PERCEPTUAL MOMENT

By

Annie Briard

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Abstract

Moving image art can provide unique possibilities for making sense of our surrounding reality. Consisting of a series of artworks produced through a creative research methodology, this thesis project explores wonderment and its role in visual perception. The series, *Perceptual Moments,* is comprised of short, evocative video works presented in a variety of modes including interactive and sculptural installation. To question the role of vision in mediating reality, the works engage the viewer through an intensive experience of seeing.

This accompanying essay explores key visual and editing devices in the series that appear to have a role in shaping the viewer's perception and interpretation of the visual experience, including "the chasm," "the blur" and "interactive installation." The essay also investigates the motivation behind the works through journal entries and offers critical analyses for each production.

The visual devices in question are grounded within the context of psychology, neuroscience, phenomenology and film theories. Philosopher Gaston Bachelard provides an anchor for the concept of wonderment, while theorists Jonathan Crary and Gilles Deleuze create dialogical space around the act of viewing filmic images and the affect that it involves. The devices are also observed in other media works, including seminal pieces by Stan Brackhage, Kurt Kren and Jan Svankmajer as well as contemporary figures such as Nathalie Djurberg and Matt Hope.

Table of Contents

List of Figures

Acknowledgments

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You all make me look forward.

Journal Entry no. 1

One of my earliest vision memories involved pressing the outer edges of my eyelids with my index fingers and rubbing them in a circular motion, while keeping my eyes open (and chanting, I have been told). There was something exciting about seeing both the outside world and the inside of my mind[1].

[1] What I was actually experiencing is called a 'phosphene', which often appears as a large darkly colored spot on the opposite side of the eye when pressure is applied. Many of the visual moments I recall were brought about by play, but employ similar tactics to experiments that have been used in neuroscience, vision science and psychology to test theories of vision. The fact that despite all this experimentation so much about how and what we see still remains a mystery is fascinating to me.

A Mediated Reality

Vision and its affect[2] are the driving force behind my art practice, and form the central focus of my research. As a visual artist, I give primacy[3] to the sense of vision and I seek to explore how visual perception shapes our interpretation of the surrounding world.

I am interested in the multiple paradigms[4] of perception, which often differ within the fields of cognitive psychology, phenomenology, neuroscience and film theory, among others. But it is not my goal to arrive at an absolute answer. Rather, I am interested in the intersection between these different theories of perception, which agree that we make sense of the world through our senses (Dwyer). In other words, our senses, which are not infallible[5], mediate what we know of the surrounding world.

The notion that there can be "no form of reality that is unmediated" (Dwyer) intrigues me. The implications for an unmediated experience of reality[6] are rife with

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[2] I use the term "affect" in the Deleuzian sense, which I understand as a moment of encounter and change. An elucidation on his use of the term is available in his transcribed lecture "Cours Vincennes: Spinoza."

[3]A number of modernist and contemporary theorists have argued against the classicist primacy of vision. Some of these positions are rounded up and compared in historian Jonathan Crary's essay *Modernising Vision*, and are explored within the context of my studio work analysis.

[4]Including, for example, the classicist model, for which Jonathan Crary proposed the "camera obscura" as a metaphor, Helmholtz's unconscious inference, stimulus-response psychology, gestalt theory, perspectivist phenomenology, to name but a few.

[5] Our senses are fallible because they are at times imprecise and can be subject to errors. In his treatise on vision *Eye and the Brain: The Psychology of Seeing*, Richard Gregory demonstrates a large number of illusory perceptual phenomena such as blurs, pattern creation, inversion of depth and size miscalculation.

[6] The suggestion that there is no fixed reality is not solely a contemporary one. A few examples supporting this notion would include the concept of embodiment in phenomenology, emphasizing how one's perception of the surrounding world is dependent upon the location of the body in space; and Jakob von Uexküll's theory of *umwelt* where each species' environment or experience of reality is different based on their survival needs and senses. At the other end of the spectrum, Descartes' 'dream argument' or ideas of simulationism are also of note.

possibilities for creative research; more so, given the representational function of art, regardless of whether the represented reality is internal, external or ideal. Representation has no true link to reality. Instead, it is mediated through our body and our senses, through the creative medium, as well as through the subjectivities[7] of the artist and the viewer.

