

Hypernatural: A Hybrid Media Approach to Opening Title Sequence Design

By

Nicholas Helton

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Patrick Fitzgerald, Associate Professor of Art and Design & Committee Chair

Katherine Diuguid, Assistant Professor of Art and Design

Marc Russo, Assistant Professor of Art and Design & Director of Graduate Programs

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Abstract

This thesis describes the creation of an opening title sequence for the 2013 Art to Wear (A2W) fashion show. The goal of the sequence was to capture the “hypernatural” theme and dynamic, collaborative, and innovative spirit of the show, through a hybrid media approach. My research includes the documentation and discussion of influences and precedents in areas of cinema, animation, fashion film/photography, philosophy, natural phenomenon, and the merging of science and technology. As a result of this research, my thesis offers thoughts concerning collaboration, the process and techniques used to create the final title sequence, and the fusion of fashion, animation, and cinema using digital and non-digital materials.

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Introduction

Through my research, I want to better understand how technology has transformed our relationship with the natural world. According to scientist and theorist Koert van Mensvoort, we now live in a world of the hypernatural. As we continue to manipulate our natural environment to better suit our needs and perceptions, the shift towards the hypernatural has caused us to question the concept of “real” nature (“Hypernature”). The hypernatural world we experience, for better or worse, results from the blend of the natural world with technological innovation and human ingenuity. In addition to changing our perception of nature, technology has also revolutionized disciplines in art and design and had a profound effect on the language of the moving image.

This paper will provide the framework for my final project and document the process of creating a hypernatural themed opening title sequence for the Art to Wear (A2W) fashion show which will take place in the spring of 2013. The A2W fashion show is an annual collaborative event involving students from North Carolina State’s College of Design and College of Textiles. In order to create the A2W title sequence, my research focuses on various ways artists, title sequence designers, fashion photographers, filmmakers, and animators have used elements of art and design and principles in animation and film theory to connect with an audience and communicate content. Other topics of discussion include the history and contemporary use of hybrid media and a survey of artists in a range of disciplines who have visually explored the concept of transformation through the human figure while utilizing elements of the hypernatural, hyper real, or surreal in their work. During the course of this paper, I will also discuss my inspiration in areas of film, animation, fashion film/photography, philosophy, natural phenomenon, and the merging of science and technology.

Project Statement

“Look around your room, the most natural part of it is you.” This statement, made by Dutch artist, scientist, and theorist Koert van Mensvoort, has the ring of truth (Mensvoort, “Exploring” 1). Ultimately this statement provokes us to redefine our conception of the natural verses the artificial (2). Human beings are increasingly modifying, enhancing, and simulating nature. Our traditional concept of the natural world, which includes trees, rivers, plants, animals, genetics, the molecular world, and climate, is being progressively influenced by our attempts to control it (1). The products of manufactured human culture are all around us. You do not have to look far to realize that most of us live in a world of enhanced simulations and modifications. After all, what is truly natural in a world of computers, cell phones, and genetically modified plants and animals? To discover this, you simply have to turn on your television or computer, flip through a magazine, or take a trip to the local grocery store.

For example, look at the latest clothing line on the H&M™ website. The women modeling the clothing are actually computer-generated 3D models with digitally pasted heads from photos of real women. Have you ever heard of a Pineberry™? It is a cross between a pineapple and a strawberry that was developed in a lab by a Dutch company named VitalBerry BV (“Hypernature”). Perhaps you’d like to pick up a dozen rainbow tulips™. By the way, exactly what is a labradoodle (Fig. 1)?



Fig. 1. A Pineberry™, Rainbow Tulip™, and a Labradoodle

These are all examples of the concept of hypernature. Hypernature is an “exaggerated simulation of a nature that never existed. It’s better than the original, a little bit prettier and slicker, safer, and more convenient” (“Hypernature”). At least, this is a nature that never existed before humans attempted to redesign it (Gerritzen, Mensvoort, and Schwarz 124). In this sense, the hypernatural materializes in the merging of what is “born” (that which is produced by nature) and what is “made” (that which is produced by human culture) (“Hypernature”). Through developments in nanotechnology and bioengineering, we are using our technological advancements to enhance and extend our lives and create hypernatural versions of ourselves that are stronger, more efficient, smarter, and genetically improved. One could say that the desire to overcome the limitations imposed by the laws of nature is an inherent part of human nature. These ideas have led me to consider how technology is changing the way we, human beings, view ourselves, our place in nature, and the future of our species.

Developments in digital technology have had a profound effect on the language of the moving image. The advent of digital technology and computer software integration has given designers new fluid and efficient tools for manipulating and mixing what was formerly separate media (Manovich, “Understanding” 37). This has given rise to a new form of hybrid media which combines elements of live-action cinematography, graphic illustration, still photography, two-dimensional (2D) animation, three-dimensional (3D) computer animation, sound, and typography (*The Language* 52). This hybrid approach can be found in a variety of creative disciplines in both a design and fine art context. For my final project, I am linking hybrid media technology with the concept of hypernature by creating a short hybrid media opening title sequence combining elements of animation, video, graphic arts, fashion, typography, and sound.

In the spring of 2013, the annual Art to Wear (A2W) fashion show will feature collections of hypernature inspired designs from North Carolina State University (NCSU) student fashion designers. My ultimate aim is to create an original concept based on the hypernatural theme for an opening title sequence that will introduce the A2W fashion show. The title sequence will

explore the boundary between what is “born” and what is “made” by enhancing, layering, juxtaposing, or transforming the human figure along with natural elements through a process of analog and digital manipulation. The target audience will be a diverse collection of audience members from NCSU, the Triangle area, and members of the fashion, motion graphics, and film community.

Historical and Contemporary Influences

In recent years, there have been a number of exciting developments and innovative breakthroughs in areas of opening title sequence design, experimental video, animation, motion graphics, and fashion film and photography. It is important that I place my work in context with other artists and designers who have explored similar themes, materials, or processes and discover those who have made unique contributions to their fields. To aid me in my pursuit, I have researched the history of the A2W show, opening title sequence design, motion graphics, and the contemporary use of hybrid media in a variety of disciplines. In addition, I have learned from artists, animators, filmmakers, and photographers who have visually represented the concept of transformation through the human figure and utilized elements of the hypernatural, hyper real, or surreal in their work.

Visual Media Hybridization

“The digital process has empowered individual forms of visual expression and has resulted in a myriad of mutated moving image forms” (*Onedotzero* 13).

My artistic training stems from traditional fine art with an emphasis in painting, drawing, and printmaking. Over the past few years, I have incorporated digital tools into my artistic process in an effort to integrate my love of art, animation, film, visual storytelling, and music in an expressive and accessible format. During my time in the College of Design, I have created both animated and live-action short films from concept to completion while paying attention to the expressive potential of each medium. I am now working towards synthesizing my traditional and digital skills in singular, mixed-media work.

This idea can be linked to Lev Manovich’s concept of “visual media hybridization” (*The Language* 38). In the mid-1990s, a revolution occurred when the development of non-linear video editing software and increasing design software compatibility gave designers the ability

to integrate previously separate media (“Understanding” 38). During this time, compositing software like Adobe After Effects™ (AE) transformed moving-image culture by giving designers the power to mix a variety of moving image media including live-action cinematography, graphics, still-photography, 2D animation, 3D computer animation, typography, and sound into a single “shared” composition (*The Language* 38).

By the end of the 1990s, these technological advances helped create a new visual language of hybrid media (“Understanding” 41). Today, hybrid media visualizations have become the norm and are clearly visible in areas of film, television programming and advertisements, music videos, and experimental fine art (41). The continued integration of media through non-linear editing and compositing software has further blurred the boundaries between design disciplines and allowed artists to give form to new visions that were not previously possible to visualize (*Motion Blur* 13). New approaches to storytelling through a wide range of styles that are not easily classifiable have signaled the emergence of a new breed of artist known as the “exploded filmmaker” (13). This type of filmmaker blends multiple disciplines by combining an array of media of their choosing (13). In addition, digital tools and software have become much more affordable and have thus given individual artists and smaller studios the chance to compete with the larger studios that previously dominated the motion graphics design landscape (Manovich, “Understanding” 43).

Hybrid Media in Art and Design

The blending of media is often a predominant feature in areas of motion graphics and title sequence design. Studios including Digital Kitchen (DK) and Prologue Films incorporate a wide range of mixed-media in their projects. One of my favorite title sequences produced at DK is Paul Matthaeus and Matt Mulder’s opening for the television show *Kingdom Hospital* (2004). The piece is inspired by the surreal photography of Jerry Uelsmann (a very influential photographer who uses the process of photomontage) (Drate, Robbins, and Salavetz 36). Photomontage involves joining multiple photographs into one image which often produces a surreal illusion (36). It is not surprising that this technique was used frequently by Surrealist art

pioneers like Max Ernst. Both Ernst and Uelsman began creating their photomontages long before the invention of Adobe Photoshop™ or compositing software like After Effects (AE). The illusions in Uelsman's photographs are created completely in the darkroom using film techniques rather than pixels. While working with the photographer, DK began experimenting with methods of adding motion to his catalog of still images (Fig. 2).



Fig. 2. *Kingdom Hospital* opening title sequence, 2004

To accomplish this, they broke his composited photographs into separate parts and tried to figure out what “could be animated and what had to be re-shot to emulate the original” (Drate, Robbins, and Salavetz 36). According to creative director Paul Matthaeus, the success of the project depended on the seamless integration of still images, live action, stock footage, visual effects, and 3D/CG (36). The result is a powerful mix of dark and striking imagery given new life through subtle motion. The atmosphere evoked by the layering of textural elements, lighting, sound, and transitions from one image to the next is particularly impressive. This type of hybridization of media can also be found in the world of experimental video art.

In a fine art context, a great example of an experimental hybrid approach can be found in the work of animator and video artist Takeshi Murata. I am attracted to Murata's work because it has a loose painterly quality that constantly shifts between abstraction and representation. His work is decidedly non-narrative and seems to be more about the experience of the movement of color, form, and sound through time and space. His process and methods are diverse and range from colorful 2D frame-by-frame or computer generated abstract animations to highly distorted yet controlled manipulations of appropriated video loops. In works like *Monster Movie* (2005), he manipulates digital compression glitches or flaws in a video loop of a vintage horror film using a process known as "datamoshing" (Fig. 3) ("Electronic Arts").



Fig. 3. Takeshi Murata's *Monster Movie*, 2005

Through this process, the manipulated looping video gives the viewer repeated glimpses of strange monsters that quickly become distorted swells of organic abstractions. The pulsing quality and fluid transformative movements in this work are very hypnotic when combined with the droning rhythms of the music that accompany it. I agree with Lev Manovich when he describes Murata's work as having a "distinctly biological" feel ("Understanding" 40). The abstracted patterns originate from the monstrous bodies in the video and dissolve into a flowing digitized body. About halfway through *Monster Movie*, you get a sense of zooming infinitely into the imagery. I think this effect is created through the use of repetition in the video loops in combination with the animated patterns generated by the pixel distortions. Murata's work is reflective of the idea of the "exploded filmmaker" because he pushes the

boundary of pure filmmaking in his sensory based manipulations of appropriated video. I am attracted to the shifting nature of Murata's work, the tension it generates, and the way he blurs the boundary between the organic and the digital. This is a concept that I would like to consider exploring in my own work.

Early Motion Graphics

Hybrid media has revolutionized the field known as motion graphics. In recent years, the description of motion graphics has evolved from a primary association with animated abstract shapes. Motion graphics evolved definition depicts an exciting medium that involves combining elements of advertising, cinematography, animation, editing, storytelling, graphic design, and typography for use in film, television, the web, or mobile devices. Motion graphics has roots in static graphic design and the growth of the discipline owes a debt to the experimental film pioneers of the 1920s including Walter Ruttmann and Hans Richter (*Krasner, Motion Graphic Design: Applied History 9*). Both Ruttmann and Richter made abstract experimental animations using basic shapes in an effort to explore the interaction of form, movement, and sound (Fig. 4) (9).

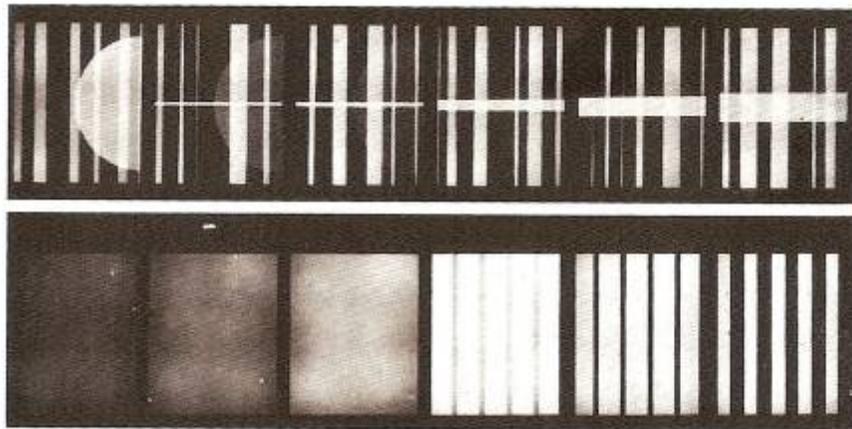


Fig. 4. Walter Ruttmann's animation in *Opus IV*, 1924

In the late 1920s, Richter went on to make films including *Ghosts Before Breakfast* (1928), which has elements of the surreal (9). In *Ghosts Before Breakfast*, Richter plays with illusions by

mixing live-action film with stop-motion animation techniques to create strange interactions between people and objects. For example, in one scene a man's head separates from his body and floats around inside of a bullseye on a target (Fig. 5).



Fig. 5. Surrealism in *Ghosts Before Breakfast*, 1928

Opening Title Sequence Design

In the 1950s, the medium of motion graphics was essentially born during the development of animated film titles in the motion picture industry (Krasner, *Motion Graphic Design and Fine Art* 36). In the mid-1990s, the opening title sequence industry was revitalized and has since received more recognition as a valid art form (36). This is due, in part, to revolution that occurred with the advent of non-linear editing and compositing software, like Adobe After Effects™ (Manovich, "Understanding" 37). In relation to a film, the title sequence has an important role to play. It is the first contact the audience has with the film and it needs to connect with the audience on an emotional level, set the tone of the story, and draw the audience into the world envisioned by the filmmaker (Drate, Robbins and Salavetz 21). During the past twenty years, motion graphics in the context of film title sequence design has generally involved the integration of graphic design, film/video, and photographic technology. According to title sequence designer Garson Yu, cinema motion graphics should "encourage the

contemplation of a story that unfolds slowly” (qtd. in Drate, Robbins and Salavetz 21). To accomplish this task, the title designer must strategically weave together elements of sound in relation to image, typography, and motion in a condensed time frame (21). While animated film titles have been around since the 1930s, innovators and visionaries like Saul Bass have elevated the art form and have often made title sequences that are as memorable as the films they introduced.

Saul Bass

Saul Bass is an original pioneer of the film title sequence genre with a career spanning over forty years. He directed many memorable opening sequences including *The Man with the Golden Arm* (1955), *Vertigo* (1958), and *Casino* (1995). Bass was known for his expressive use of typography and his work with visual and sound-based metaphor (Krasner, *Motion Graphic Design and Fine Art* 37). Through his title sequences, he aspired to prime the audience by providing an early “emotional resonance” with the film (qtd. in Haskins 12). He accomplished this by setting the mood and expressing the core of the story in his sequences (12). Many filmmakers, including Martin Scorsese, consider Bass’s sequences as short films in themselves. Concerning Bass’s work, Scorsese states, “His graphic compositions in movement function as a prologue to the movie-setting the tone, providing the mood and foreshadowing the action.” (qtd. in Krasner, *Motion Graphic Design: Applied History* 38) I am particularly interested with his work on *Vertigo* (Fig. 6).



Fig. 6. Saul Bass’s opening title sequence for *Vertigo*, 1950

In this famous sequence, there are a number of close-up shots of actress Kim Novak's face. As we zoom into Novak's eyeball, abstract patterned animations designed by legendary experimental filmmaker John Whitney are revealed. The mood and feel of the sequence evokes the feeling of disorientation and psychological turmoil explored in the film (Krasner, *Motion Graphic Design and Fine Art* 37). This effect is achieved by an effective combination of sound, expressive color, live-action shot composition, and symbolic animation. The close-up framing of the live-action shots on Novak's face as the camera moves toward her gives the sequence a distinct claustrophobic and psychological intensity. This feeling is enhanced by the eerie red lighting and use of the recurrent spiral theme utilized in the animated portions. The spiral is important symbolically in that it represents the mental afflictions and subsequent downward spiral of the protagonist in the film played by James Stewart. *Vertigo* is a fine example of Bass's command of the title sequence. His influence on subsequent filmmakers and designers is tremendous, and he has inspired a number of contemporary practitioners, including Kyle Cooper, who bring their own unique voices to the genre ("Kyle Cooper Interview").

Kyle Cooper

In the 1990s, innovations made by directors like Kyle Cooper helped revolutionize the title sequence genre. Cooper is known for his unique approach to title design and he has over one hundred titles sequences to his credit. He currently runs two studios, Prologue and Imaginary Forces, which are based in Los Angeles.

His direction for the opening titles for David Fincher's *Se7en* (1995) put him on the map. I remember being completely blown away by this opening when I saw it in the theatre. In this sequence, the inventive integration of raw video footage, quick camera cuts, and frantic, scratchy hand-drawn type foreshadow future events and immediately put the viewer inside the mind of the demented and delusional serial killer depicted in the film (Krasner, *Motion Graphic Design and Fine Art* 43). The killer's twisted nature is introduced through close-up shots of overlapping imagery including Bible pages, razors, trays, and the hands of the killer compulsively writing and cutting up photos. Reflecting the distorted, jarring disharmony of the

soundtrack, the editing utilizes quick flashes of imagery and text that jump all over the screen (Fig. 7). While Cooper often employs digital or computer generated technology in his work, much of the character of the *Se7en* sequence is established by the manipulation of analog technology. It is interesting to note that, rather than using digital trickery, Cooper and the typographic designers physically drew on and twisted the film roll to create the distorted and jumpy appearance of the type (“Kyle Cooper Interview”). The mix of manipulated Helvetica font with hand written text gives the impression that the movie’s killer “John Doe” actually created the title sequence by hand (“Kyle Cooper Interview”).



