Webster's Photoshop brush pack is available for purchase on this site.
- Webster, Kyle T. "Kyle T Webster." *Kyle T Webster RSS*. N.p., n.d. Web. 20 Nov. 2014. http://www.kyletwebster.com/>. Webster's personal portfolio site.
- Weiner, Zach. "Saturday Morning Breakfast Cereal." *SMBC RSS*. N.p., n.d. Web. 24 Sept. 2014. http://www.smbc-comics.com/>. Site featuring the recurring strip.
- Wells, Paul, Joanna Quinn, and Les Mills. *Drawing for Animation*. Lausanne, Switzerland: AVA Academia, 2009. Print. The theory and practice of drawing as it relates to animation.
- "What Do You Want to Learn Today?" *Online Video Tutorials & Training*. lynda.com, n.d. Web. 17 Nov. 2014. http://www.lynda.com/>. Online paid subscription based software training website.
- "What Is Narrative Theory?" *Project Narrative*. The Ohio State University, Department of English, n.d. Web. 04 Nov. 2014. https://projectnarrative.osu.edu. OSU's Project Narrative site.
- Williams, Freddie E., II. *The DC Comics Guide to Digitally Drawing Comics*. New York: Watson-Guptill Publications, 2009. Print. Williams explains his digital comic creation techniques when creating work for DC comics.
- Williams, J. H., W. Haden. Blackman, and Trevor McCarthy. *Batwoman #24*. N.p.: DC Comics, n.d. Print. Ser. 2011. Batwoman #24 comic book in which the gritty illustrated style enhances the content of the story.
- Williams, Richard. *The Animator's Survival Kit.* New York: Faber and Faber, 2009. Print. One of the best and most recommended books on the animation process.
- Wilson, G. W. *Ms. Marvel Infinite #1*. N.p.: Marvel Characters Inc, 2014. Digital. Distributed through Comixology, this digital comic is created exclusively for digital display and read through a "native guided view."

- Wolk, Douglas. *Reading Comics: How Graphic Novels Work and What They Mean.*Cambridge, MA: Da Capo, 2007. Print. Wolk's take on how comics work with great information on drawing style considerations.
- Wood, Ashley, Shane McCarthy, El Torres, Ashley Wood, Chris Bolton, and Yair Herrera. *Zomnibus*. San Diego, CA: IDW, 2012. Print. A collection of zombie comics.
- Woodward, Ryan. "HOME." *Ryan Woodward Art and Animation*. N.p., n.d. Web. 25 Sept. 2014. http://ryanwoodwardart.com/>. Woodward's portfolio site showing his work and short biography.
- Woodward, Ryan. "Official Bottom of the Ninth Website." *Official Bottom of the Ninth Website*. N.p., n.d. Web. 25 Sept. 2014. http://www.bottom-of-the-ninth.com/>. Woodward's animated graphic novel web site.