In this way, I work with the video camera as a sort of vision prosthesis. As positioned within film theory, the moving image "recognizably shows and expresses the same viewed concrete reality as human perception, as well as the intentional process bringing meaning to that view [...]" (Shaw 63). The camera therefore mediates my viewing experience, and the work I produce is similarly mediated for the viewer through video, which also opens possibilities for perceiving imagined and simulated worlds. The primary body of work I have created for this thesis is entitled *Perceptual Moments.* This series of moving images investigates visual impressions that I have experienced, and then reinterpreted and represented for the viewer.

The "perceptual moment" is a term used in neuroscience that has formed an appropriate title for my series in that it frames visual phenomenology within a moving image analogy. American neuroscientist Christof Koch describes the term in his book *The Quest for Consciousness: A Neurobiological Approach,* as follows:

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[7] Maurice Merleau-Ponty, in his seminal text *Phenomenology of Perception*, describes perception as being skewed by its embodiment. One example explains that location of the body in space determines which portion of an object can be accessed and how it might be skewed (by angles, for instance). Without having access to the other portions of the subject, one cannot truly perceive it in its actuality (236).

> "The perceptual moment is the hypothesis that perception occurs in discrete processing episodes, called frames or snapshots. Each snapshot is associated with a constant percept of color, motion, sound and so on. The stream of consciousness consists of an endless sequence of such frames, not unlike a movie. The attributes within a frame, including the perception of motion, are experienced as constant." (Koch)

As stated by Koch, the term "perceptual moment" draws a direct line from the sense of vision and its cognitive interpretation to cinema or the moving image. I consider my *Perceptual Moments* as a collection of experiments with which to discover, relate and share theories around visual[8] perception.

This essay is framed around a selection of works from the *Perceptual Moments* series, which are used as case studies to present and analyse my creative exploration into visual perception, wonderment and affect. Through this text, I am offering personal experiences, public responses, future creative possibilities and theoretical context surrounding the work.

[8] As mentioned earlier, the sense of vision is given primacy within the context of this research; to facilitate this focus sound is entirely excluded at the time this essay is being written. Further comments on sound in relation to wonderment are discussed in concluding thoughts on page 47.

Journal Entry no. 2

I saw a dozen shining arms outstretched to the sky from the opposite side of the island. I couldn't get the image out of my mind. As I finally approached the statue of Guanyin[9] and stared upward, a thrill of awe and of fright overcame me; an uncanny wonderment. The sensation was so moving it was transfixing. It is viscerally and emotionally recalled every time I picture the looming figure.

[9] This statue was an 18-armed representation of Guanyin, the Buddhist bodhisattva of mercy, erected at Wat Plai Laem in Koh Samui, Thailand.

Looking with Wonderment

To explore the role of vision in perception, I employ scopic technologies to compare and contrast the phenomenological experience of the physical world to that of simulated realities and imagery. I am specifically interested in the role of wonderment within visual experience[10], and the possibilities for affect within perception.

As an artist, I conduct research through creative processes using a phenomenological method and an inductive approach[11] in the studio, which I envision as a poststructuralist laboratory. I begin with perceptual experiences that provide me with a level of wonderment, as described in the journal entries introduced throughout this essay.

I understand wonderment as a moment of intense awe-inspired reverie. Philosopher Gaston Bachelard describes this as a "reverberation to the poetic image in the very sense of phenomenological resonance" in his *Poetics of Reverie* (7). Within the context of my research, this wondrous "poetic image" can be any moment[12] of visual perception, whether located in the outside physical world or the world within the screen. The wonderment provided by the image becomes a vehicle for seeing the familiar in an extraordinary way. Theorist Philip Fisher describes wonderment as "the most neglected of primary aesthetic experiences" (2) and explains that it arises from the unexpected or the

[10] Theorist Philip Fisher proposes the primacy of visual perception in his text *Wonder, the Rainbow, and the Aesthetics of Rare Experiences*, stating that the experience of wonderment arises out of the act of seeing the world (17).