Fig. 7. Typography in Kyle Cooper’s opening sequence for *Se7en*, 1995

In his opening titles for *The Island of Dr. Moreau* (1996), the design also reflects the nature of the film (Fig. 8). The film is based on the book by HG Wells and tells the story of a mad scientist’s attempts to transform animals into monstrous animal/human hybrids. Long story short, things do not go well and the hybrid beasts break out and run wild on the island. To achieve this mood and foreshadow the events to come, the sequence mixes video layers of fast-paced point of view footage with quick cuts to layered images, video, and animations of microorganisms, blood cells, bacteria, and blood veins. The visual rhythm of the sequence starts smooth and slow but gradually accelerates and builds toward a frantic crescendo along with the music. The additional combination of saturated, high contrast complementary colors, and distorted type add intensity and suggest the sense of mutation gone awry.

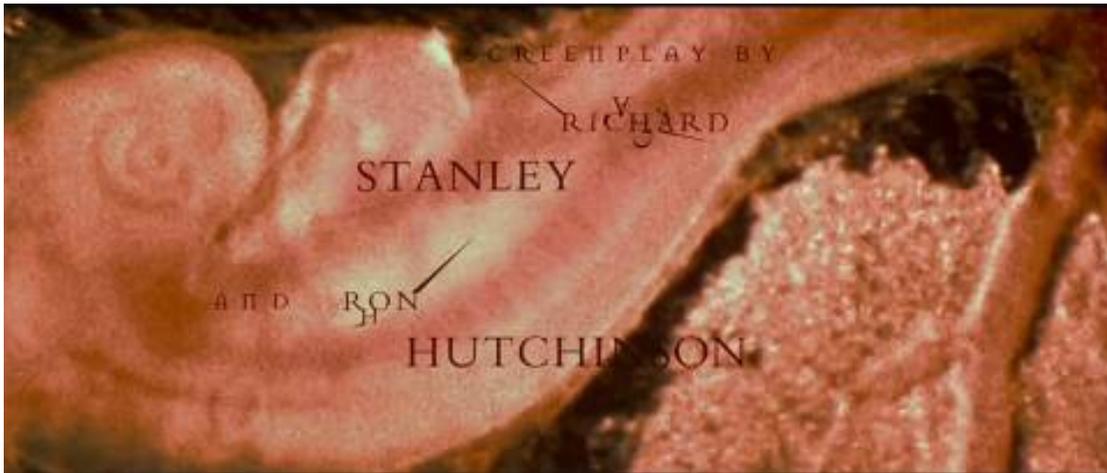


Fig. 8. Kyle Cooper's opening sequence for *Island of Dr. Moreau*, 1996

Cooper's title sequences are like mini-films. I love his approach to filmmaking in that it involves a level of experimentation and accident in the stages of filming and editing. Many of his sequences also involve the use of mixed-media in both the analog and computer generated world. He says that he is more interested in discovering and using the materials that best allow him to express the content or mood of the film with which he is working ("Kyle Cooper Interview"). He also allows accident into his process and working philosophy because, as he explains, accidents can create unexpected surprises and often help to convey content in ways that he could never plan ("Kyle Cooper Interview").

An example of this idea can be found in the title sequence he directed for the film *Darkness Falls* (2003). In the sequence, there are a number of close-up camera shots that pan across old photographs of residents of the town depicted in the movie. The mood is unsettling because the photographs appear to be melting under extreme heat. In fact, Cooper and his crew used a blowtorch to create this effect by placing the flame on the backside of the framed photographs ("Kyle Cooper Interview"). In one particular shot, the heat became so intense that it cracked the glass covering a photograph of a young child (Fig. 9). The glass ended up splitting straight across the eyes of the child in the photograph by pure accident and produced a shot that pushed the disturbing nature of the sequence to the next level. While I do not intend to make a piece this

disquieting, I am interested in using a process of experimentation that will lead me to these kinds of unexpected moments that cannot be planned.



Fig. 9. Conveying content through accident in *Darkness Falls*, 2003

I have learned a great deal about title sequence design by studying the methods and philosophies of influential title designers. In order to create a title sequence for the A2W show, it is important that I understand the history and purpose the event. While I am not creating a sequence based on one particular story, this consideration will inform the way the elements of sound, imagery, and typography are woven together to make an effective whole that represents the theme and tone of the fashion collections being introduced.

Art to Wear (A2W)

The Art to Wear (A2W) fashion show is an annual collaborative event involving students from North Carolina State's College of Design and College of Textiles. The show is juried by fashion industry professionals and gives student volunteers the chance to organize and produce a highly anticipated event that attracted thousands of attendees in 2012. Every year, A2W has gained momentum and has even managed to garner some national attention. Now in its

twelfth year, the 2013 show will be based on a “hypernatural” theme and produced under the direction of faculty members Katherine Diuguid and Justin LeBlanc.

According to the A2W mission statement, the show provides a platform where, “Young designers are challenged to imagine, create, and inspire by expressing their point of view through wearable art” (“NCSU Art2Wear”). The A2W collections created by the student designers often showcase the innovative use of non-traditional or experimental materials. The vision of the show is to “inspire and challenge the audience and designers to think about clothing in a different way” (“About A2W”). This is an inspiration to me because experimentation with digital and non-digital materials will be part of my own process. The hypernatural theme will inspire a diverse range of work and present the challenge of creating a title sequence that represents the spirit and content of the show. It is important to note that the organizers of the show do not want the audience members to see the collections until they are unveiled in on stage. With this in mind, interviews with the designers will be conducted in order to get a sense of the concepts they have developed for their own collections. Since the designer’s collections cannot be featured in the A2W title sequence, I will find a way to visually reflect and integrate their concepts along with my own interpretation. Since I am presenting this project in a fashion context, I have researched innovations in fashion photography and fashion film in order to find inspiration.

Digital Influence on Fashion Film and Photography

“With the total revolution going on in communications, there’s been a big step from pure photography into what are the beginnings of a new medium. Technology has fundamentally changed my relationship with the image. I don’t feel that it’s a correct description to say I am a photographer” Nick Knight (qtd. in Dawber 9).

Since the beginnings of photography, the photograph has acquired a level of influence and trust through its ability to accurately capture the events of our lives in the form of a picture (Derrick, Poynter, and Sanders 2). In the book, *The Impossible Image*, Robin Derrick suggests that, while

fashion photography has always had an element of the artificial, the advent of digital tools and computer software has opened the doors to an endless variety of manipulation (2). The ability to seamlessly mix images and alter or control every color, form, and composition has given photographers new reasons to experiment and new abilities to push past all of the limitations of the medium (3). While there are many different styles of fashion photography, from gritty and realistic to humorous or surreal, the demand for greater simulation in the fashion world has compelled some photographers to stretch the level of fantasy in fashion even further (Dawber 7). As with film, the new tools allow artists to blend and disguise artificial elements in order to present them as real or believable (8). However, I am interested in photographers and filmmakers, like Nick Knight and Solve Sundsbo, who have exploited the new medium to express their own imaginations through enhancements and surreal distortions of the figure or intense color schemes which embrace a sense of the artificial. They are artists who have created strange yet almost believable hyper figures in hyper realities. As fashion writer Robin Derrick puts it, these are artists who “wear their artifice openly” (Derrick, Poynter, and Sanders 2).

Nick Knight

Nick Knight is a very well-known and influential fashion photographer and filmmaker. He is known for his editorial campaigns for magazines including *Vogue* and *Dazed and Confused* and his fashion films and photographs created for designers like Alexander McQueen and Christian Dior. He has a reputation as a non-conventional artist who often experiments with form, color, and technique to create highly exaggerated and expressive depictions of his subjects (Cotton 15). I am drawn to both his print and film work for its hyper real, surreal, and transformative qualities. I am also impressed by the innovative methods he uses while shooting live in the studio and with the digital post-production manipulations he uses to great effect. Knight’s use of enhanced colors, texture, and exaggerated distortions of the human form relate to the idea of hypernature in that he creates “exaggerated simulations” and hyper real images that are linked to the natural world while simultaneously existing outside of it (“Hypernature”). However, the images themselves have such an impact that they weirdly start to acquire a level

of believability despite the element of fantasy they present. In other words, for me, his imagery suggests a fantasy world so convincing in appearance that it could actually exist.

His photographic series *Sister Honey* (1999) is a great example of work that uses digital manipulations to express the idea of transformation (Fig. 10). When looking at the images in this series, it is not surprising that Knight is interested in science and “the idea of alchemy and the transformation of matter from one state to another” (Cotton 15). Martin Dawber argues that these images could not have even been envisioned without the help of a computer (9). The photos are sexually charged and depict blurry, biomorphic, and shape-shifting figures intertwined with each other in state of fluid movement. The pictures are full of high contrast lighting and very bold reds, oranges, and blacks. In these images, I see a connection to the paintings of Francis Bacon (Fig. 11). Like Bacon, Knight often uses very saturated colors and distorts the forms of his subjects to suggest a subjective drama. Knight’s interest in motion is also apparent through the implied movement and transitions in the scenes.



Fig. 10. Digital manipulation in Nick Knight’s *Sister Honey* series, 2009 (left)

Fig. 11. Francis Bacon’s figures in *Writing Reflected in a Mirror*, 1976 (right)

Knight is a pioneer in the realm of the fashion film. With the help of his website SHOWstudio.com, he has expressed his interest in creating interactions between the moving image and the fashion world (Cotton 19). While there are some exceptions, many current fashion films are short, non-narrative, and experimental works that rely heavily on the relationship between sound and image (19). In an effort to make fashion more accessible, these films are often shown online for promotional purposes or played during fashion shows (“SHOWstudio”). His films give the impression of a creative collaboration between the filmmaker and fashion designer. Many of Knight’s fashion films showcase the collections of fashion designers in inventive or unique ways by establishing mood and creating an environment inspired by the meaning behind the fashion designer’s collection. The films are meant to enhance the collections while allowing the viewer to experience them in a cinematic context. This type of cinematic treatment can be found in the film *Insensate* (2008) which Knight made with fellow filmmaker Ruth Hogben and fashion designer Gareth Pugh (Fig. 12).



Fig. 12. Fashion designs by Gareth Pugh in *Insensate*, 2008

Insensate is a beautiful black and white film that combines live-action video, animation, and digital effects with thunderous, dark, and atmospheric music. The models move in and out of

high contrast lighting schemes and the digital enhancements and distortions applied in post-production give the figures a fractal-like quality which plays off of the sharp geometry of the clothing (“Insensate”). The contrast between the accelerated and slow movement of the figures is used to great effect adding to a dynamic and sinister mood. I appreciate the mesmerizing quality achieved through the play of light, the movement of the models in the frame, and the digital kaleidoscope-like distortions that shift the figures from representation to abstraction. I am interested in playing with these kinds of visual illusions in my own work to increase intensity and suggest an unfolding drama.

Solve Sundsbo

Solve Sundsbo is a London-based photographer and fashion film director who learned his trade as an assistant to Nick Knight. His recent fashion film and editorial spread for *W Magazine*, *The Ever Changing Face of Beauty* (2011), is a collaborative effort with Jerry Stafford and Marie Chaix (Fig 13). The film is based on Surrealism founder Andre’ Breton’s famous statement, “Beauty will be convulsive or not at all” (qtd. in Mistry). The film and the photographs explore the constantly changing notions of beauty within a single body (Mistry). The concept was inspired by a Surrealist writing and image making technique known as the “exquisite corpse” (Mistry). Using the “exquisite corpse” technique, an assortment of words or images can be assembled to produce oddly juxtaposed hybrid phrases or images. In many cases, these juxtapositions result in strange, humorous, or even grotesque images or written compositions. In the film, four separate video screens are stacked and lined up. To create the illusion of one figure in a continuous state of transformation, each screen plays overlapping layers of live-action video, animation, and time lapse photography depicting men, women, plants, and animals dissolving and transforming into each other. The camera is set in a fixed position and the screen arrangement allows a great number of possibilities for ever changing combinations and constant metamorphosis guided by the atmospheric and ethereal soundtrack by James Lavelle.



Fig. 13. Hybrid media in Solve Sundsbo's fashion film, 2011

The bold and saturated reds, blues, violets, and yellows in the color palette add to the beauty of the overall effect. The enhanced look of the natural imagery combined with the intense color palette in *The Ever Changing Face of Beauty* also gives the film a strong hypernatural quality, and it is a wonderful mix of all of the elements I am interested in using in my final project. I am particularly fond of the surreal nature of this work and the way the images overlap and blend to suggest a constant metamorphosis. This reminds me of Lev Manovich's assertion about contemporary motion graphics use of a constant sense of transformation affecting the entire composition in a video or image ("Understanding" 43). While these precedents have given me a direction, this project will require a process of both discovery and experimentation. In order to develop an original form of expression, I will utilize specific principles in art and design, animation, and film theory.

Supporting Art, Design, and Film Theory

In order to create an opening title sequence for the A2W show, I have established three primary goals. First, the sequence I create should capture the dynamic, collaborative, and innovative spirit of the A2W fashion show. Second, the sequence will reflect my conceptual interpretation of hypernature by exploring the boundary between what is “born” and what is “made”. Third, the sequence should enhance audience experience and add to the reputation of the show as a vibrant and exciting event on the local and national level. Title sequences in film and television are designed to engage the audience, set the tone and foreshadow the events of the film or program that follows. In order to create the A2W title sequence, I have researched the various ways artists, designers, and filmmakers have used elements of art and design and principles in animation and film theory to engage an audience and convey content. In addition, I am interested in discovering how our interest in mimicking and testing the limits and laws of nature are expressed in the medium of film and animation.

Composition

Since the early 20th century, artists have tested conventional notions of space and attempted to escape from the limitations of the canvas frame (Krasner, *Motion Graphic Design and Fine Art* 133). Painters including Robert Delaunay, Frank Stella, and Ellsworth Kelley have broken out of the traditional rectangular boundaries by painting on canvases in odd or irregular shapes. Spatial conventions within the frame have also been challenged over the years. For example, Cubist paintings allowed viewers to see subjects from multiple three-dimensional viewpoints simultaneously on two-dimensional surfaces. Russian Constructivist painters and graphic designers also made use of dynamic diagonal compositions in opposition to familiar vertical and horizontal layouts (133). Like painters, media artists have attempted to push the boundaries of the fixed frame associated with movie and television screens.

In the early days of silent film, composition and camera placement was absolutely essential to storytelling. The camera was the primary means for advancing the plot and developing characters through visual communication (Van Sijll 1). Unlike a painting, a film or animated sequence is time-based and allows for a greater exploitation of motion within the frame. Compositions can be dynamic and fleeting with the capacity for reorganization within a fixed or moving frame. Through the manipulation of the camera's position, the frame can also move around inside the world of the film or animation and alter the viewer's perception of space. The viewer can even be seduced by the possibility of unlimited space without defined boundaries; a very powerful asset that can inspire nonconventional approaches to composition and visual storytelling (Krasner, *Motion Graphic Design and Fine Art* 135). According to motion graphics artist Jon Krasner, "The concept of camera movement throughout an animation can create a dynamic, multidimensional space where the viewer feels like an active participant" (*Motion Graphics* 148). This effect can be seen in the opening title sequence to the movie *Fight Club* (2009) where an animated camera flies through the interior of the main character's brain (Fig. 14).



Fig. 14. Virtual camera moves in *Fight Club* opening sequence, 1999

The landscape inside the brain is generated in a 3D modeling program. The dynamic, stressed, and randomized movement of the virtual camera moving through the brain landscape creates

what visual theorist Bruce Block calls “open space” (Block 14). According to Block, this kind of open space can generate “tremendous excitement and intensity” for the viewer because it creates the sensation of space outside of the frame lines that enclose the pictures or screens we see (17). It accomplishes this through camera movement which overpowers the vertical and horizontal lines that emphasize the frame lines most pictures. I am interested in exploring this kind of camera approach in order to actively engage the audience through dynamic movement and shifting compositions that change frequently along with musical accompaniment.

Human Perception and Visual Intensity

Since there will be a number of visual elements in motion within each frame of the A2W sequence, a balance between visual complexity and readability is essential. In order to accomplish this balance, I have researched theories about human perception and the Principle of Contrast and Affinity.

Contrast refers to difference and affinity refers to similarity (Block 11). In Fig. 15, the example on the left uses pure black and white values to achieve a maximum contrast between the figure and ground while the example on the right



Fig. 15. Maximizing contrast (left) and affinity (right)

creates affinity by using two light gray tones with minimum contrast (Fig 15). Artists can use visual elements including space, line, shape, tone, color, movement, and rhythm along with the Principle of Contrast and Affinity to create the desired emotional and visual effects (Block 11).

The Principle of Contrast and Affinity states, “The greater the contrast in a visual component, the more the visual intensity or dynamic increases. The greater the affinity in a visual component, the more the visual intensity

or dynamic decreases” (Block 11). The use of contrast in a composition will increase “visual intensity” and, in turn, intensify the audience’s reaction (11). Contrast can also be used to organize information in a design (Goodman 42).

While I am interested in creating a powerful visual experience, I need to consider ways to control the way the audience perceives and interprets the imagery on screen. Based on the laws of human vision, an audience member will only be able to focus on one area of the screen at a time. In order to direct audience eye movement, a designer should consider ways of attracting the audience’s point-of-attention (Block 181). According to Bruce Block, an audience will first be drawn to moving objects followed by areas of brightness, color saturation, and areas of the greatest visual contrast (183). Filmmakers, artists, and designers frequently use these principles to direct the viewer’s attention accordingly. Since film and television title sequences utilize a condensed amount of time to establish mood and communicate content, these principles can be particularly effective.

Color

Studies have shown that color has the ability to affect human beings on an emotional and psychological level. The color wheel is divided into “warm colors” which includes red, yellow, and orange and “cool colors” which includes green and blue. While the actual effects of color are often debated, it is generally agreed that warm colors are associated with warmth and stimulating to our senses while cooler colors are more serene and calming (Zelanski and Fisher 126).

However, it can be argued that the psychological effects and meanings related to certain colors are relative. Colors can convey symbolic meaning and carry many different cultural associations. For instance, in the Western world black is often associated with death and mourning. However, in India, funeral goers often wear white in respect for the dead (Arnston 142). Research by psychologist E.R. Jaensch has shown that people from “strongly sunlit countries tend to prefer warm, bright colors, while those from countries with less sunlight tend

to prefer cooler, less intensely saturated colors” (Zelanski and Fisher 126). Many of us also have our own personal associations with specific colors based on our memories, events, or relationships in our lives (Arnston 142).

The color schemes that I will use in my project are inspired by color theories developed during a radical shift in the tradition of Western painting. This shift occurred when painters abandoned traditional modes of representation by exploring the emotional effects of exaggerated color and form. During the late 19th century, Post-Impressionist artist Paul Gauguin began juxtaposing large areas of contrasting color to intensify the colors on his canvases (Zelanski and Fisher 118). Gauguin used color to accentuate and enhance nature while reflecting his own inner “feeling expressed before thought” (118).

During the beginning of the 20th Century, artists including Henri Matisse and Pablo Picasso began employing bold color schemes and distorting forms to symbolically evoke an emotional response from the viewer. The concern for accurately representing nature through representational imagery and the recreation of local, natural, or observed color on canvas was not a concern for Picasso or Matisse (Zelanski and Fisher 116). These artists used the expressive potential of color and allowed their own imaginations and emotional responses to influence their color decisions. The resulting work was often filled with bold and highly saturated color schemes. In this case, the term saturation generally refers to the “relative purity” or intensity of the color (140).

Generally, there are preconceived notions about the colors of nature. In this project, I am interested in using color symbolically to express the hypernatural theme. When thinking about the symbolic colors of nature, I often immediately think of muted brown and green earth tones. However, there are many occasions when the colors of nature are incredibly intense or saturated; those moments will be the inspiration for the colors palette used in the final sequence. Through their use of color, artists like Matisse and Picasso were creating their own personal and enhanced versions of nature. In this sense, I want to combine both warm and cool

colors in a vibrant and highly saturated palette to suggest the idea of an augmented or hypernatural nature and reflect the energy of the show.

To intensify the palette, I plan on utilizing complementary colors and tonal contrasts. Complementary colors are those that lie opposite of each other on the color wheel. Placing complementary colors next to each other in an image can create visually intense color relationships through the phenomenon of simultaneous contrast (Parramon 18). For example, in *Westminster Bridge* (1906), Andre Derain juxtaposed patches of red/green and violet/yellow complementary colors to amplify the sense of life in the scene he painted (Fig. 16). In the A2W sequence, I also plan on using strong tonal and color contrasts by overlapping or juxtaposing dark background colors with lighter colors.

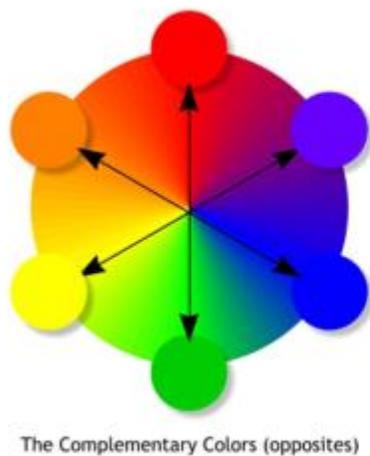


Fig. 16. Complementary colors in Andre Derain's *Westminster Bridge*, 1906

Form

I am visualizing the A2W sequence in a state between abstraction and representation. On a formal level, the imagery and shapes in the sequence will symbolize the collision between the

natural and manmade and flow together in a constant state of metamorphosis. As I develop the formal aspects of the design, I will continue to consider the ways in which form and shape can convey content.

In *The Visual Story*, Bruce Block makes associations between shapes and emotions or ideas. Block describes rounded shapes as “indirect, passive, pertaining to nature, soft, organic, childlike, safe and flexible” (qtd. in Van Sijll 32). On the other hand, square shapes are “direct, industrial, ordered, linear, unnatural, adult and rigid” while triangles are often “aggressive and dynamic” (qtd. in Van Sijll 32). Fritz Lang utilized shape associations with great success in his film *Metropolis* (1927). The film describes the underbelly of a dystopian future city filled with workers forced to work like robots in an industrial wasteland. As the workers slave away under terrible conditions, the wealthy enjoy the splendor and luxury of a world reminiscent of the “Garden of Eden” (Van Sijll 42). In this case, flowing organic shapes represent the world of the wealthy while the rigid lines of rectangles and squares compose the environment of the workers.

Exaggerating and Defying Nature through Film and Animation

Our interest in testing or breaking the laws of nature is often expressed in forms of entertainment. The mediums of film and animation continually draw inspiration from nature while pushing the limits of the laws that govern it. The blending of the natural world with science, technological innovation, and human ingenuity has contributed to the development of motion pictures and animation. Without this combination, these mediums simply would not exist. Motion pictures have evolved since their creation in the late 19th and early 20th century in terms of both artistic expression and technological innovation. Digital technologies are now enabling even greater possibilities. While it is still true that the heart of a good film lies in the imagination of the creators, digital technologies have given filmmakers new ways of expressing their visions. Digital processes in the area of special effects have given filmmakers the ability to do things that were not previously visually or economically possible. In the same way, the merging of scientific understanding with technology has increasingly provided visionary

scientists and thinkers with efficient and powerful ways of making possible what was once unthinkable.

Films and animations can draw an audience into new and exciting worlds. However, while they may stimulate our senses, the world that the viewer enters is an illusion. Relating to the hypernatural viewpoint, this illusory world is often an enhanced simulation of the natural or real world. From a psychological standpoint, the enhancements, exaggerations, and intensified emotional states induced by these film worlds can seem very real and cause intense emotional experiences in the viewer despite their illusory nature.

In the 1930s, Philosopher Walter Benjamin wrote extensively about the film medium and its effect on the senses and human perception. For Benjamin, filmic stimuli transcends “the category of purely optical impressions” (Mul, “Walter Benjamin” 1). In his view, the motion pictures continual changes of scene and focus was an “exercise for the senses” that could help people to adapt to modern perception (1). However, no matter how immersed a viewer is in a film, they are ultimately removed from the filmic stimuli which is “safely or visually framed in the screen” (1).

Films and animations can produce hyper visions of reality in a variety of genres including science fiction, fantasy, surrealism, and horror. If the viewer accepts these visions, they go along for the ride according to the laws established in the world of the film or animation; even if laws of the world are drastically differ from the natural laws of nature and the real world. The hypernatural world blurs the boundary between the natural and artificial in order to create an enhanced yet authentic experience (“NextNature.net”). In the same way, the world of the film can blur the line between an illusion and the real/natural world to the point that the illusion becomes an authentic emotional experience for the viewer. A number of visual elements are blended seamlessly in an order to make the world of the film seem more believable. In a number of films, the combination of traditional and computer generated special effects,

wardrobe, makeup, set design, digitally enhanced color and sound, and live-action shots work together to establish believability.

Animation also has a unique capacity to create an enhanced version of reality. An animated film exists in its own universe and does not have to obey any physical or natural laws. The medium has the capacity to exaggerate the natural world and affords unlimited possibilities for manipulating and defying the limitations and laws of nature and physics. For example, animated characters can defy gravity with ease or be squashed and stretched beyond all reason.

Animation director Chuck Jones made great use of animation's ability to push the laws of nature while directing films at Warner Brothers studios in the late 1940s (Bendazzi 134). A great example of this can be found in the Wile E. Coyote and Road Runner cartoons. You could describe these films as a kind of hyper animation. These cartoons presented a world of exaggeration. It was not uncommon to see Wile E. Coyote run across air miles above the ground after chasing his nemesis off a cliff, being completely squashed by an anvil, or run straight through a mountain. Contrasting with the "reality" of Disney's animated worlds, Jones did not want the viewer to forget they were watching a cartoon (134).

Walt Disney believed that the characters in animated films had to be believable and convey an emotional depth through their gestures and movements in order to connect with an audience. He insisted that his character animators create the "illusion of life" by establishing believable characters that were based on reality and natural movement (Thomas and Johnston 319). In order to achieve this illusion, animators at Disney studied both human and animal anatomy and movement by referencing live-action footage of animals in motion or actors acting out scenes (319). Through their observations, the animators could better understand the mechanics behind the animal or actor's movement. During the Golden Age of animation at Disney Studios in the 1930s and 40s, the twelve principles of animation were developed to help convey this illusion. These principles included squash and stretch, anticipation, staging, slow in and out,

exaggeration, solid drawing, follow through and overlapping action, arcs, secondary action, timing, and appeal. Using these principles and references, the characters and supporting elements in Disney films were defined by more fluid and naturalistic movement than the animation world had never seen before. In contrast, the concept of limited animation was developed by studios like UPA in the 1940s and 50s. Limited animation is characterized by a minimal approach to animation and is unconcerned with creating the effect of fluid and natural motion. Characters, props and scenery in UPA films are defined by limited movement and minimized detail (Bendazzi 130).

While based on emotional realism and the study of naturalistic movement, Disney animation made during the Golden Age is an exaggerated form of realism (Thomas and Johnston 65). Disney animators would amplify and exaggerate the character's expressions, movements and gestures in order to enhance the story and get the audience emotionally involved with the characters (319). Oddly enough, simply copying the live-action reference often produced stiff and unnaturalistic looking results. Exaggerating a character's movements helped capture the essential essence of motion and created a greater illusion of life (319).

There are a number of animation styles and principles that can be used to convey content and emotion. Whether it is animating abstract forms or representational imagery, I want to create variation in the movements of the elements on screen to add visual interest. I am interested in studying natural movement as an inspiration for the animated elements and filmic motion in the A2W sequence. For example, this could involve the study of natural systems in the body or the motion of aquatic animals. However, the use of exaggeration will be crucial in order to achieve a sense of dynamic movement that will engage the audience and set the tone for the show.

Musical and Visual Rhythm

“Imagine a movie without any close ups or long shots or a song in which all the notes were held for the same duration. It would be painfully uninteresting and artificial. The world around us is interesting because of rhythm” Allison Goodman (Goodman 63).

The A2W sequence will rely heavily on the relationship between music and image. Musical soundtracks in television and film title sequences are important because they also help establish the tone of a film or program. In the A2W sequence, the soundtrack should be energetic and build to a crescendo in order to build anticipation. It should also coincide with visual rhythms of the imagery and editing while attaining a level of variation that will hold the audience’s attention.

Repetition is one of the basic principles of design. Establishing rhythm in a visual composition or sequence involves the repetition of imagery or actions in a series of patterns. Adding variation to repeating patterns creates visual interest and can keep rhythms from becoming dull or monotonous (Brock 20). In order to add variety to visual rhythms, graphic designer Allison Goodman offers the following suggestions: 1) Set up a regular system of elements and then interrupt that system; 2) Utilize surprise changes in scale; 3) Move elements out of their expected position (Goodman 63)

Visual rhythms are related to the repetition and arrangement of musical notes in a musical composition (Krasner, *Motion Graphic Design and Fine Art* 151). It is important to understand that rhythm does not have to follow a consistent pattern. As in a symphony, rhythmic patterns can be altered and manipulated over time to evoke a variety of moods throughout the duration of an animated sequence (151).

The relationship between sound and image has been a topic of exploration for a number of artists. In his paintings, Russian painter and abstract art pioneer Wassily Kandinsky often made associations between colors and musical notes. His interest in representing musical rhythms

through alternating visual patterns guided the placement of shapes, lines, and colors in his compositions (Fig. 17). Kandinsky appreciated the “abstract and spiritual” forces generated by music, and he wrote about the relationship between visual art and sound extensively in his 1910 book *Concerning the Spiritual in Art* (Forde 15). Through his work, Kandinsky sought to connect with viewers on an emotional level by enabling them to see music visually. According to Kathleen Forde, experimental film pioneers including Oskar Fischinger and Stan Brakhage, along with contemporary audiovisual artists, have pushed this concept to new levels (14).

Oskar Fischinger was an abstract painter and animator who shared Kandinsky’s interests in the relationship between visual and musical rhythms. His abstract animated films have been described as “moving paintings” and “optical symphonies” based on musical compositions (Bendazzi 124). In works like *An Optical Poem* (1938), Fischinger, like Kandinsky, visually associates sounds with abstract shapes and colors (Fig. 18). In this work, the animated patterns of shapes and colors visually mimic the ebb and flow of the rhythms of the soundtrack “Second Hungarian Rhapsody” by Franz Liszt. Giannalberto Bendazzi describes Fischinger as an artist who “loved music and wanted to imitate it, trying to steal its secrets and harmony, melody and counterpoint, and transfer them to the field of images” (124).

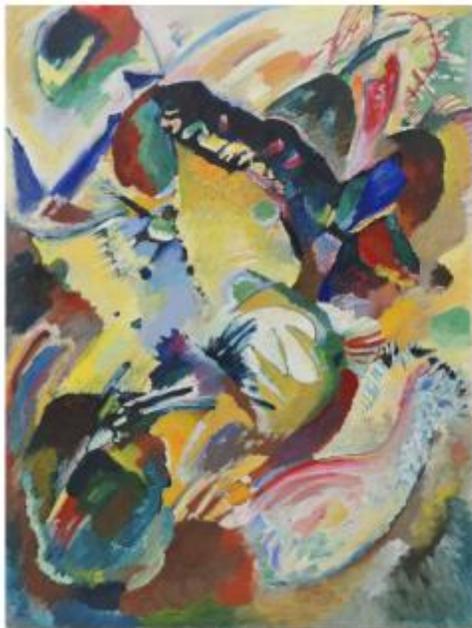


Fig. 17. Visual rhythm in Wassily Kandinsky’s *No. 2*, 1914 (left)



Fig. 18. Oskar Fischinger’s *Optical Poem*, 1938 (right)

Complicated visual rhythms are a prominent feature in the work of independent filmmaker Stan Brakhage, and his films have been an important source of inspiration for me. Although his work is often inspired by music, most of his films are silent. Through a meticulous process of editing, he shows his preference for depicting complex visual rhythms in his heavily layered imagery. Some of his most abstract works, including *The Dante Quartet* (1987), are cameraless films (Fig. 19). In *The Dante Quartet*, Brakhage hand-painted abstract images of swirling shapes and organic forms directly on film stock. The highly expressive, saturated colors and free-flowing organic shapes in *The Dante Quartet* are reminiscent of paintings by Kandinsky and abstract expressionist painter Jackson Pollock. Brakhage believed that that there is purity in the visual rhythms in his films that would be compromised with the addition of a soundtrack (Brakhage 80). In his essay “Film and Music”, he addresses this topic stating, “Although I have always kept myself open to the possibilities of sound while creating, I now see/feel no more absolute necessity for a sound track than a painter feels the need to exhibit a painting with a recorded musical background”(79).



Fig. 19. Visual rhythms without sound in Stan Brakhage’s *The Dante Quartet*, 1987

While I appreciate Brakhage’s viewpoint, a key element of the A2W sequence will be the relationship between the imagery and soundtrack. In areas of film, animation, and motion graphics, the use of a soundtrack to accompany visuals is entirely dependent on the needs and content work being produced. While it is not always necessary, it is generally agreed that a musical soundtrack can greatly enhance the viewer’s experience of a film or animation. In their book *The Illusion of Life*, legendary Disney studio animators Ollie Johnston and Frank Thomas

echo this point. They stress that Walt Disney understood the power of musical expression and state that music, “can do more to bring a production to life, to give it integrity, style, emphasis, meaning, and unity than any other single ingredient” (Thomas and Johnston 285).

Scientific and Philosophical Connections

The way the hypernatural theme is visually expressed will be heavily influenced by a variety of scientific, psychological, and philosophical concepts. According to scientist and theorist Koert van Mensvoort, hypernature is nature that would never exist without human influence (“Hypernature”). As the line between nature and culture and the “born” and the “made” is blurred, I am interested in addressing the following questions:

- What are the defining characteristics of nature versus culture and how have they changed?
- How does the substitution of “real” nature with an increasingly technological nature affect the human species on a physical and psychological level?
- How has the natural world influenced our technology?
- While embracing our technologically enhanced versions of nature, should we be concerned with creating technologies that will sustain our environment as well as our species?
- As we utilize advancements in science and technology to enhance ourselves or potentially control our own evolution, are we playing a dangerous social and ethical game?

Nature, Culture, and Hypernature

Our increasing ability to control nature has altered the way many of us perceive and interact with it. In reference to this idea, microbiologist David Biltmore states, “Our image of nature is coming more and more to emphasize human intervention through a process of design” (qtd. in Rolston 7). Nature is traditionally conceptualized in terms of trees, rivers, plants, animals, genetics, the molecular world the climate, etc (Mensvoort 1). Philosopher Holmes Rolston III describes culture in terms of its manmade artifacts stating that, “artifacts are the products of culture; they are nature cultured, and culture is something else from wild nature” (Rolston III

2). Nature, on the other hand is all that which is without “human intervention” (1). According to Koert van Mensvoort, the boundary between nature and culture should be redefined (Mensvoort 1). This redefinition is the principle idea behind the philosophy known as “next nature” which Mensvoort has developed.

A subtheme of the next nature philosophy is the concept of the hypernatural. In the context of the next nature philosophy, the hypernatural world is an enhanced simulation of nature that combines the synthetic and the natural while acknowledging the fact that human beings are increasingly enhancing, modifying, and simulating nature in a manner that better suits human needs and perceptions. In other words, Mensvoort explains that the hypernatural world materializes in the merging of the “born” (that which comes from nature) and the “made” (that which is produced by human culture) (Mensvoort 1). He also suggests human beings have become accustomed to culturally influenced simulations to the point that they have become disguised, and the increasing difficulty in distinguishing “real” nature from hypernature has given the hypernatural world a level of authenticity (“Hypernature”). For example, the process of genetically manipulating plants has altered the way we view certain foods that we consume. A large portion of the population is more accustomed to buying genetically modified, treated, and enhanced foods in the supermarket rather than foraging or hunting for them in the forest. Thus, many of us would not even recognize a “real” banana in the wild as opposed to a supermarket banana with the familiar polished shape and bright yellow color (“Next Nature”). According to Mensvoort, the authenticity of hypernatural products gives us a reason to reconsider our views on what constitutes “real” versus artificial nature (Gerritzen, Mensvoort, and Schwarz 124). However, despite the decline of biological diversity and the growth of technological diversity, the philosophy of next nature “does not make any judgments about which form of nature is more valuable than the other” (Mensvoort 2).

Nature: To Abandon or not to Abandon?

The question of whether or not human beings still need nature is multifaceted. No matter how much we control nature or how “humanized” it becomes, it is generally agreed that we are products of it and cannot live without it (Rolston III 4). Psychologist Peter Kahn has studied the effects of our immersion in “technological nature” (Kahn, et al 37). This involves technologies that “mediate, augment, and simulate” the natural world; examples might include live webcams of natural environments or immersive online virtual environments like Second Life (37). In his article, “The Human Relation with Nature and Technological Nature”, Kahn states that our adaptation to the disappearance of actual nature comes at a psychological cost (41). He argues that we have an instinctual and “evolutionary need” to connect with the nature of our ancestors and he associates this idea with the concept of biophilia (41). According to E.O. Wilson, biophilia is a “fundamentally, genetically based human need and propensity to affiliate with life and lifelike processes” (qtd in Kahn, et al. 37). Supporters of biophilia note that it is our connection to the natural world from which we are born and claim that it is an intrinsic part of our psyche and continued evolution (38). Without this connection to the natural world, our species would lose its sense of meaning (38).