[11] As elaborated in Collins, Hillary. *Creative Research: the theory and practice of research for the creative industries*. Lausanne, Switzerland: AVA publishing, 2010. Print.

[12] The moment as a time-based situation.

uncommon. In this way, I see wonderment as an active agent complicating the mediation of reality and thus creating renewed possibilities for interpretation. A related aesthetic experience, the uncanny, could be helpful in further elucidating the concept of wonderment as its effects are similar in nature.

The term "uncanny" has been used in response to a number of *Perceptual Moments* works. I explored this concept in the early stages of my project as a potential device for wonderment; however, my research led me to understand the uncanny instead as a related yet narrower form of this sensation. Sigmund Freud describes the uncanny as triggering anxious emotional responses, usually occurring when something outside of one's familiar knowledge – often having been estranged through repression – is suddenly brought back into cognisance. These can be moments, images or narratives going beyond what is normal or expected. According to Freud, in art the uncanny is an uncomfortable effect produced by "effacing the distinction between imagination and reality," often using tropes such as darkness, solitude, or defamiliarization to test the viewer's notion of reality (232). Thus, in its capacity to render the ordinary questionable and in summoning emotional responses, the effect of the uncanny relates to wonderment and the poetic image, but to a lesser degree as it operates through repression; a subtractive approach.

When I experience a sensation of wonderment, I record the visual moment with a video camera, as the camera obscura is in ways modelled on the workings of the human eye. As opposed to traditional notions of a landscape photographer seeking to compose

a fixed image or capture the sublime[13], my approach aims instead to record the temporal experience of the moment. Here, I slightly detach myself from the embodied experience by perceiving it as mediated through the flattened surface of a viewfinder or screen. By using the camera as the immediate sensing "eye," I can postpone making meaning knowing that the recording could later be recalled as a physical remembrance.

Upon revisiting my recorded experience through video footage, I remember, reflect, deconstruct and analyse the moment in question. Within this studio laboratory, my analysis commingles with reverie or creative viewing[14] in an iterative process. I attempt to recognize and re-experience the moment and its wonderment.

Because the camera is a fixed watcher of the scene, the unedited raw footage generally does not provide the same wonderment as the initial experience. Thus, after analysing the represented experience, I work at drawing out the sense of wonderment that first attracted me to the recorded moment through experimentation and creative editing. In this way I am also seeking to construct a similarly affecting or transformative moment[15] for the viewer.

During the course of producing moving image works in this way, I have identified

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[13] I mention the sublime as an example partly for the opportunity to polarize it at the opposing end of my focus on wonderment. In a Freudian positioning of these two forms of aesthetic experience, Fisher describes the sublime derisively as pertaining to the death principle or as an aestheticization of fear (2), and favors wonder for belonging to the pleasure principle (see Freud *Beyond the Pleasure Principle* ch. 1). Through an etymological and historical analysis, he also defines wonderment as the starting point for philosophy (9), which is particularly of mention in contextualizing wonderment as an aid with which to question mediated reality.

[14] I understand creative viewing as an act of agency described by Ron Burnett in *How Images Think* whereby perception meets imagination or 'make-believe,' expressed on pp. 15, 53.

[15] With the term "transformative moment" I wish to designate the space where the perceptual moment interconnects with Deleuze's notion of affect as a moment of encounter and change.

certain physical and theoretical devices[16] which I consider in their capacity to intensify the viewer's experience. Through the use of these affective devices, I seek to mimic the essence of my own perceptual moment and create derived experiences for the viewer.

Beyond the visual world created or represented within the medium itself, I can further transform the experience of the moving image in a number of ways to investigate certain elements of perception. These elements could include embodiment, imagination and memory. By changing screen or room sizes, expanding into the third dimension[17] or connecting to sensor-based user interfaces, moving image works can be positioned as customizable subjective experiences. In this sense, by changing installation modes or adding digital technology to offer a perspective that mutates depending on the viewer's activity or location in space, I am not limited to representing a Cartesian perspective.