This concept inspired Kahn to conduct a series of experiments that tested the physical and psychological effects of repeated exposure to both real and simulated natural environments. As a result, he concluded that the subjects involved in the experiments demonstrated greater physical and mental responses and benefits from their exposure to the real natural environments over the simulated ones. Kahn goes on to say that with the loss of biophilia due to technological immersion will lead us to “environmental generational amnesia” (40). Ultimately, this shift could make people less aware and thus less concerned with potentially devastating environmental problems such as climate change (40).

Biomimicry and Sustainability

Much of the plant and animal world has managed to live in harmony with nature since the beginning of time. Even today, there are cultures that are removed from the technosphere of modern life who live according to this understanding. Since the Industrial Revolution, there have been obvious instances where human beings have harmed the environment with irresponsible and unsustainable technologies. One can look to the pollution caused by increased fossil fuel consumption or damage to ecosystems caused by unregulated industrial waste. Many are in agreement that, in order to ensure our species survival, we have to consider developing technologies that are sustainable. This is especially important when considering the ways in which we have begun to control nature. When reflecting on our relationship to nature and technology, we should consider the fact that we have learned a multitude of lessons from nature in order to advance our species. In fact, a number of technologies that have enhanced our lives are actually inspired by the natural phenomenon we observe.

The discipline of biomimicry was pioneered by biologist Janine Benyus. According to Benyus, biomimicry is “the conscious emulation of life's genius” which rests on the foundation of “innovation inspired by nature” (Benyus 3). Biomimicry (which means to imitate life) is basically a combination of biology and engineering that looks at nature as a teacher that can show us better ways to design sustainable and efficient technologies that solve human problems (3).

Biomimicry is a new discipline, but the concept has been around for some time. In her book, *Biomimicry: Innovation Inspired by Nature*, Janine Benyus mentions how indigenous societies studied and learned from their surrounding animals and organisms (3). As an example, she describes the way Alaskan hunters mimic polar bears in the way they track seals. Another early famous example of biomimicry is the invention of the airplane. The Wright brothers learned the secrets of flight by studying the mechanics of motion used by vultures. More recent examples involve research by Thomas and Ana Moore and Devins Gust at the University of Arizona. Moore and Gust are studying the process by which a leaf captures energy in order to create small, sun-powered batteries. (5).

Biomimics are interested in learning from and imitating the designs of nature and retreat from the ideology of dominating it. Benyus points out that, "Unlike the Industrial Revolution, the Biomimicry Revolution introduces an era based not on what we can extract from nature, but on what we can learn from her" (Benyus 4). The biomimic community also believes that a sustainable relationship with nature is absolutely necessary when considering the rapidly increasing population and consumption of resources (4). Turning our back on nature while basking in the glory of our own inventions could have dire consequences and many amazing discoveries could be lost. In this viewpoint, our technological progress and future as a species will depend on it.

Walt Disney's philosophy on the "illusion of life" relates to the discipline of biomimicry because it places an emphasis on mimicking natural processes, phenomenon, movements or designs. In Disney's case, the problem was finding a way to create a greater illusion of life that would make his fantasy world more believable and engaging. The animated performances of the characters in Disney films were enhanced by exaggerating their movements during the process of animation. As a result, the character's performances were given authenticity and expressed a greater illusion of life.

The Transhuman

The merging of science and technology is increasingly giving us the ability to improve our health and possibly even control our own evolution through genetic engineering, synthetic biology, and nanotechnology. According to microbiologist David Biltmore, "The limitations of species can be transcended by splicing organisms, combining functions, dovetailing abilities and linking together chains of properties. The living world can now be viewed as a vast organic Lego kit inviting combination, hybridization, and continual rebuilding. Life is manipulability" (qtd. in Rolston III 7). After all, if we can manipulate and enhance nature to suit our own needs, then why not improve our own bodies? With all of these possibilities, the future of the natural human being is up for debate.

Transhumanism is a philosophy that advocates using reason, science, and technology to overcome the limitations of the organic human body. As transhumanist advocate Simon Young puts it, “We have nothing to lose but our biological chains” (Young 15). Transhumanism theorists like Young suggest that advances in biotechnology will enhance our mental and physical capabilities to heights that have only been dreamed up in science fiction. In addition to curing an increasing range of devastating diseases, this merging of science and technology could ultimately “defeat death in the 21st century” and transition us into the era of the “posthuman” (17). Young’s supporting evidence for this prospect lies in the field of synthetic biology and genetic engineering. Research groups like those involved with the Human Genome Project have begun cracking our DNA code. The ability to manipulate this code will eventually allow us to alter and customize our gene pool or replace failing organs with new, higher functioning ones (17). Ultimately, we will be able to replace our own bodies or even upload our consciousness to a computer.

However, the fact that we potentially have the ability to control our own evolution and live forever like some sort of indestructible super species has created controversy. Some have raised objections towards the ideas of transhumanism on a religious basis and fear that we have started to view ourselves as our own Gods. Others, including bioconservative Francis Fukuyama, have labeled transhumanism as “the world’s most dangerous idea” (qtd. in Bostrom 24). Fukuyama argues that the realization of transhumanist ideals could lead to a culture war where the new posthuman species will likely view the old “normal” humans as substandard and potentially fit for either slavery or death (Bostrom 24).

Supporters of transhumanism like theorist James Hughes argue that these beliefs are unfounded and that “we will achieve the best posthuman future when we ensure that technologies are safe, make them available to everyone, and respect the right of individuals to control their own bodies (qtd. in Bostrom 22). Personally, I think that idea is a nice thought, but the cynic in me believes that this best posthuman future scenario might not be realistic.

A large portion of the human species lives in the ever-expanding nature of technology, thus altering many of our conceptions of nature. A waning appreciation for nature could negatively affect our psychological well-being and our evolutionary connection and desire to sustain the nature of our ancestors. In addition, others have suggested that we are playing a dangerous social and ethical game as we utilize advancements in science and technology to enhance ourselves and control our own evolution. These are important consequences to consider as our populations, scientific understanding, and technologies are expanding. Ultimately, it seems that we will have to find some sort of sustainable balance with nature (both real and artificial) if we are to survive and thrive.

Techniques, Tools and Materials

According to motion graphics artist John Krasner, thorough research in the early stages of a project can help a designer clarify what they are interested in conveying and suggest a direction when choosing appropriate materials and processes (Krasner, *Motion Graphic Design and Fine Art* 95). When developing concepts for any kind of art or design project, research is an important part of my own process. In order to create the A2W title sequence, the choice of materials, tools, and techniques will be based on the concepts developed as a result of my research.

In order to execute this project, I have also considered the following questions:

- How can I adapt my own design process to the needs of this particular project?
- What kinds of equipment will be required?
- Should the visual effects be generated primarily in post-production (using software) or can those effects be achieved in a live-action shoot?
- What animation processes should be used?
- What software should I use to combine media?

Experimentation

My process, especially in the beginning stages, involves a back and forth dialogue between careful planning and experimentation with materials. While I might have a clear concept in mind and a general plan for executing a project, the process of experimentation often leads to inspiring discoveries. The exciting part of this process occurs when unexpected imagery, motion, or other accidental yet interesting phenomenon are generated. In many cases, these happy accidents end up being incorporated into a project.

During October of 2012, I began collaborating with fellow graduate student and A2W photographer Ben Scott. Ben will be co-directing the A2W sequence and, during the development phase, we will be conducting a series of video, photographic, and animated tests in order to produce/capture imagery and video relating to the concepts and influences we have

been researching. For example, some of these tests might include time lapse photography of flowers blooming that will be enhanced and manipulated through color corrections or animated effects in Adobe After Effects™ (AE). Preliminary experimental “tests” will help us figure out technical issues and guide the direction. Based on some of my conversations with Ben, I have compiled words and phrases to direct aesthetic and material choices. The words I listed include the following: texture, layering, saturated color, dynamic movement, time manipulation, transformation, surreal, artificial, and organic. Listing these words is beneficial because it will influence the early experimental video and animation tests.

During the research phase of this project, we have started to think about the visual style of the sequence. Moodboards and visual style frames will be created to capture the overall aesthetic and mood of the sequence. The style frames will be put together using a combination of Adobe Photoshop™ and AE. Both of these programs are useful in that we can use them to easily make color corrections and mix, manipulate, and compose images and text by separating visual elements on multiple layers. In order to achieve a sense of transformation, Ben and I are interested in layering and superimposing imagery using blending modes (which dictate the way one graphic element or image layer interacts with another). Once a visual style is approved by the A2W organizers, we can move on to the storyboard and animatic phase.

Creating storyboards will help clarify the compositions and work out the movement, transitions, and basic flow of the sequence. An animatic is essentially a moving storyboard with a rough soundtrack that will assist us in refining the sense of movement and timing in the sequence and give us a better idea of how the images are relating to the soundtrack. I frequently use a combination of Photoshop™ and AE to create animatics.

Cameras: Analog or Digital?

The increasing popularity of digital cameras in cinematic productions has caused a debate between those who embrace the new technologies and those who argue for the superior quality of traditional 35mm celluloid film (Hanson 5). While most major motion pictures are still shot on 35mm film, high-end digital cameras like Red Studio’s “Red Cinema” camera line are

arguably matching the high quality of traditional motion picture film. I have had the opportunity to shoot some short films using Super 16mm film, and I have to agree that film does have a certain magical quality that cannot be completely emulated in the digital world. However, for the video portions of the A2W sequence, we have decided to use digital cameras based on time and cost considerations, flexibility, and ease of use. Unfortunately the costs required for using a film camera, the amount of time you have to allot for development and digital transfer, and the inability to view footage as you shoot make it an unreasonable choice. Consequently, these are the same reasons why many directors, cinematographers, and major studios are beginning to use digital cameras like those in the “Red Cinema” series.

During the early experimental testing and visual concept development stages, we are planning on using Canon or Nikon DSLR cameras for shooting video. For the finalized video footage, we will use the Red One digital cinema camera owned by the Animation and New Media program. My choice for using the Red One camera is based on the extremely high level of image quality it can produce and its ability to shoot up to 120 frames per second. Shooting at a higher frame rate (120 frames per second) produces footage with a beautiful slow motion effect. I have seen a number of video screen tests and motion pictures shot at this frame rate and the effect is mesmerizing. A great example of this can be seen in the fashion film *Poor Celine* (2011) (Fig. 20). The film uses some incredibly effective slow motion shots of a woman cloaked in white floating in a dark and mysterious space. The use of slow motion adds to the sense of drama, weightlessness, and ethereal mood in the film. In the A2W title sequence, we want to suggest a sense of manipulated time and the ability to shoot in this manner will be an asset. Slowing down and speeding up the video footage through a process called time remapping will add to the sense of dynamism and surrealism we are interested in evoking.



Fig. 20. Slow motion in David Vigh's *Poor Celine*, 2011

Compositing, Animating, and Editing

AE is widely used in the motion graphics community, and we will use it as the primary software for compositing and animation. Compositing is a process of integrating a variety of separate visual elements into a compositional space (Sawicki 116). AE will be an important tool because the A2W title sequence will involve layering photographic, animated, live-action, and typographical elements. In addition, a number of the visual effects will be created through an animation process known as keyframing. Keyframing is a process that gives designers or animators the ability to assign precise values to objects at a specific point in time in virtual space. In compositing software like AE, an object could be a vector graphic, a video sequence, a typographic element, a digital photograph, or a variety of other media. Through keyframing, a long list of variables can be adjusted in order to manipulate an object. For example, an object's position in space, opacity, or color, can be altered to create the illusion of motion or a transition in transparency and color. Transformative effects between images and video layers can also be created by animating applied blending modes to the layers.

Animation and compositing software like AE helped kick start a hybrid media revolution in motion graphics by giving designers the ability to stack, mix, distort, and manipulate multiple layers of media in a single composition (Manovich, "Understanding" 41). In addition, the ability

to keyframe and alter multiple aspects of an object's appearance or position in space in relation to other objects or images has produced a new aesthetic of "constant transformation" (41). According to Lev Manovich, "Contemporary motion graphics often have the effect of an overall transformation of the frame where elements and attributes of the layers are constantly changing" (41). This idea of constant transformation is prevalent in the work of experimental artist Jeremy Blake. In works like *Sodium Fox* (2005), Blake creates rich, multi-layered environments where drawings, abstract animation, old film footage, and type are superimposed and blended together in constant states of "permanent metamorphosis" using the keyframe animation process (Fig. 21) (Manovich, "Understanding" 43).



Fig. 21. Constant transformation in Jeremy Blake's *Sodium Fox*, 2005

To convey the feeling of transformation and the blending of the natural and the artificial, the ability to keyframe and control transitions between different media on multiple layers will be extremely useful.

Another advantage in AE is the ability to put visual elements into what is known as 2.5D space. As with programs including Autodesk Maya™, AE's virtual environment can be constructed around an X, Y, and Z axis. The X axis refers to the horizontal space, Y to the vertical space, and Z to a spatial illusion of three-dimensional depth. Multiple layers of media can be placed in

space throughout a composition based on the x, y, and z coordinates and navigated by a variety of cameras. Virtual cameras in AE allow animators to emulate traditional filmmaking camera moves including pans, tilts, dolly movements, and zooms. The ability to set key frames and animate the camera in these programs provides an even greater flexibility to explore space within a composition. In particular, the orbit camera provides a very flexible way of producing dynamic camera moves that maneuver fluidly around a virtual space occupied by a variety of media. I plan on taking advantage of the ability to animate a camera and arrange and alter compositions through camera moves.

After compositing, we will complete the final sequence editing, additional color corrections, and sound mixing in Adobe Premiere™. While AE is very useful for compositing elements, it often slows down when attempting to process and playback high-resolution video. Premiere is an efficient non-linear editing program that I have used frequently. I prefer using it for final editing because it is designed to process larger video files and the sound mixing and color correction capabilities are also superior to those in AE. Working between Premiere and AE will also help speed up the workflow because we will be able to use dynamic links. A dynamic link allows you to seamlessly move back and forth between an AE and Premiere file or sequence. For example, if you edit a video clip in Premiere and want to add some animation or effects to it using AE, you can create a dynamic link and any changes you make to the clip in AE will automatically update the linked clip in Premiere. This will save time because I will not have to render video files separately and reimport them.

The success of this piece will be dictated by creative decision making, inventiveness, and willingness to experiment in order to create something unique. While the possibilities offered by digital technology and the expanding powers of creative computer software are vast, it is important to not allow these technologies to completely dictate the way the sequence will look. It is easy to rely on canned software effects and high-resolution video that looks flashy but is ultimately uninspired. To convey our vision for this sequence I will search for the best ways to use and integrate these techniques, tools, and materials.

Project Evaluation and Progression

Art and Design

I took on this project because, in addition to being challenging, it struck a balance between art and design, involved a thought-provoking theme, and afforded me the opportunity to merge a range of media in the context of both cinema and fashion. It also forced me to step outside my comfort zone by emulating a “real world” design situation with a firm deadline, a client, a function, an emphasis on collaboration, and a set of aesthetic goals.

From a design standpoint, the title sequence served a function as the introduction to the A2W show. However, the process of creating the sequence also enabled me to take an artistic license and experiment with materials and imagery. In the fine art world, emphasis is often placed on the artist’s subjective message but, in design work, the designer has to consider the needs of the client. In some situations, a client might have different levels of involvement or ideas that need to be visually communicated. Fortunately our clients, A2W faculty advisors Justin LeBlanc and Katherine Diuguid, gave us a lot of freedom to come up with something original.

Collaboration

Initially, I wanted to be involved with the A2W show because it is a collaborative, dynamic, and highly celebrated event. For the 2013 show, greater participation from the Animation and New Media program was encouraged. I realized that my project would require collaboration, and the sequence could not have been completed without it. I am happy to say that this project evolved into a group venture involving collaboration with a number of individuals from the College of Design, the College of Textiles, the Film Studies program, and the North Carolina Museum of Natural Sciences.

As I was conducting research in the fall of 2012, I spoke with fellow graduate student Ben Scott about working with me on an A2W opening title sequence. This ended up being a great match

because Ben was the head of photography for the show, and we realized that we had very similar interests and ideas once we started brainstorming. The success of the sequence ultimately depended on finding a balance between what we would ideally like to do and what we actually could do based on the skills, manpower, equipment, minimal budget, and time that was available to us. There were a number of occasions where we had to drop a shot because we, for whatever reason, could not pull it off in time. Concerning time management, I found a great quote by director David Fincher. He states, "I always feel that the best things come out of having just enough time to get into some serious trouble and not enough time to navel-gaze endlessly about something" ("Dragon Tattoo Interview").

In the early stages, Ben and I understood that we needed to reaffirm the purpose of the title sequence, recruit others interested in contributing, refine the conceptual framework, define the sequence structure and visual style, and develop a strategy for completion. This involved making decisions about equipment, video shooting/scheduling, location scouting, makeup, costume design, props, sound, animated elements, final editing, and compositing.

Merging Media in a Fashion Context

One of the most interesting aspects of this project is the context. In previous years, the A2W show used documentary style video or short motion graphics based introductions. For the 2013 show, we created a three minute opening that combined elements of cinema and fashion. This idea is inspired by the expanding nature of image making through the merging of media. In addition to crediting the key directors of the show, the opening sequence needed to connect with the audience and build anticipation for the designer's collections using animation and filmmaking principles and techniques.

As I mentioned in the background research section, fashion films were an important reference point. Experimentation with moving images and digital manipulation in fashion film is beginning to be fully explored by filmmakers and photographers like Nick Knight, Solve Sundsbo, and Amber Gray. I believe that my/our main contribution to this area of research involves the

blending of materials with digital and non-digital tools and techniques to create a title sequence that is outside of its traditional film context.

In the beginning research stages, I defined some of the primary goals of A2W. This helped me find an effective way to use a hybrid media approach to express the hypernatural theme and emphasize the purpose of the show. According to the mission statement, A2W seeks to, “inspire and challenge the audience and designers to think about clothing in a different way” (“About A2W”). As a result, the A2W collections created by the student designers often showcase the innovative use of non-traditional or experimental materials. In a similar way, we experimented with a mixture of non-digital and digital materials to construct hypernatural costumes and cinematic environments. Since there was very limited time to create a rich atmosphere or elaborate costumes for the models, we found ways to combine fabric, makeup, props, set design, digital video, and animation to achieve the desired effect.

Refining the Conceptual Framework

Initial Meeting with the Faculty Advisors

The hypernatural theme is open to a variety of interpretations and has very rich visual and conceptual potential. In order to achieve some level of cohesion, it was important to understand how the organizers of the show and student designers interpreted the theme.

In September of 2012, I pitched the opening title sequence idea to Justin LeBlanc and Katherine Diuguid by showing them some references to give them an idea about the basic direction I wanted to take. They described the theme by showing me some of their research materials which included thematically related imagery and concepts. In terms of thematic interpretation, this was an important point of departure. During this time, I was introduced to the website nextnature.net which features articles, images, videos, and links connected to the next nature philosophy. The site also provides writings by Koert van Mensvoort which were an important part of my early research. At this point, I also discovered the wgsn.com website. The wgsn site showcases fashion trend forecasts including the “next nature” trend projected for the 2014 season (Fig 22).



Fig. 22. Next Nature fashion forecast

Designer Interviews and the Jury Process

In December of 2012, student fashion designers underwent a jury process where they presented preliminary samples from their collections. During this process, Ben and I conducted separate interviews with the designers inquiring about the design concepts for their collections and their reasons for being involved in A2W. We also interviewed the jury members about their own interpretation of the theme and the criteria they used to evaluate the designers. While this was early in the designer's process, this gave us a better idea of what to expect from the finished collections. After this jury process, eight designers were selected for inclusion in the show. The following is a list of those selected with brief excerpts from their design statements explaining their collections:

Jennifer Werkhoven and Ami Sueki - *Cosmosis*

Werkhoven and Sueki are “inspired not only by the hyper-saturated colors of nebulas and planets, but also by the science and technology used to investigate them”. With *Cosmosis* they “attempt to break down the massive, surreal scale of cosmic events and interpret them with basic geometric forms”.

Laura Tripp - *Dissimulate*

With her collection, Tripp asks, “What if camouflage is not about blending in but standing out?” *Dissimulate* offers “a creative reinterpretation of the idea of camouflage through pattern and texture [while] exploring the interplay between garment and body”. Tripp states that, “Exaggerated shapes and optical patterns play into a collection that draws the eye and creates visual distractions and illusions”.

Sarah Edens and Lindsey Sherrill - *Creatures of the Deep*

Edens and Sherrill’s collection embodies “a rare state of beings that grow and evolve naturally under the sea and in some cases have taken on a hypernatural state”. For the designers, *Creatures of the Deep* seeks to “take you on a journey through different layers of the ocean starting with the top of the shoreline all the way down to the deep dark abyss of the underworld”.

Sarah Cannon - *Patterned Strength*

With *Patterned Strength*, Cannon “reinterprets the conventional use of wood and cotton [by] drawing on the materiality of wood and cotton and pushing the boundaries of how each can be used to clothe and reshape the body”. Cannon states, “Through pattern manipulation in both printed textiles and garment construction, this line represents an exaggerated simulation of nature and natural materials”.

Sarah Kelly - *Fractured*

Fractured is “inspired by fractals, captivating mathematical patterns found in nature [which] help nature create expanding and complex life forms using only a small amount of information”. With her collection, Kelly aims to “highlight the complexity of life and the intelligent world around us”.

Morgan Wolf - *The Enlivening of Recycling*

In her collection, Wolf uses “natural dyeing techniques, zero-waste patterns, and upcycled garments”. She explains, “Layers of nature and culture are fused to each fashion piece; glass becomes the imitation of crystals and gems; naturally dyed fabric imitates patterns in nature, such as tessellations, and can be transformed into sustainable clothing using zero-waste patterns”.

Kori Waldrup - *Roots of the Runway*

Roots on the Runway “features live plants that are living and growing on the garments and require sunlight and occasional watering”. Waldrup states, “Inspired by the trend of vertical gardening in homes, this collection literally brings fashion to life”.

Brittney Tabron - *Insurrection*

According to Tabron, *Insurrection* embodies “rebellion against race and gender stereotypes [and the] current notions of fashion”. Tabron states, “Through my exploration of texture, fabric manipulation, and volume, my collection will leave viewers rethinking the preconceptions of race, gender, and subcultures”.

In February of 2013, we were updated on the designer’s progress when Ben photographed one finished look from each collection for the A2W show program. It is important to note that we were not able to include any images from the collections in the sequence because the organizers of the show did not want the audience members to see them until they were unveiled on the runway. Time was also a consideration since the designers continued to work on their collections up until the show. Those facts compiled with the wide range of unique thematic interpretations meant that we would not be able to completely represent the original designs in the sequence. However, we were able to visually reference and incorporate some of the designer’s conceptual interests into our own interpretation.

Modifying the Concept

According to my original project statement, “The A2W title sequence will visually represent the human being as a transforming body in a state of flux between an “original” organic version (resulting from a natural evolutionary process) and a technologically enhanced or manufactured version (controlled by human intervention)”. This was partially inspired by the idea that the designers were essentially transforming their models into unique representations of the hypernatural through materials, forms, colors, and textures.

As the project proceeded, I tweaked this concept by focusing on the hypernatural materializing in the merging of the “born” (that which comes from nature) and the “made” (that which is produced by human culture). As we developed the visual style, I also began to think about the existence of the hypernatural within nature itself. This is a view that acknowledges nature at its most beautiful, intense, surreal, or instructive. After discussing the idea in the title sequence production crew meetings, we agreed to use the classical elements of water, earth, and air as a visual framework and source of inspiration. This was helpful in that it gave the sequence some structure and enabled visual connections to some of the designer’s own original thematic interpretations. With this as an anchor, the concept of the hypernatural within nature was balanced with the concept of the technological enhancement of human beings through manmade design. This balance was represented by enhancing, layering, juxtaposing, or transforming the human figure along with natural elements through a process of analog and digital manipulation. In the finished sequence, the human being is both a product and manipulator of nature.

Assembling a Crew

Ben and I realized that, from a practical standpoint, we needed to recruit people who would be interested in contributing. This process began in early January of 2013 when we met with Alyssa Barrett (an animation and new media graduate student responsible for typographic animation and production assistance) and Gillian Paige (a fibers major responsible for costume design). Eventually, we had a small team that met on a weekly basis to share inspirational

videos/images, brainstorm ideas, and organize the production schedule. We also created a google document to easily share information and reference materials.

The Crew:

Nick Helton – Co - Direction, Camera, Animation, Editing, Sound

Ben Scott – Co-Direction, Cinematography, Camera, Animation, Editing

Alyssa Barrett –Plexus/Text Animation, Production Crew

Christina Kim – Makeup

Dwayne Martin - Production Crew

Leesa Moore - Camera, Production Crew

Gillian Paige – Costume Design

Daniel Rode – Camera, Production Crew

Lawrence Lee – Animation Research

Thomas Crocker – Pre-Production Video

The Models:

Anna Bailer

Zoe Blevins

Christine Van Hoever

Jasmine Rhodes

Agee Taylor

Process

Visual Style

When developing the visual style, we gathered references from areas of fashion, animation, film, and science. We then assembled moodboards to catalog and organize influential images and ideas. As we refined the visual style, we were thinking about camera movement, composition, color schemes, lighting, texture, and materials for costume and makeup design. Stemming from the classical natural elements, we gathered images of aquatic environments, hydrothermal vents, deep sea creatures, microorganisms, mineral formations, plant life, and a variety of air and land dwelling mammals.

In terms of color, we focused on a creating a vibrant, saturated palette with an interplay of warm and cool colors. In addition to the work of fashion filmmakers/photographers Nick Knight and Amber Gray, Ben and I were inspired by the intense colors, creative use of props, and mix of natural elements in the photography of Brooke Shaden and Kirsty Michell (Fig. 23).



Fig. 23. Image from Kirsty Mitchell's *Wonderland* series, 2009-2013

The title sequences from the James Bond films also became an important reference. The opening from *Goldfinger* (1964) by Robert Brownjohn was particularly influential for a number of reasons. I liked the effect of the strong contrast between the model (actress Margaret Nolan) and the simplified black background. I thought that we could use this kind of contrast to construct a mysterious and dramatic compositional

space. I was also interested in the way scenes from the actual Bond film were projected directly onto Nolan's body (Fig. 24). The idea of the body as a canvas was interesting and we referenced other fashion films including Solve Sundsbo's *The Ever Changing Face of Beauty* (2011) and Pierre Debusschere's *Holy Flowers - Fade Into You* (2012) which also play with this idea. We wanted to try to get a similar effect by superimposing imagery and textures from the natural world onto the models in our own video footage. In essence, we wanted to use this effect to create a kind of hypernatural costume that could be manipulated and transformed digitally.



Fig. 24. Projections in *Goldfinger* opening title sequence, 1964

To make decisions about makeup, we discussed ideas with our makeup artist Christina Kim. I created moodboards with notes about what we wanted to try, and Christina sent me annotated sketches of the models with different looks to help us visualize and compare (Fig. 25). The looks were influenced by the natural elements in the corresponding scenes. In the scenes influenced by the element water, the look was natural with subtle shimmers as highlights, basic contouring, and minimal eyeliner with an emphasis on the lashes. The design for air was more angular with an aerodynamic quality around eyes. The look for earth came about through a process of trial and error. Christina attempted to apply a colorful powder to our model

Jasmine's face and shoulders. This particular type of powder would not stick properly to create the desired effect so we had to scrap the idea. An alternate final look worked out well in the end.

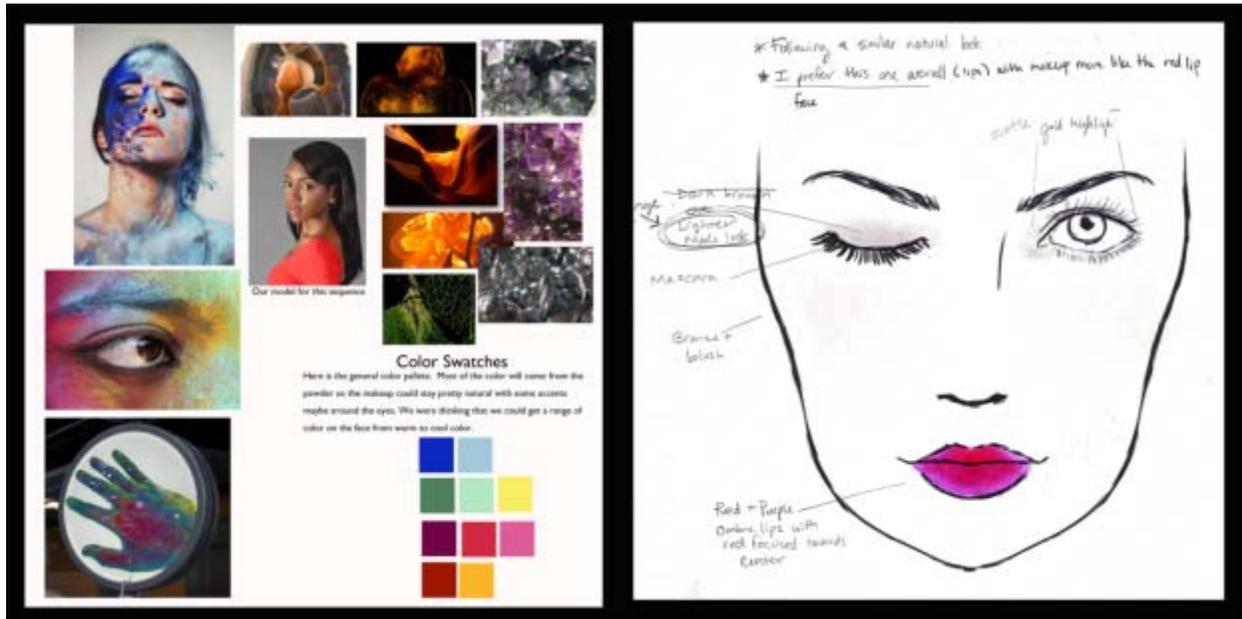


Fig. 25. Moodboard and makeup design sketches

In order to come up with wardrobe ideas for our models, we worked with Gillian Page. Fortunately, we were able to use one of Gillian's own beautifully completed garments. In her garment, the combination of soothing shapes (inspired by rock formations) with highly saturated colors made it easy to integrate it into the sequence. Due to our limited time frame, Gillian could not create any additional costumes from scratch so we had to improvise. We brainstormed ways that we could use dyed fabrics to creatively wrap around our models. We looked at a number of fabrics and decided to use sheer silk gauze which Gillian dyed using a maroon and plum color palette. The sheer and flexible nature of the fabric enabled the models to wrap it around them in a variety of ways while making fluid and expressive movements. We were also able to digitally superimpose textures and layers of video and animation onto the fabric during post-production.

Story and Structure

Unlike an opening title sequence for a movie, the A2W sequence does not foreshadow one particular story. During the development stage, we had to figure out how to structure the sequence to best express the concept based on our numerous references and ideas. We began by discussing rough ideas for the general tone and pacing and ways we could play with perception in a surrealistic and evocative style. This involved using a collage aesthetic that captured viewer interest by slowly revealing transforming figures in a hypernatural world. The idea was that the viewer would not completely understand the full picture of the world they were seeing but it was compelling enough for them to continue watching. In terms of pacing, Ben and I agreed that it should begin slowly with an ambient soundscape and increase in pace and intensity towards a crescendo of music and imagery. To establish structure, we made notes about specific scenes to be included describing them in terms of composition, actions, color, camera movement, and possible transitions from one shot to another. For instance, we wanted to include a scene where a transforming figure emerges from an aquatic environment.

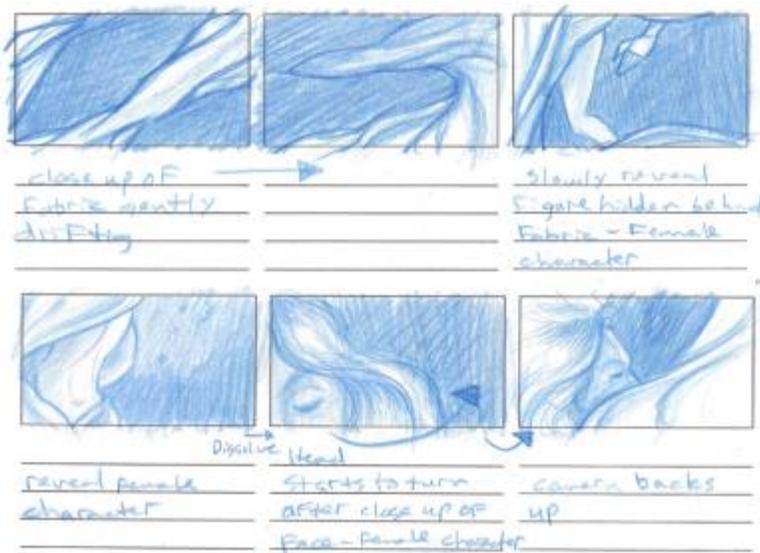


Fig. 26. Early storyboard for "water" section

One of the most difficult aspects of the project was determining if the sequence should have a clear linear narrative or be more abstract and nonlinear. Early on, we had some narrative ideas including one involving hypernatural creatures being born in a petri dish. It became easier to visualize once we decided to link the imagery and progression to a

water, earth, and sky motif. To continue discussing scenes we categorized them under water, earth, and air "sections".

Before production, I developed storyboards. This included a storyboard for a scene in the “water” section (Fig 26).

We originally wanted to shoot the water scenes with a model swimming underwater. However, for a number of reasons, we had to shelve the idea. Ultimately our video shoots were flexible, and we did not rely on a strict adherence to this type of storyboard. Especially in the video shoots with our models, we used shot lists, storyboard sketches, and photos of poses from fashion magazines and films for reference. Some of our key fashion film references were Amber Gray's *Dark Visions* (2013) and Ruslan Pelykh's *Angel* (2013). We had a basic idea of what we wanted, but we allowed some flexibility and spontaneity into the shoots. During this time, we also discussed ways of transitioning between shots. Working this way freed us to experiment with different angles, lighting effects, and model poses.

It is true that this approach is not always the best option because it comes with a level of uncertainty. It is also a little scary in that you have to trust your instincts that everything will work in the final cut. Especially when making an animation, I usually plan everything out with meticulous storyboards and animatics. In retrospect, a more defined narrative probably would have made it easier to cut together and given us a better idea of how the final product was going to turn out. However, I do think that the final sequence worked out using the more spontaneous approach.

The story structure of the sequence is abstract and nonlinear yet anchored by the concepts with which we were working. In the final edit, there is a basic progression from microscopic internal spaces in the beginning to a reveal of the transforming figures in the hypernatural environments. Many decisions about the final arrangement of the scenes were made during editing. In the end, the sequence lies in the realm of visual poetry capturing the spirit and concept of the show through a careful arrangement of texture, color, light, composition, motion, and layered imagery set to music.

As I explained in the background research section, many of the fashion films we referenced are short and experimental without clearly defined narratives that rely heavily on the relationship between sound and image. Nick Knight's films in particular seem to focus on establishing mood and through a cinematic environment inspired by the meaning behind the designer's collection. While we were inspired by these films, we wanted to build towards a climactic moment (which is not always present in these types of films).

In title sequence design, the opening for *The Girl with a Dragon Tattoo* (2011) uses a more abstract and somewhat nonlinear interpretation of a story. The sequence has the feeling of a "fever dream" and draws from various elements from the story (Fig. 27) ("Dragon Tattoo Interview"). The creative team approached it by identifying key moments from the story. Once this was complete, they developed imagery inspired by those moments and used them to describe the story in a more symbolic and surreal way.



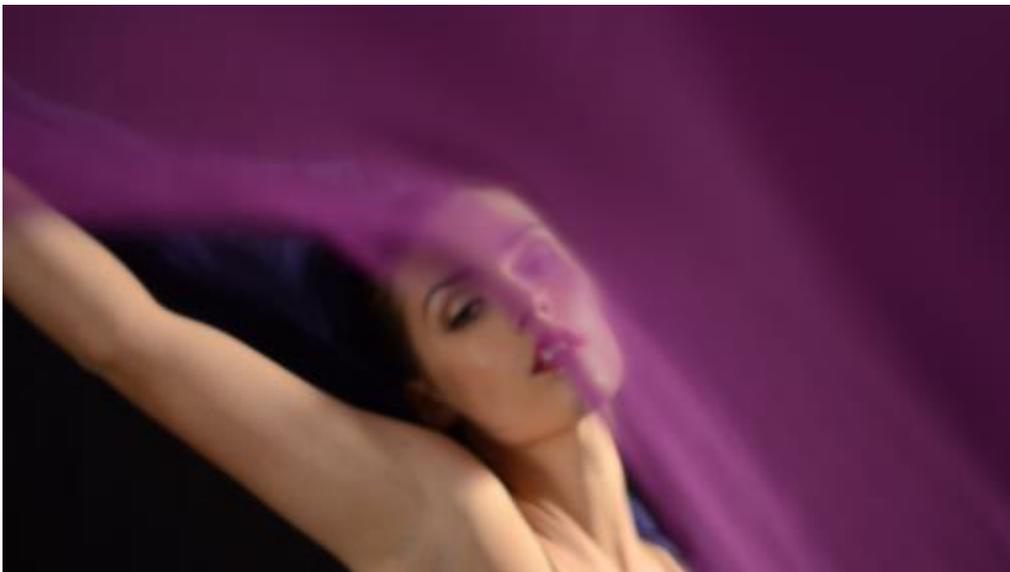
Fig. 27. *Girl with a Dragon Tattoo* opening title sequence, 2011

Next, the team created story vignettes which were narrowed down and edited together to form the whole sequence. Creative Director Tim Miller says that they tried to set up a "creative and production process with lots of flexibility" ("Dragon Tattoo Interview"). Miller also said that, at some point, he had to "let go and embrace the abstract" ("Dragon Tattoo Interview").