Following this methodology, my viewers' responses have been important; not only in comparing theory to practice, but moreover to engage in a dialogue where I could learn more about visual perception, reality interpretation and wonderment. I have been collecting these comments through studio critiques, interviews and written impressions so that they can actively influence the direction of subsequent work.

The *Perceptual Moments* series contains nine individual works at the time this essay was written; more will be developed before my research is complete. To provide an in-depth analysis of the work, this essay is comprised of two sections, each focusing on one work from the series and mentioning related works produced within this thesis context.

[16] With the term "device" I am designating both editing tropes and tactics, such as image blur, color saturation or time remapping, as well as theoretical concepts found in philosophy and works of art, such as the void.

[17] Stereoscopic 3D cinema

Journal Entry no. 3

I also recall a time in the dormitory of my aunt and uncle's farm one Christmas where the dimly lit room's blue patterned wallpaper, after I had been staring at it for a while, started to become animated and seemed to extrude into a relief. I was fascinated and revelled in the moment. I remember asking my little brother to look too, to validate what I had seen. At first he just nodded, but after a minute the vision hit him and he cried out in excitement.

Perceptual Moment #8 (Walker)

Figure 1: *Perceptual Moment #8*, still frame, HD video, 2012.

WHAT DO I SEE

Perceptual Moment #8 is a short live-action video from the *Perceptual Moments* series, exploring wonderment and visual perception. It begins by proposing an implacable environment which has been deconstructed by stripping all colors but the green channel, and removing shades to express only vivid lightness and darkness. In this way, the represented environment appears equally as a simulated world or an organic grouping. As the sense of temporality within the scene differs from our usual experience of time, and as the colours are pushed from their general appearance in the surrounding world, the illusion that it is occurring within its own ephemeral universe takes hold.

The ethereal scene eventually allows a figure to slowly and fluidly emerge from the

surreal landscape and walk towards the viewer. There is an off-kilterness about her body; as is comes closer into view, it seems dipped to the side at an impossible angle. Within this atmosphere resides a strong sense of the uncanny. The walker's movements are eventually slowed to such a point that the incrementally augmenting chasm left between her footsteps becomes a blurred still; an evocative space filled with possibilities for interpretation. The work has been presented both as a screen-based work and as an interactive installation, which will be described in further detail later in this section.

As stated earlier, the *Perceptual Moments* series explores wonderment, visual perception and the moving image. Each work contains visual editing devices that I have analyzed in order to compare visual perception of the 2D moving image versus the outside physical world; and to deepen my knowledge and understanding of various modes of experience representation and the creation of affect. *Perceptual Moment #8* contains many of these devices. This section will delve into four of them, deciphering their role within visual perception and their creative possibilities: the chasm, stop-motion, interactive installation and white noise.

THE CHASM

As a creative device, I see the chasm as the null space between elements of visual perception. I understand this space as the location where a subject or a viewer can take a leap of imagination to fill the gap. This chasm can be either theoretical or physical, as evidenced in its figuration in a number of different fields and theories.

For instance, the concept of the chasm is found in existentialism, particularly in Kierkegaard's "leap of faith," necessary when one is faced with the abyss (Kierkegaard

61). The leap of faith or chasm is also perceived in art criticism as a means to the viewer's suspension of disbelief, and can be engaged through particular tropes such as weaknesses or fissures in language (Verwoert). The chasm appears in film theory as well, where Deleuze identifies it as an interval space located physically between film frames, or theoretically as a space to be crossed by the mind or our imagination (Ashton). Additionally, a more formal iteration of the chasm appears in pop-culture, within comic book layout. Figuring here as the 'gutter,' the conventional chasm between two illustrations subconsciously indicates to the viewer that their imagination is required to thread together the narrative.

Within the moving image, the chasm is time-based and can vary in duration. Gilles Deleuze, in his work on the moving image, acknowledges this time spacing as the "interval frame." Transforming the duration for the interval can affectively change our association of the subsequent frame with that which precedes it, as well its veracity in our memory. Deleuze explains that the interstice in perception is expressed by space, and by time in action or movement. He points out that something lies within the in-between: "affectation is what occupies the interval [...] it surges in the center of indetermination, that is to say in the subject, between a perception which is troubling in certain respects and a hesitant action" (Deleuze 65). This interval is described as both the actual gap separating frames, and the space between stimuli and response in cinematic images. He also speaks about it phenomenologically in terms of visual, emotional and affective perception.