Much of the *Girl with a Dragon Tattoo* sequence was created using 3D modeling/animation. Using the 3D virtual world, they created most of the scenes “in a sort of void, as theatre in the round” (“Dragon Tattoo Interview”). With this method, they used the virtual 3D camera to put the action together and watch it from different camera views to find the best angles and cuts. While they made 3D animatics for specific scenes, Miller stated that they did not have time to complete storyboard animatics.

The Cinematic Camera: Equipment and Technique

We utilized a variety of camera equipment and shooting techniques to give the sequence a cinematic quality. Some of these techniques included exposure manipulations, rack focusing and camera tilts, pans, and tracks to add dramatic camera movement. For most of the video shoots, Ben shot footage with his Nikon D7000 camera with a Sigma 50mm 1.4, Sigma 17-70mm 2.8 macro, and Nikon 85 mm 1.8 lenses. To add color in the live shot, we also used blue, red, and pink gels. In general, we were we happy with the results (Fig. 28).



Fig, 28. Video still from raw footage

For additional shots focusing on textural details, I used a Canon 60D with a 2.8 macro lens. With the macro footage, we could emphasize details that could be used for textural purposes. In

addition to capturing amazing looking textures, the macro footage gives small details an almost epic quality (Fig. 29). To capture additional footage, I also recruited the talents of film studies majors Daniel Rode and Leesa Moore who used a Sony PMW-EX3 digital video camera.



Fig. 29. Video stills from macro video footage by Ben Scott (left) and Nick Helton (right)

We originally planned on using the Red One digital cinema camera, but decided against it due to time and processing power constraints. The Red One is a rather complicated camera and, since we were on a tight deadline, it simply would have taken too much time to learn how to effectively use it. In addition, the 2K to 4K outputs it produces would have taken a great deal of processing power and rendering time that we did not have.



Fig. 30. Using the Glidetrack for camera movement

Ben and I decided to use the Glidetrack Hybrid to achieve a wider degree of fluid camera movement. The Glidetrack is basically an aluminum rail that can be mounted on tripod with an attached camera. It is incredibly useful because it allows you to make smooth tracking

shots that add dramatic visual interest (Fig. 30).

Location Video Shooting: The Museum of Natural Sciences

Since we wanted to create a hypernatural cinematic world, we needed to capture imagery and video footage representative of and the natural elements of water, earth, and air. This led me to reach out to the North Carolina Museum of Natural Sciences. In January of 2013, I contacted Roland Kays (Director of Biodiversity Lab), Lisa Gatens (Curator of Mammals), Brian Oshea (The Ornithology Collections Manager), Benjamin Hess (Mammalogy Collections Manager), and Trish Weaver (Collections Manager of Geology and Paleontology). With their help, I started by scouting out the museum archives to find specimens of bird feathers, mammal skeletons or skins, and mineral/rock formations. I was interested in shooting video of a variety of specimens from different angles focusing primarily on detailed textural shots that could be collaged into the sequence or used as textures that could be projected or superimposed onto the models.

Everyone at the museum was incredibly helpful and directed me to specimens that they thought might be of use. During this phase, I took reference photographs of specimens with vibrant colors and unique textures. On a second trip, Daniel Rhode and I narrowed down the list of specimens we wanted to capture on video and made arrangements for the shoot in the museum. During the final shoot, Daniel, Leesa Moore, and I lit the specimens with filtered LED and Omni lights. I then shot the macro footage with the 60D while Daniel and Leesa shot with a Sony PMW-EX3 camera (Fig. 31).



Fig. 31. Macro video stills from the museum shoot

Experimentation and Trial and Error: Instant Optics and Digital Tools

I recently came across an interview with Marc Chartrand, the director of the title sequence for the film *Chasing Shakespeare* (2013). In the interview, Chartrand describes completing a series of experiments and motion tests to help “lock in a direction” for the sequence (“Chasing Shakespeare Interview”). We took a similar approach by refining a visual style through trial and error involving experimentation with process and materials.

While we relied heavily on the use of computers and digital technology, it is important to remember that this technology is only a tool and an extension of the creative mind that controls it. We realized that some shots required digital manipulation, compositing, or animated effects in post-production. Other effects could be captured “in camera” during a live video shoot. Creative director Robert Brownjohn referred to these types of shots as “instant opticals” (qtd. In Radatz, “James Bond: 50 Years ”). Brownjohn says an instant optical shot is one where “everything is done in the camera rather than the laboratory” (qtd. In Radatz, “James Bond: 50 Years ”).

There are many examples of “instant opticals” in both the film and fashion world. In *From Russia with Love* (1963), Brownjohn used film slides to project the film titles directly onto the body of a backlit dancer (Radatz, “James Bond: 50 Years ”). This is an effect that he perfected in the title sequence for *Goldfinger* (1964). We were also inspired by fashion photographer Kristy Mitchell who often uses handmade props to create visual effects in during live shot without a great deal of digital compositing in post-production.

We faced the issue of figuring out which effects or shots could be captured “in camera” and which shots required digital manipulation. Virtually every scene involved some level of digital tweaking, however, there were a number of instances where we used lighting gels and filters, camera techniques, and other materials to achieve the desired effect. Some of the color effects were created in the live shot by placing colored gels and filters over the lights during the shoots. We were also able to get specific looks by controlling the camera exposure. For example, in one

scene, Ben overexposed the shot by adjusting the aperture to create a blown out ethereal effect (Fig. 32).

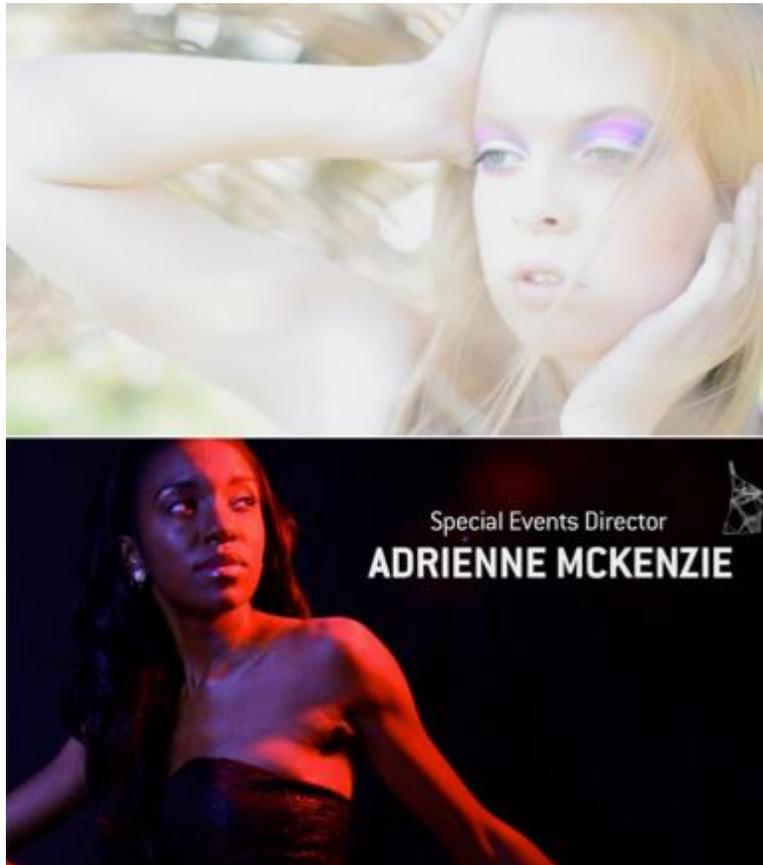


Fig. 32. Exposure and color gel effects in A2W sequence

Combining Non-Digital Materials with Digital Effects

Many of the final shots contain a mixture of non-digital materials and digital effects. In some of the early scenes, we envisioned a womb-like aquatic environment with imagery and motion reflecting the idea of birth and growth. We were particularly inspired by an experimental motion study called *The Flow III* (2012) by Bose Collins Creative Consultancy. *The Flow III* explores underwater movements of intricate patterns of color and organic form. These patterns are created by filming colored liquid being squirted into a clear container filled with water. Using a mixture of creative lighting schemes, a high definition camera, and digital effects, the resulting patterns form images that remind me of a mixture of bodily organs, spiritual mandalas, or strange deep sea creatures. The transformative nature of the imagery produced

by these floating and shape-shifting patterns combined with the alternating slow and fast motion playback speeds create an absolutely mesmerizing effect. This is an effect that could be simulated using digitally created particle effects in an animation program. However, Ben and I used a similar approach to Bose Collins by using both “in camera” and digital effects.

We began by setting up lights and a camera focused on an aquarium filled halfway with water. We then tried different combinations of materials to create a liquid that would give us the most interesting form when dropped into the water. We found that denser, more molded forms resulted from a mixture of coffee creamer, food coloring, and vegetable oil. We also dropped food coloring into the water for a sinewy, less 3D appearance (Fig. 33). To give the shots more depth of field and atmosphere, Ben adjusted his aperture and focus.



Fig. 33. Test footage from the aquarium shoot

There were a number of instances where we altered the way we shot a scene. In one particular scene, we originally wanted to shoot video of our model Agee Taylor underwater. We tried shooting some preliminary tests in a pool but, due to equipment malfunctions and lighting issues, we decided to simulate the underwater shot using simple props and digital effects. To abstractly simulate the feeling of underwater movement we used dyed sheer silk gauze and creative posing. As the camera rolled, Agee worked with the flexible nature of the fabric to make fluid movements in between several additional layers of fabric positioned at different depths in front of the camera. We used air from several fans to give the fabric greater motion during the live shot. In the final composited shot, I was able to blend some of our aquarium

footage into the scene with multiple layers and blend modes in AE. Using this technique, we were able to represent an underwater scene in a very stylized way.

A large portion of our footage was color corrected in Adobe Premiere™. Color and levels adjustments combined with blended layers ultimately gave the sequence a more lush and cinematic look. An example of this can be found in the one of the opening scenes involving a simulated “microorganism.” Ben and I produced this microorganism scene by shooting video of droplets of food coloring and creamer suspended in vegetable oil in our small aquarium. Since we associated the hypernatural with a vivid and heavily saturated color palette, I imported the raw footage into Premiere and adjusted the contrast, range, and intensity of the colors (Fig. 34).



Fig. 34. Aquarium test footage with color correction

Through trial and error, we figured out methods of manipulating the video footage to create a surreal and transformational natural world. Experimenting with selective mirroring and digitally warping or distorting the video footage helped us express our ideas through more complex and illusory imagery. This was an important part of our process because this experimentation with form produced a number of exciting surprises (Fig. 35). During this time, we were also able to resolve some technical issues while using the most successful experiments as a guiding force.

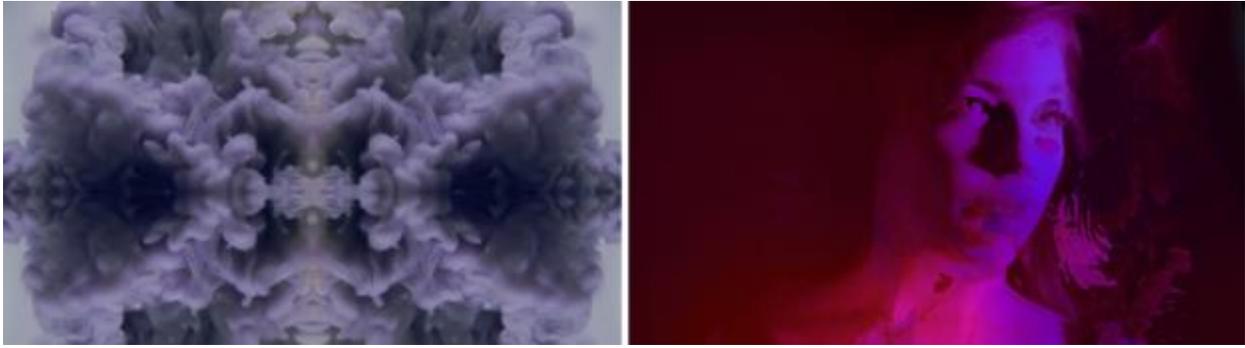


Fig. 35. Experimenting with form manipulation in test footage

Distorting the underwater footage from the aquarium shoots was particularly useful. After experimenting with virtual cameras in AE, I decided to use a plugin called Little Planet to warp the video footage in perspective and give it a greater appearance of deep spatial depth. Once this warping effect was applied to the video layer, I was able to set keyframes on different channels to create the sensation of movement through deep space. This animation combined with the depth of field in the raw video footage was intended to suggest a more immersive and active space (Fig. 36).



Fig. 36. Immersive Space

Compositing

Using AE and Premiere, multiple layers of video footage, animated effects, and typography were integrated into a finished composited shot. This particular shot depicts an aquatic, womb-like environment and appears in one of the opening scenes (Fig. 37).

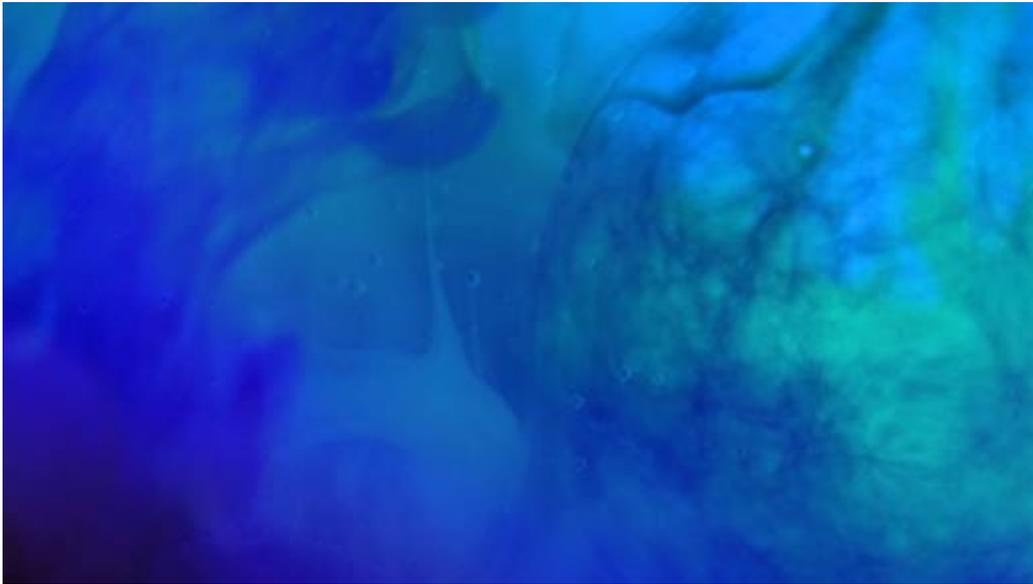


Fig. 37. A final composited shot

The compositing process used to create this shot is described in the following breakdown:

- 1) In AE, the main composition was comprised of 2 layers. One layer contained the video footage from the aquarium shoot and the other contained a layer with a womb-like “orb” that we wanted to float around in an aquatic environment. The orb layer was precomped (which means that it was nested inside an AE composition).
- 2) In the orb precomp, I created a dark solid layer with fractal and turbulent noise filters applied. In the fractal channel settings, I set the fractal type to dynamic and the noise type to spline. I keyframed the evolution channels on both filters to animate the fractal patterns. Using the CC Sphere filter, the flat fractal animation was converted into a spherical or orb shape. The

animated fractal patterns on the orb shape gave womb a pulsing vein covered appearance (Fig. 38).

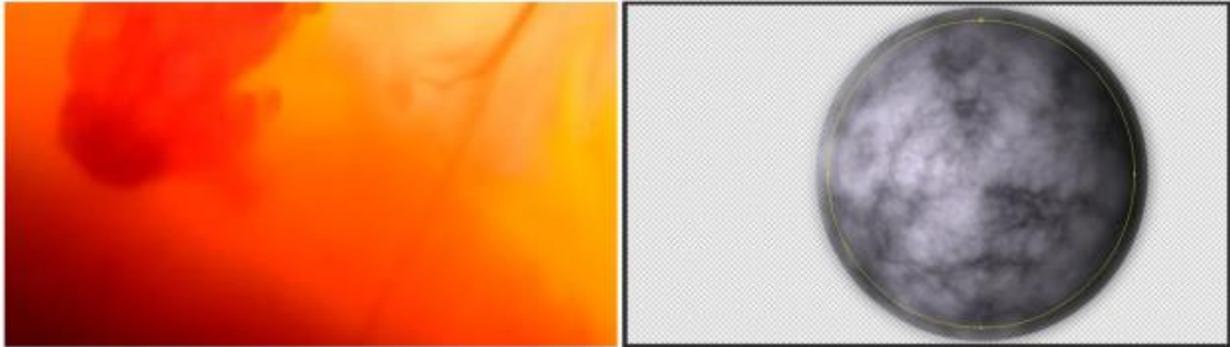


Fig. 38. Raw video footage (left) and the “orb” precomp (right)

3) On top of the fractal animation layer, I created an adjustment layer and applied a circular shaped mask and set it to subtract inside the interior of the orb shape. The yellow circle in the in Fig. 38 represents the edge of the mask. Next, I added a gaussian blur filter to the mask in order to soften its edge and blend the orb shape more convincingly into the final composited shot.

4) In the main composition, an overlay blending mode was added to the orb precomp layer in order to blend it with the original aquarium footage. The position, scale, and rotation channels of the orb precomp layer were then keyframed to give the orb some additional movement.

5) The main composition was then rendered out as a quicktime movie with a full hd resolution of 1920 x 1080. Next, I imported the quicktime movie into a sequence in Adobe Premiere. In Premiere, sequences are equivalent to compositions in AE. I added to the atmosphere by blending another layer of aquarium footage using a soft light blending mode (Fig. 39).



Fig. 39. Video footage layer from aquarium shoot

6) Next, I made color corrections to give the shot a more mysterious blue cast, and I adjusted the contrast and levels for a more cinematic look. After nesting those layers, I keyframed the scale attribute of the nested sequence to simulate a camera moving through the space.

Applying Texture and Layering

We were inspired by the texturized figures in *Goldfinger* (1964), Solve Sundsbo's *The Ever Changing Face of Beauty* (2011), and Pierre Debusschere's *Fade into You – Holy Flowers* (2012) (Fig. 40, 41, 42). We wanted to try superimposing textures onto the models in our video footage. The textures we used came from the raw and manipulated video footage we shot outdoors, in the aquarium, and at the museum. To project textures on the figures, a number of techniques were tried before settling on final process.

In the *Goldfinger* sequence, film images and text were projected onto female figures using a film projector. Instead of trying to capture that kind of projection effect in a live-shot, we considered ways of creating the same effect using digital tools in post-production. A couple of modern versions of the *Goldfinger* concept are the heavily textured and transforming figures in *The Ever Changing Face of Beauty* and *Fade into You – Holy Flowers*. Instead of using a live-projection, the video footage of the figures in these films was more than likely shot in front of a green screen in order to isolate the figures from the background. We considered different ways of digitally separating our models from the backgrounds.



Fig. 40. *Goldfinger* opening title sequence (top right), 1964

Fig. 41. *The Ever Changing Face of Beauty*, 2011 (left)

Fig. 42. *Fade Into You – Holy Flowers*, 2012 (bottom right)

After doing several tests, we decided not to use the green screen for a number of reasons. There are potential problems (including reflectivity) that you have to deal with when working with a green screen. If it was not set up properly, we might have ended up with a green cast on the figures in the shot. Due to time constraints, we only had one chance to shoot video with our models so we did not want to take a risk. Once we figured out that we could get the effect we wanted without the green screen, we opted to shoot video of the models on a black background.

Using the Roto Brush tool was another possible solution for separating the figures from the background. The Roto Brush is a tool available in AE that can be used to isolate objects. Basically, it enables you to draw a boarder around the object or figure you want to separate. I had some success with the Roto Brush and it helped me isolate the areas I wanted and mask out the textures inside the shape of the figure; this meant that the textures would be revealed and superimposed within the shape of the outside contours of the model (Fig. 43, 44).



Fig. 43. Texture applied to the figure in the finished sequence (top)

Fig. 44. Early Roto Brush tests (bottom)

If given more time, the Roto Brush would have been a suitable alternative to a green screen. I used the Roto Brush on one shot which appears in the final sequence, and I would have preferred to use it on more of the shots. However, using this tool can be a tedious process especially when you are trying to isolate a moving figure. This method simply took too much time and processing power to use for every shot.

After experimenting with some of the raw footage, we realized that the textures that we wanted to superimpose on the figures could be added by creatively stacking layers and applying blend modes. This reduced the necessity of separating the figure from the background using the green screen or Roto Brush. However, even though the textures layered on the figure are not completely masked out from the background, it worked well enough. The effect was easier to achieve using a multiply blend mode because I was working with figures on a black background.

The following is a basic breakdown of a shot with model Christine Van Hoever demonstrating the compositing set up with three video layers:

- 1) Top Layer- Duplicate layer with original raw footage of Chrissy turning her head. A soft light blend mode is applied with brightness and contrast adjustments.

- 2) Middle layer (Texture Layer) – Video footage layer with a moving shot of a bird feather taken at the museum. After applying a multiply blend mode, a turbulent displace filter was also added and keyframed to help mold the texture to the contours of the Chrissy's face (Fig. 45).

- 3) Bottom layer – Layer with original raw footage of Chrissy turning her head with shadow/highlight adjustments.

Using the multiply blend mode with the dark background helped hide some of the areas in the texture video layer in the final shot (Fig.46). This put the primary focus on the blended textures on the models.



Fig. 45. Video layer with turbulent displacement



Fig. 46. Composited shot in the finished sequence

This technique did not always work perfectly, but it worked well enough. The only major issue with this technique was revealed when I rendered out an mov file using H.264 compression. For some reason, the H.264 codec causes a gamma shift in the final output making the blacks less dark. This means that some of the areas of the texture layers that I wanted to be hidden in the darkness outside of the model's body are more visible and distracting. However, this only seems to be a problem when playing the video with Quicktime Player on a Windows machine.

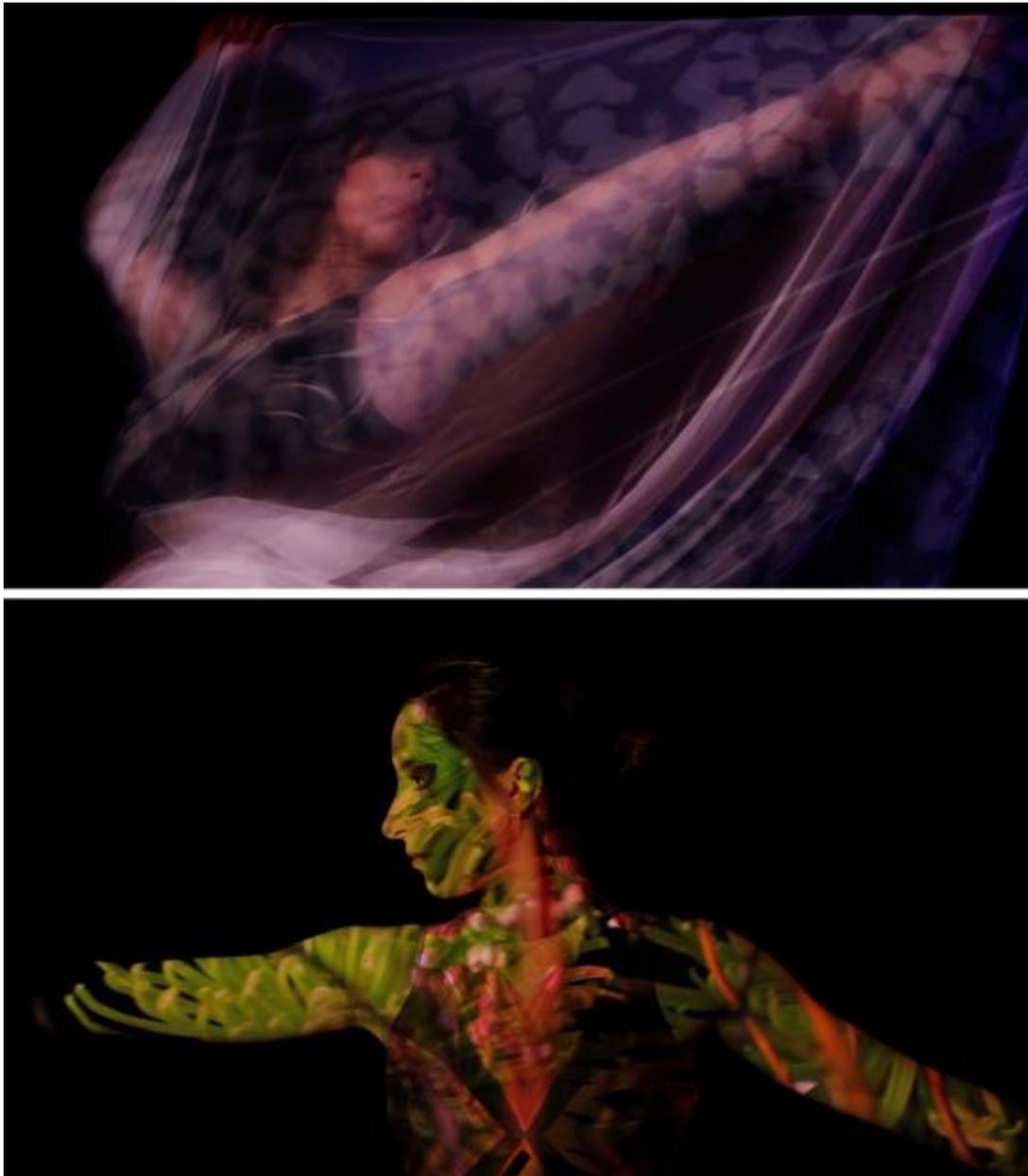


Fig. 47. Applying textures to figures

In general, I am pleased with the way the natural textures relate to the figures (Fig. 47). The blend modes worked particularly well when applying layers of texture to the fabric draped around the models. Layered imagery was an important visual component and working between AE and Premiere helped produce the desired look (Fig. 48). To add additional interest, Ben used his camera to produce a bokeh effect (which refers to the way a camera lens displays out of focus points of light. Bokeh means “blur quality” in Japanese and Ben achieved this effect by aiming his camera at our studio lights while adjusting the focus to create blurred points of light. The bottom/left still image in Fig. 48 is an example of a final composited shot using the bokeh effect as an additional texture.



Fig. 48. Layered imagery and animated effects

Presenting to a Client

Since this project relied heavily on experimentation the question was raised, “How do you present an experimental project to a client to give them a clear picture of the final product? A portion of the answer depends on the client. Fortunately, in our case we had some freedom with the imagery and style. In my original pitch, I showed Justin and Katherine some references

that gave them an idea about the direction I wanted to take. During production, I kept them informed of the progress and asked for their opinions after sending them some rough edits from specific sections. Ideally, I would have shown them a more detailed storyboard and animatic along with rough edits to give them a clearer idea about the entire piece. Lack of time was a major factor and the compressed schedule meant we had to improvise and work quickly.

Like Chartrand with the *Chasing Shakespeare* (2013) titles, we conducted experiments and motion tests which helped solve technical problems and shaped the form and subsequent direction of our sequence. While I made a few animation tests during the fall 2012 semester, for a number of reasons, most of the experimental video recording, motion, and compositing tests were made during the spring 2013 semester. Experimentation was an important part of the process so we dealt with the delays this caused in our production schedule. I would have preferred to conduct these tests during the fall semester which would have given us more time and direction during the production phase in the spring. This would have also freed up time to put together more refined storyboards, animatics, and edits.

Through my research, I have found that this is not necessarily an unusual problem, and the method of presenting ideas to clients varies. It would be interesting to see how other experimental filmmakers approach this issue. I found one extreme example in Robert Brownjohn's pitch for the title sequence to *From Russia with Love* (1963) which involved film images and text being projected onto female figures. Brownjohn apparently hated storyboards and scripts and pitched the concept to his clients by removing his shirt and standing in front of a slide projection saying, "It will be just like this ...except we'll use a pretty girl!" (qtd. in Radatz, "James Bond: 50 Years ")

Typography

Type was an essential ingredient and the type treatment we used reflects the visual style of the sequence and the A2W brand. From a functional standpoint, we needed to display the names of the show's primary directors, the A2W logo, and the title of the show. To effectively use the

type, we considered the font and form of the text, the visual hierarchy, and the placement and movement of the text within the frame. We used the conduit bold and light font, chosen by the show's Graphic Designer Zoe Symon, to keep the branding of the show consistent.

The font itself was simple, clean, and readable. We thought of the type in terms of its visual character rather than as mere informational text. Robert Brownjohn described the concept of "type as image" when he stated, "The picture and the word have become one thing. The only real advance...has been the use of type not as an adjunct to an illustration or the image but in its use as the image itself" (qtd. In Radatz, "James Bond: 50 Years"). In order to add additional visual interest to our text, Alyssa Barrett utilized an AE plugin called Plexus. Plexus is a 3D particle system that creates animated geometric patterns which we used to add character and draw attention to the type. Alyssa experimented with Plexus in the months leading up to the show and applied this knowledge when she animated the type using the treatment she developed. Using Plexus, Alyssa created some complex animated patterns composed of triangular shapes that mirrored the geometry in the A2W logo and the angular motifs used in some of the designer's collections. The Plexus treatment also gave the text a transformative

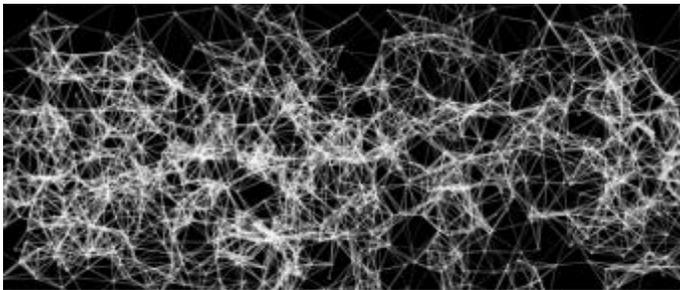


Fig. 49. Plexus tests by Alyssa Barrett

and simultaneously digitized yet organic appearance and movement (Fig. 49). The subtle use of Plexus animation on individual letters added just enough visual interest without disrupting clarity (Fig. 50).

In order to establish a visual hierarchy within the frame, we made use of strong tonal contrast and size relationships. The use of predominantly white or light colored lettering on dark backgrounds added drama, visual intensity, and

readability. We integrated the text into each composition in spaces that directed attention without overpowering the other elements in the frame.



Fig. 50. Text with Plexus treatment

The Soundtrack

In the early stages, Ben and I agreed that the soundtrack should be dynamic and build in intensity along with the imagery. In terms of sound, I wanted to find something that mixed tribal influenced percussion with digitally manipulated, atmospheric, or ethereal sound. Ben, Alyssa, and I found several tracks that fit the criteria on some levels but were deficient in others. We knew the sequence would be two to three minutes in length so we also had to find something that worked within that timeframe. In the end, I opted to compose the soundtrack myself. I realized that this would take up more of my time, but the advantages of creating my own soundtrack was worth it. This solved a number of problems in that I was able to customize and alter both the sound and the length of the track as needed.

To record the track, I began with a drum loop and a Buddhist chant sample I acquired from freesound.org. After altering and mixing these samples, I developed the song structure and added additional percussion, processed guitars, and bass tracks recorded in my studio. While recording, I used a combination of microphones and amplifiers with an M-Audio Fast Track

instrument interface. I used GarageBand to record the instruments and Adobe Soundbooth™ for final mixing.

I recorded a rough track to help give us direction for test video edits and fleshed it out for the final edit. I wanted the music to have an ebb and flow that drifted from layered sound with prominent percussion to more atmospheric less percussive sections. In the end, I was pleased with the soundtrack. Given more time, the final track could have been improved, but I thought that it captured the right feel and build.

Final Editing

As the project progressed, we made rough edits to clarify the general mood and feel. For the final edit, we sifted through a huge amount of raw footage and cut out the most interesting moments. Trimming down the raw footage was an intuitive process where we determined which shots would add tension or transition well from one shot to the next. To add dynamism, our decisions to make cuts were determined by the movements of the models, camera, or other objects in the frame. While we were not working with an animatic, we had specific ideas about the progression and pacing.

We controlled the timing of the shots and cuts to establish a relationship with the dynamic arrangement of the soundtrack. To add interest and variety to the musical and visual rhythm, we tried mixing the soundtrack and video elements using parallel, irregular, and counterpoint editing strategies. In parallel editing structure, the rhythm and pace of the music is perfectly synced with the visuals (Woolman 61). In an irregular editing structure, the pace and rhythm of the music or audio is often regular and dominant, while rhythm and pace of the visuals is irregular. In counterpoint, the visuals follow a slower rhythm and pace in contrast to a music track following a faster pace (61).

The pacing was established, in part, by alternating the duration of the shots. The sequence begins with ambient sounds with longer spaces between the dissolving “soft” cuts. As the music

gets more layered and intense towards the end of the sequence, the shots are much quicker with more abrupt transitions or “hard” cuts. Controlling the pace helped us build up to a climactic moment before the show title appears at the end of the sequence. To manipulate the viewer’s perception of time and space, we arranged alternating close up, medium, and wide shots. To add varying degrees of motion, we also sped up and slowed down the action in specific shots using a process called time remapping.

To create a smooth editing workflow, we used a number of strategies. For the final edit, I imported all of the video clips, rendered movie files, and Adobe Premiere™ sequences into one Premiere file. I then pulled out the edited shots I wanted and placed them into one sequence for the final edit. Since we were incorporating animated effects with video using both AE and Premiere, the process of dynamic linking was especially helpful. Fortunately, we were able to split up some of the editing duties to speed up the process. While Alyssa worked on the Plexus type animation, Ben and I could edit video and animation footage for the final cut. After I imported Alyssa’s rendered Plexus type animations, I used Premiere to add additional motion, fades, and blur to the text. Ben and I each had a copy of the Premiere file so I could also import and integrate his edits into the final cut.

Presentation and the 2013 A2W Show

On April 16, 2013, I gave my project oral presentation that detailed the influences, precedents, and process used to create it. During this time, I also showed a sample edit of the sequence. At this point, we were in the process of final sound and video editing and, while the project was close to completion, this gave me a chance to get some feedback before finishing the final edit.

The finalized sequence was shown on four projection screens before the show commenced on the evening on April 25th, 2013. Each screen displayed the opening title sequence, sponsorship information and graphics, opening and closing video announcements from runway director Laruen Caddick, hypernatural inspired animations from Marc Russo's animation studio, and designer video introductions made by Doug Kass's documentary film class. The final collections by the designers turned out incredibly well and the show went smoothly.

The show took place outdoors with the runway set under a large tent in the Court of Carolinas on the NC State campus (Fig.51). I thought the atmosphere was beautiful and the production was very professional. Fortunately, there were not any weather complications, but the starting time for the show presented a visibility issue on the projection screens during the beginning portions. The show started just before the sun went down and the video on the projection screens on the outside of the tent could not be clearly seen. In the future, a later starting time should reduce screen glare and prevent this issue on outdoor screens.



Fig. 51. The 2013 A2W show

Conclusion and Future Work

In general, I am very pleased with the final title sequence. While I do recognize areas of improvement, I believe that it accomplished the goals that were established. Fortunately, it was also delivered on time and was well received. It was an incredible amount of work putting it together and it required a great deal of coordination. For instance, one of the most difficult aspects of the project was scheduling the video shoots. Organizing the shoots involved juggling the schedules of the models and crew, gathering the supplies, and reserving camera equipment and space. While I do not have any additional plans for this specific project, it has also inspired me in a number of ways.

First of all, I would like to continue working collaboratively. In this particular project, collaboration was essential. After working on films and animations with others during past few years, my conception of the myth of the lone, individualist artist has evolved. In my previous master's work at the University of Georgia, I developed a series of paintings and drawings based on my own interpretation of a fairy tale called *The Juniper Tree*. While it was rewarding to create, I often worked alone in my studio with occasional feedback from my peers. While I am still interested in creating work individually, I have come to realize that it is a highly rewarding experience to work with other people towards a common goal. Creative director Tim Miller sums up this sentiment when he said, "The best thing about the collaborative process of filmmaking is finding people you like working with and trust; it not only makes the process more enjoyable but it produces the very best results" ("Dragon Tattoo Interview").

In addition, I hope that this project will inspire future interaction between graduate/undergraduate students in multiple disciplines and departments both inside and outside of the university. This kind of cooperation is bound to produce exciting future innovations and experiences. When working collaboratively, I can offer the following advice: Ask for help if you need it and return the favor, always appreciate the help you receive, and try

to maintain a positive attitude when interacting with your collaborators (because you can always freak out when you are alone).