Art critic Jan Verwoert similarly links wonderment to this device. He explains that wonderment occurs when a chasm is present in the language, engaging the perceiver in

a game of idea association. As opposed to a more complete language, which could keep the viewer at a prescribed distance, a language with an inherent weakness can result in producing greater feelings of astonishment[18]. Inspired by suspensions of disbelief, esemplastic processes – or the mental act of connecting the dots between ideas and images – can further personalise and thus heighten a viewer's experience of the moving image.

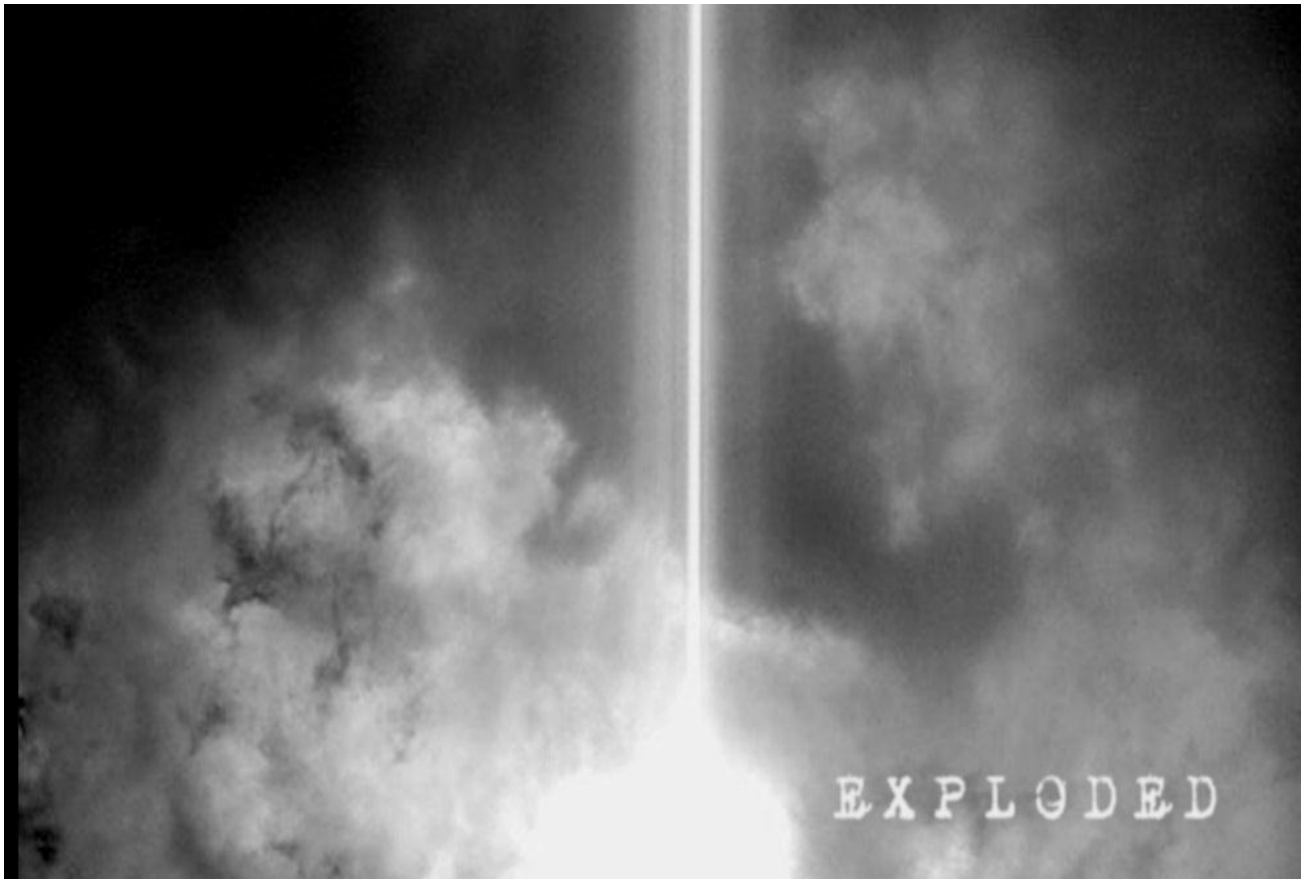

Figure 2: *Gutter*, page detail, artist book, 2011.