In future projects, I also want to continue exploring a hybrid media approach because it offers seemingly unlimited possibilities for visual storytelling and image making. In *The End of Celluloid*, Matt Hanson mentions the dawn of the “advanced moving image” (Hanson 2). He argues the traditional idea of cinema is disappearing in the wake of digital technologies. These technologies have opened new doors for expression and freed artists to create and blend their own unique visions outside of the conventional Hollywood settings. In the same way that we have used our ingenuity and technology to bend the rules of nature, we can manipulate the standard conceptions of film and animation and the genres that confine them.

Additional Illustrations



Cosmosis

Jennifer Werkhoven and Ami Sueki



Dissimulate

Laura Tripp



Creatures of the Deep

Sarah Edens and Lindsey Sherrill



Patterned Strength

Sarah Cannon

Fig. 52. Images from the A2W program featuring the designer's collections

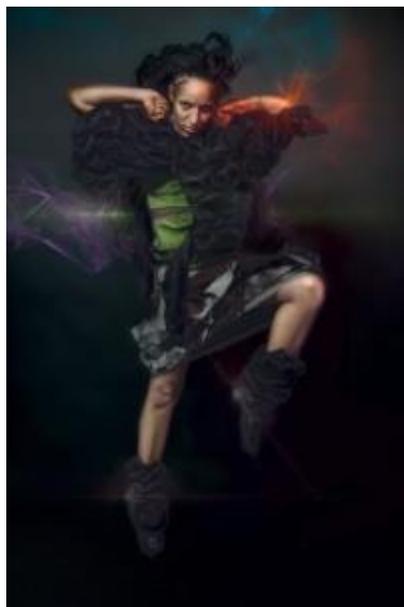
Additional Illustrations



Fractured
Sarah Kelly



The Enlivening of Recycling
Morgan Wolf



Insurrection
Brittney Tabron



Roots of the Runway
Kori Waldrup

Fig. 53. Images from the A2W program featuring the designer's collections

Additional Illustrations



Fig. 54. The 2013 A2W show

Additional Illustrations

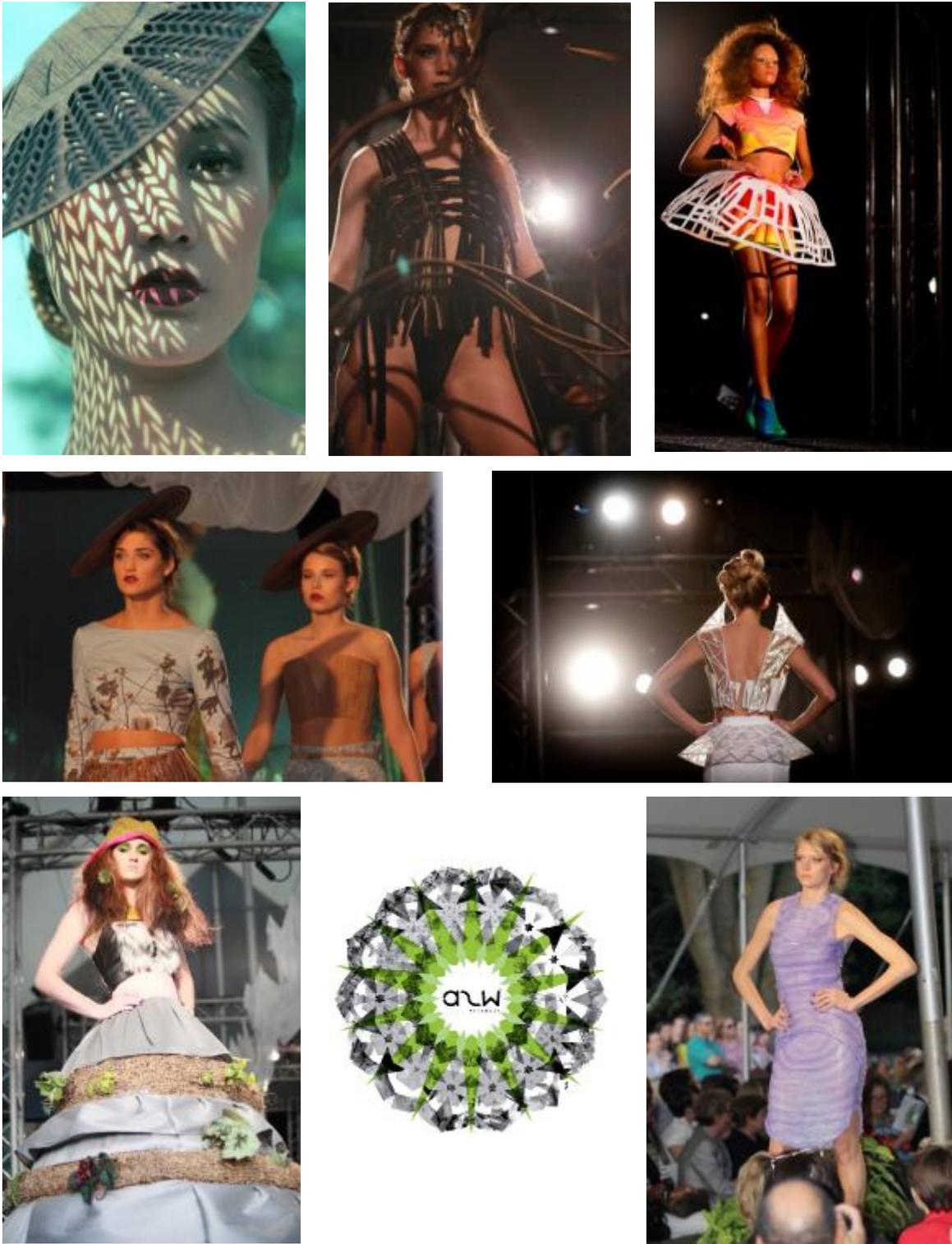


Fig. 55. The 2013 A2W show

Fig. 56. The 2013 A2W Logo (bottom middle)

Additional Illustrations



Fig. 57. Stills from final A2W opening title sequence

Additional Illustrations

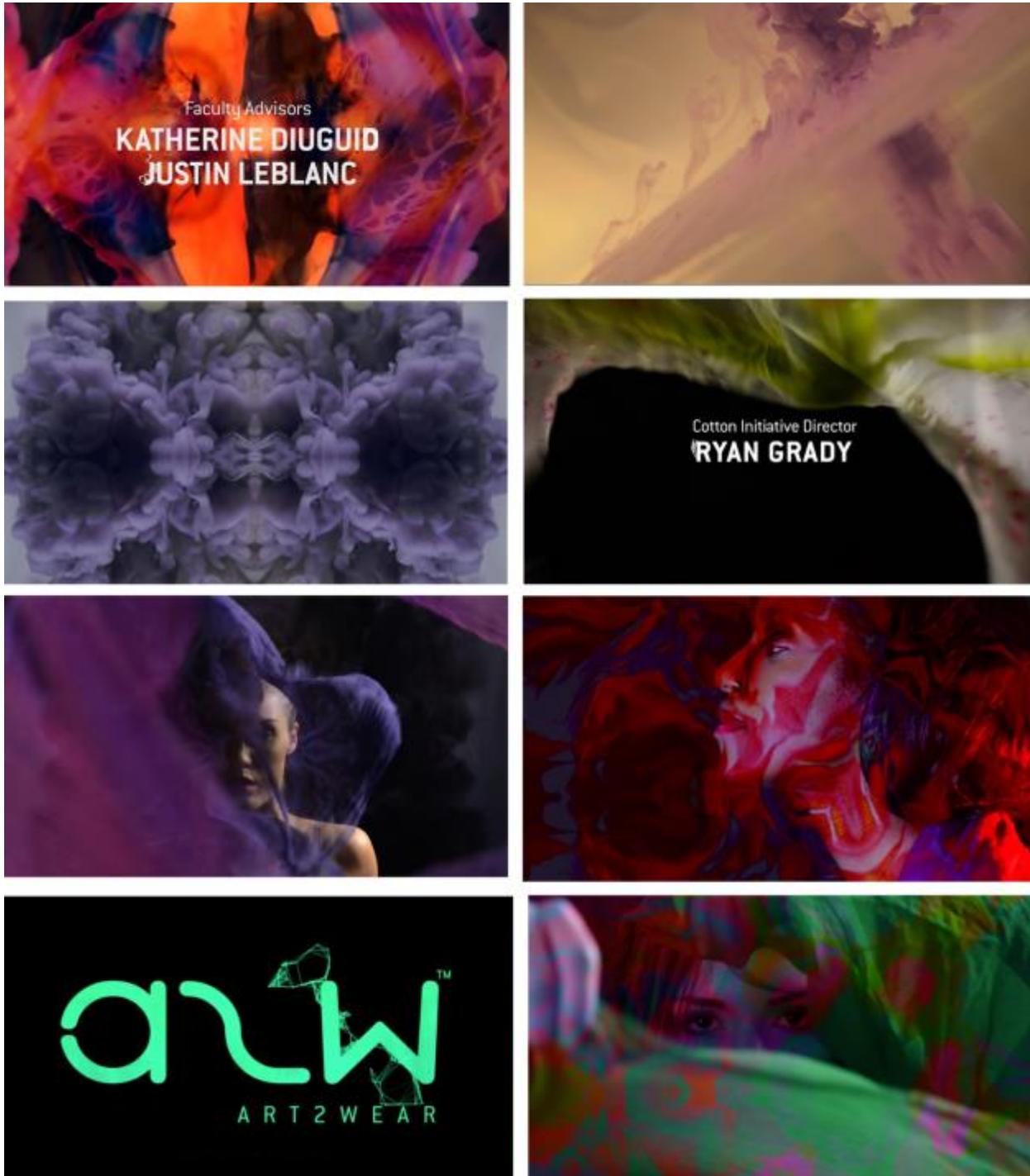


Fig. 58. Stills from final A2W opening title sequence

Additional Illustrations



Fig. 59. Behind the scenes

Additional Illustrations



Fig. 60. Behind the scenes

Glossary of Terms

Animatic- A type of moving storyboard with a rough soundtrack. Animatics can help define the sense of movement and timing in a sequence and can give early indications of how the images are relating to a soundtrack.

Biomimicry- A scientific discipline involving a mixture of biology and engineering that, in order to solve human problems, looks at nature as a teacher. Biomimics study processes in nature that can demonstrate better ways to design sustainable and efficient technologies.

Biophilia- A concept coined by Psychologist E.O. Wilson. According to Wilson, biophilia is a “fundamentally, genetically based human need and propensity to affiliate with life and lifelike processes.” (qtd in Kahn, et al. 37).

Biotechnology- A blending of technology and science that utilizes and manipulates living organisms and systems to produce a wide range of products.

Blending Modes- A range of effects in Adobe Photoshop™ and Adobe After Effects™ that can be applied to layers and dictate the way one graphic element or image layer blends or interacts with another.

Camera Pan- A shot in which a camera is pivoted and turned horizontally on a tripod.

Camera Tilt- A shot in which a camera is pivoted and moved vertically on a tripod.

Cameraless Filmmaking- The process of drawing or painting directly on celluloid film to create a succession of images.

Cinematographer- The person responsible for the photographic aspects of a film including lighting and composition.

Color Saturation- Refers to the “relative purity” or intensity of the color (Zelanski and Fisher 140).

Complementary Colors- Colors that lie opposite of each other on the color wheel.

Compositing- A process of merging a variety of separate visual elements into a consistent and seamless compositional space.

Counterpoint Editing- An editing strategy where the visuals follow a slower rhythm and pace in contrast to a music or audio track following a faster pace.

Cubism- An art movement, led by Pablo Picasso and Georges Braque, that sought to represent multiple viewpoints of 3D space on a flat 2D surface.

Environmental Generational Amnesia- A psychological state caused by an increasing disconnection with natural phenomenon that can be traced and measured from one generation down to the next.

Exaggeration (in character animation)- The process of amplifying a character's expressions, movements or gestures in order to enhance the story and get the audience emotionally involved with the characters.

Genetic Engineering- Using biotechnology, genetic engineering involves the process of altering genetic material (DNA) in an effort to produce modified plants, animals or micro-organisms.

Hybrid Media- A mixed-media approach to filmmaking that involves blending a variety of moving image media including live-action cinematography, graphics, still-photography, animation, 3D computer animation, and typography into a single "shared" composition

Hypernature- A concept within the larger philosophy of Next Nature. According to scientist and theorist Koert van Mensvoort, hypernature is an "exaggerated simulation of a nature that never existed." According to the hypernatural viewpoint, the world we experience, for better or worse, results from the blend of the natural world with technological innovations and human ingenuity.

Industrial Revolution- Beginning in the mid-18th century, a period of change from an economy based on agriculture and handcraft to one of industry and manufacturing through machinery.

Irregular Editing- An editing strategy where the pace and rhythm of the music or audio is often regular and dominant, while rhythm and pace of the visuals is irregular.

Keyframing (in Adobe After Effects™)- An animation process that gives animators and designers the ability to assign precise values to objects at a specific point in time in virtual space.

Limited animation- A minimal approach to animation defined by limited movement that is unconcerned with creating the effect of fluid and natural motion, characters, props and scenery.

Local Color- The color of a particular object as seen in daylight without the influence of shadow.

Motion Graphics- A broad term for a medium that involves combining elements of cinematography, animation, advertising, editing, storytelling, graphic design, and typography in areas of film and television, the web, and mobile devices.

Nanotechnology- A blending of engineering and science that deals with the design and manufacturing of microscopic devices (including robots) at the molecular level. Advancements in Nanotechnology will ultimately lead to the creation of small “nanobots” capable of repairing cells.

Next Nature- A Philosophy that seeks to challenge the traditional concept of the natural world by redefining what is considered natural and what is considered artificial.

Opening Title Sequence- An introduction to a film which provides information about those involved in the film’s production. The title sequence sets the tone of the story and draws the audience into the world envisioned by the filmmaker.

Parallel Editing- An editing strategy where the rhythm and pace of the soundtrack is perfectly synced with the visuals

Point-of-Attention- A viewer’s area of focus that can be directed and manipulated through design and filmmaking principles.

Principle of Contrast and Affinity- A principle in design that addresses the effective use of contrast versus similarity. The principle states that, “The greater the contrast in a visual component, the more the visual intensity or dynamic increases. The greater the affinity(referring to similarity) in a visual component, the more the visual intensity or dynamic decreases.” (Brock 11).

Russian Constructivist Movement- An abstract art movement originating in Russia that sought to explore abstract properties including picture surface, construction, line, and color.

Storyboard- A set of successive images that identify key moments in a story or sequence and clarify the transitions between them.

Style Frames- Images that capture the overall aesthetic and mood of a sequence. Style frames are generated in order to highlight artistic preferences in terms of color, form, composition, and typography.

Superbiology- A term coined by transhumanist philosopher Simon Young. The term refers to the unlimited potential of scientific and technological advancements in areas of Biotechnology, Genetic Engineering, and Nanotechnology.

Superimposition- One shot or layer overlaid on another.

Surrealism- A movement in art and literature that began in the 1920's. Surrealist visual artists were interested in the irrational logic of dreams and sought to explore the unconscious mind through the use of automatism and the juxtaposition of absurd pictorial or sculptural elements.

Time Remapping- Through a process of setting keyframes to adjust playback speeds, time-remapping alters the speed of video or animation footage.

Tracking Shot- A shot that follows a moving subject within the frame. A tracking shot can also move towards, alongside, or away from a stationary subject.

Transhumanism- A philosophy that advocates using reason, science and technology to overcome the limitations of the organic human body.

Typography- Involves the design and use of typefaces in a range of media.

Visual Rhythm- The repetition of shapes, values, color, and texture to establish a pattern.

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<http://www.ncsu.edu/project/design-projects/art2wear/about/>. In addition to providing information about the mission and vision of the A2W show, this site provides profiles of the designers and team members that bring the show together. The site also gives volunteer and sponsor information in addition to a detailed listing of events and news updates that correspond with the show.

“About SHOWstudio” *SHOWstudio*, Web. 9 Sept. 2012.

<http://showstudio.com/about>. SHOWstudio is an independent website started by fashion photographer Nick Knight. In addition to broadcasting catwalk shows and live fashion shoots, the site is a platform for engaging the public with the rising medium of fashion film. Using the internet as a vehicle, it seeks to encourage the blending of the fashion world with areas of photography, experimental art, the moving image, and illustration.

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Janine Benyus is a biologist, innovation consultant, author, and pioneer in the emerging discipline of biomimicry. In this publication, Benyus explains that biomimicry (which means to imitate life) is a combination of biology and engineering that looks at nature as a teacher that can show us better ways to design sustainable and efficient technologies that solve human problems.

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<http://www.artofthetitle.com/title/six-feet-under/>. An interview with director Danny Yount about the creation of his opening title sequence for *Six Feet Under* (2001).

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<http://www.artofthetitle.com/title/the-girl-with-the-dragon-tattoo/>. A discussion with director David Fincher, creative director Tim Miller of Blur Studio, and designer Neil Kellerhouse of Kellerhouse, Inc. Fincher, Miller, and Kellerhouse describe the process used to create the opening title sequence for Fincher’s film *The Girl with the Dragon Tattoo* (2011).

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<http://www.eai.org/artistBio.htm?id=10311>. This site is a showcase of work by artists working in the field of electronic arts which includes mixed-media approaches involving film, video, animation, and computer programming. I visited the site to learn more about video and animation artist Takeshi Murata.

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<http://www.nextnature.net/themes/hypernature/>. This webpage outlines the basic

ideas behind the concept of hypernature. This was a very helpful site that provides links to a variety of articles and images associated with the hypernatural theme.

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<http://www.wmagazine.com/fashion/2012/03/solve-sundsbo-transforming-human-figure>. This article reviews the fashion film *The Ever Changing Face of Beauty* by fashion film photographer Solve Sundsbo. Mistry briefly describes the concept of the film which deals with the constantly changing notions of beauty within a single body. I was interested in this article because it mentions Sundsbo's precedents for this piece which includes the Surrealist writing and image making technique known as the "exquisite corpse".

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Motion Blur explores innovations in the art of the digital moving image in areas of motion graphics, broadcast design, digital film effects, and animation. It features interviews with multi-media artists working in animation, character design, advertising, film title sequences, and short films. The book aims to reveal the creative process of these artists and highlight their innovative approaches.

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<http://www.nextnature.net/2012/08/walter-benjamin-on-film-and-the-senses/#more-23533>. Jos de Mul discusses filmic perception in relation to the writings of philosopher and theorist Walter Benjamin. Benjamin wrote extensively about the film medium and its effects on the senses and human perception.

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Geared toward fine artists and designers in the applied arts, this text gives an overview of color theory and its many applications. I am primarily drawn to the chapters that deal with the psychological effects of color, cultural associations with color, and the use of color relationships and color schemes to convey mood or communicate concepts.

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