Another version of the chasm in book form is the space between pages of a flipbook. In experimenting with the chasm for *Perceptual Moment #8*, I created a flipbook to explore the spacing between frames concretely through the use of paper. The book is composed of live-action scenes that I shot around Montreal, Canada, during moments of wandering

[18] Verwoert, Jan. "Art and Animism." Graduate Interdisciplinary Forum. Emily Carr University. Vancouver, British Columbia. 17 November 2011. Lecture.

reverie. Formally speaking, the text as it figures within the constructs of the book signifies memory and the change of its representation over time. Adopted from Ingmar Bergman's film *Through a Glass Darkly*, the sentence reads: "all of reality exploded and I tumbled out." It vividly recalls the existential leap so present in Kierkegaard's writings, amongst other existentialist texts.

Flipbooks are rudimentary forms of a moving image as they function through the same time-based succession of visuals. What appeals to me about flipbooks is that the viewer is placed in charge of the speed at which the images – or the chasms between the images – unfurl before their eyes. Producing and manipulating it allowed me to experiment with different 'reading' or watching speeds, alternate orientations for the images, as well as choosing the scene order. This close looking, along with the slowly laid out words within the book, made me think about the importance of memory in the moving image experience.

Seeing the past

I understand the perception of moving images as having as much to do with memory as with vision. The effect of seeing unfolding action would ostensibly require us to remember, whether mentally or bodily[19], the image that came before the current one.

[19] The notion of an embodied memory of images whilst watching a moving image refers to the widely debated term "persistence of vision," frequently proposed as the cornerstone optical phenomenon of cinema. This theory, first appearing in the late 1700s, and later developed through early cinematic apparatuses such as the praxinoscope and the zoetrope has been used to describe how our eyes perceive motion in the moving image ("Persistence of Vision"). It was based on the notion of 'afterimages,' where the light from an image would be retained by the retina momentarily before the next image appeared. This theory is still frequently employed in film theory, though it has been disproven by perceptual psychology in the 1970s. Psychologists Bill Nichols and

Otherwise we would be experiencing each image as a still[20]. The narrative function of moving image works relies on memory as well, in the sense that to keep the unfolding of a story afloat one must remember its earlier scenes.

Vision science makes compelling arguments for the role of memory in visual perception. In his seminal text *Eye and Brain: the Psychology of Seeing*, Richard Gregory puts forth the notion that we are in fact always seeing in the past (17). Because of the time it takes visual stimuli to impress an image on our retina and be recognized by the brain, everything we perceive has already happened micro-moments before. For instance, our perception of the sun is eight minutes late and nearby objects are sensed a few hundredths of seconds late (Gregory, 17). The delay, although infinitesimally small, is nonetheless significant. We could say that we are as such reading memories. It is hardly negligible in the context of reality mediation that one of the primary senses by which we experience and understand the world is removed from it to a certain extent. I am fascinated by the idea that there is a disassociation between what we perceive and what is real. Here can be posed the chasm between perception, interpretation and reality. It can be seen as the chasm between what has already happened and is

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Susan J Lederman, in their research "Flicker and Motion in Film," explain that the phenomenon is attributed to the theories of 'visual flicker' and 'apparent motion' (Nichols).

Cognitive film theoreticians Joseph Anderson and Barbara Fisher Anderson provide an in-depth overview of the use of persistence of vision in film theory:

> Joseph and Barbara Fisher. "The Myth of Persistence of Vision." Journal of the University Film Association XXX:4 (Fall 1978): 3-8.

Mary Ann Doane provides a wider context of phi movement and other vision theories present in film theory:

> Doane, Mary Ann: The Emergence of Cinematic Time: Modernity, Contingency, the Archive. Harvard University Press, 2002. Print.

[20] Richard Gregory, in *Eye and Brain, the Psychology of Seeing* does not discount persistence of vision yet also poses another key theory explaining cinematic motion perception. "Phi movement" is a term used in vision science that describes the eye's tolerance for gaps or cuts within the beam of light, allowing us to experience it as constant (Gregory).

experienced as the present; the chasm between my experience and yours; the chasm between memory, representation and reality.

As the *Perceptual Moments* series has progressed, formal links to structuralist filmmaking have become apparent. One work that strongly pertains to memory and evidences similar use of the chasm as a device is avant-garde American film pioneer Ken Jacobs' *Capitalism: Slavery*. This piece falls within a body of works produced using antique photographic stereograph pairs. The left and the right image are shown one immediately after the other with the use of computer software to give the image depth and roundness, leaving an empty frame or black chasm between the sets, each of which are repeated multiple times. Upon watching the work, the thick spacing between the stereograph images made me understand the scene as moving and changing although I was seeing the same image pair repeatedly. The spacing was too long for my eyes to experience the image as constant in the way a video would generally function. It wasn't until the image eventually panned out and revealed more of the scene that I recognized my perceptual mistake.

STOP-MOTION

As with the production of my flipbook, my experience with stop-motion[21] has also allowed me to learn more about time and spacing between frames. Another particularity of object-based animation is its special treatment of the referent, which is the reason I began working with the medium in 2007. Stop-motion has the inherent ability to blur the line between real and imaginary worlds.

[21] First appearing in the 1900s, stop-motion, or more specifically "puppet animation", is the process of making a moving image by producing a photo for every film or video frame, which allows inanimate objects to seemingly come to life (animate) through movement.

Metamorphosis is one of the most defining characteristic of stop-motion animation; it enables transformation between the tangible to the imaginary and vice-versa. As animation scholar Paul Wells explains, "[…i]n enabling the collapse of the illusion of physical space, metamorphosis destabilizes the image, conflating horror and humor, dream and reality, certainty and speculation" (69). It is within this light that I explore the possibilities for wonderment in stop-motion.

Theorist Susan Stewart also speaks to Wells' statement on the melding of dream and reality in her essay on the miniature. She claims that "once the toy becomes animated, it initiates another world, the world of the daydream. The beginning of narrative time here is not an extension of the time of everyday life; it is the beginning of an entirely new temporal world" (57). Thus stop-motion evokes the daydream in the sense that its imagery begins in the physical realm with tangible three-dimensional objects and is indexed as such within each photograph used as a video frame, as opposed to a dream whose imagery unfolds in the dreamer's imagination. Umberto Eco, speaking about semiotics and representation, claims that "at a certain point the iconic representation, however stylized it may be, appears to be more true than the real experience, and people begin to look at things through the glasses of iconic convention" (*A Theory of Semiotics* 204). Within the context of animation as a fabricated reality, actions can trigger unexpected responses, producing a narrative that can be absurd, fantastical or impossible.

Artist-theorist Amir Mogharabi, when writing about stop-motion, states that "the fragmentation of time into a distinct series of divided images is what gives the filmic medium the potential to be magical. By chopping the continuous flux of the visual field

into individual frames, the potential for utilizing the space in-between the frames becomes apparent" (Mogharabi 2). This links stop-motion to the chasm as a device. I understand Mogharabi's statement on the capacity to create "magic" in the medium as similar to the possibility to create wonderment.

In discussing stop-motion and its ability to evoke imagined worlds and a sense of wonderment for the viewer, the computer generated image (CGI) may come to mind. Jean Baudrillard's postmodern elaborations on the death of the 'real' speak to the CGI in the context of the chasm. He regards CGI as a medium with a language devoid of gaps, which provides no space for the suspension of disbelief or wonderment (40). He claims that "soon there will no longer be any thought-sensitive surface of confrontation, any suspension of thought between illusion and reality. There will be no blanks any more, no silences, no contradiction – just a single continuous flow, a single integrated circuit" (Baudrillard 40). Here, Baudrillard would seem to be in agreement with Mogharabi's statement on the production of magic, and describes what resides at the polar opposite of that process. Baudrillard also states that the imagining and illusion of the image ends with CGI as the referent no longer exists: "the ultimate violence done to the image is the violence of the CGI, which emerges ex nihilo from numerical calculation with the computer" (Baudrillard 45). Having tried my hand at computer generated animation, I would disagree with Baudrillard's claim that the CGI contains no referent, as the animator herself would, to a certain extent, be using representation processes for her image. They may, however, be from her memory, and thus be far removed from the actual object. Regardless, Baudrillard's claims about CGI would seem to support stop-motion as a medium providing possibilities for wonderment.

Contemporary artist and animator Nathalie Djurberg's work has been situated in a direct response to Baudrillard's critique[22]. Her animations and installations place emphasis on the handmade, as her puppets are sculpted with clay and her visible fingerprints lend an important texture. Of particular interest is the extreme roughness inherent to her work; in terms of formal fabrication but most notably in its timing, composed of limited frames that are used for overextended durations – her videos are eight frames per second as opposed to the standard cinematic twenty-four or the traditional thirty of video. Having experienced her works and responded to the spacious duration of her interval frames is what led me to experiment with play, or rapid and unplanned shooting, and low frame rates for my stop-motion work *Peephole* in the context of this research.

Figure 3: *Peephole*, still frame and installation view from "Inventory of Language" exhibition at Concourse Gallery, Emily Carr University, 2012.

Peephole is an automatist exercise in puppet animation, where play is used in lieu of storyboards or scripts. Reminiscent of Marcel Duchamp's *Étant Donnés*, through a

[22] When describing Djurberg's aesthetic in his curatorial text of her Prada Foundation exhibition, Germano Cellant states that the handmade can rescue us from a language "flattened into mechanized homogeneity" devoid of unique individuality.

peephole[23] on a wooden column, the viewer peers through real twigs and moss to access the video. Blurred pans and darkness are used to drop the viewer in a nighttime forest scene where a reclining nude is sleeping[24]. Nearby, there is an extinguished campfire of human limbs. She awakens to horror and attempts to fly away by growing wings but with ripping flesh, they gruesomely fall away, abandoning her to grief. The narrative having been produced through creative reverie, I will not attempt a semiotic deconstruction here. Suffice it to state that the handmade approach of puppet stop-motion allows its creator to gain concrete knowledge about time manipulation and about the space between the frames, which helped me produce *Perceptual Moments*.

INTERACTIVE INSTALLATION

In addition to experimenting with time, *Peephole* also experimented with embodied perception through physical access. I continued to explore this for *Perceptual Moment #8*, which was presented as an interactive installation in addition to its single channel iteration described earlier in this section.

The interactive version of *Perceptual Moment #8* was influenced by a deepened understanding of ideas around phenomenology and embodiment. In his text *Phenomenology of Perception*, Maurice Merleau-Ponty explains that the interpretation of the viewing act depends strongly on the location of the body in any given space (236).

[23]The stop-motion work *Peephole* is included here solely as an example of stop-motion as a moving image device and therefore does not delve into the peephole apparatus itself. The peephole is investigated as a device in section "Perceptual Moment #9" on page 32.

[24] Philip Fisher states that one of the most important tropes for wonder in classical literature is that of a beautiful woman appearing suddenly in the woods, referencing the apparition of a deity (17). It is possible that Duchamp was referencing this image in his *Étant Donnés*, despite the scene taking place by an 'étang' or pond.

On a theoretical level, in terms of deconstructing perception, this notion of embodied vision is particularly important to me because it considers consciousness, the physical world and our bodies as being mutually engaged. The body therefore, when understood as subjectivity incarnate, informs our perception and knowledge of the world. I'm interested in this notion of the body in space as a determinant factor in our understanding of reality, as it expresses our inaccessibility to fully or precisely take in all that is occurring around us.

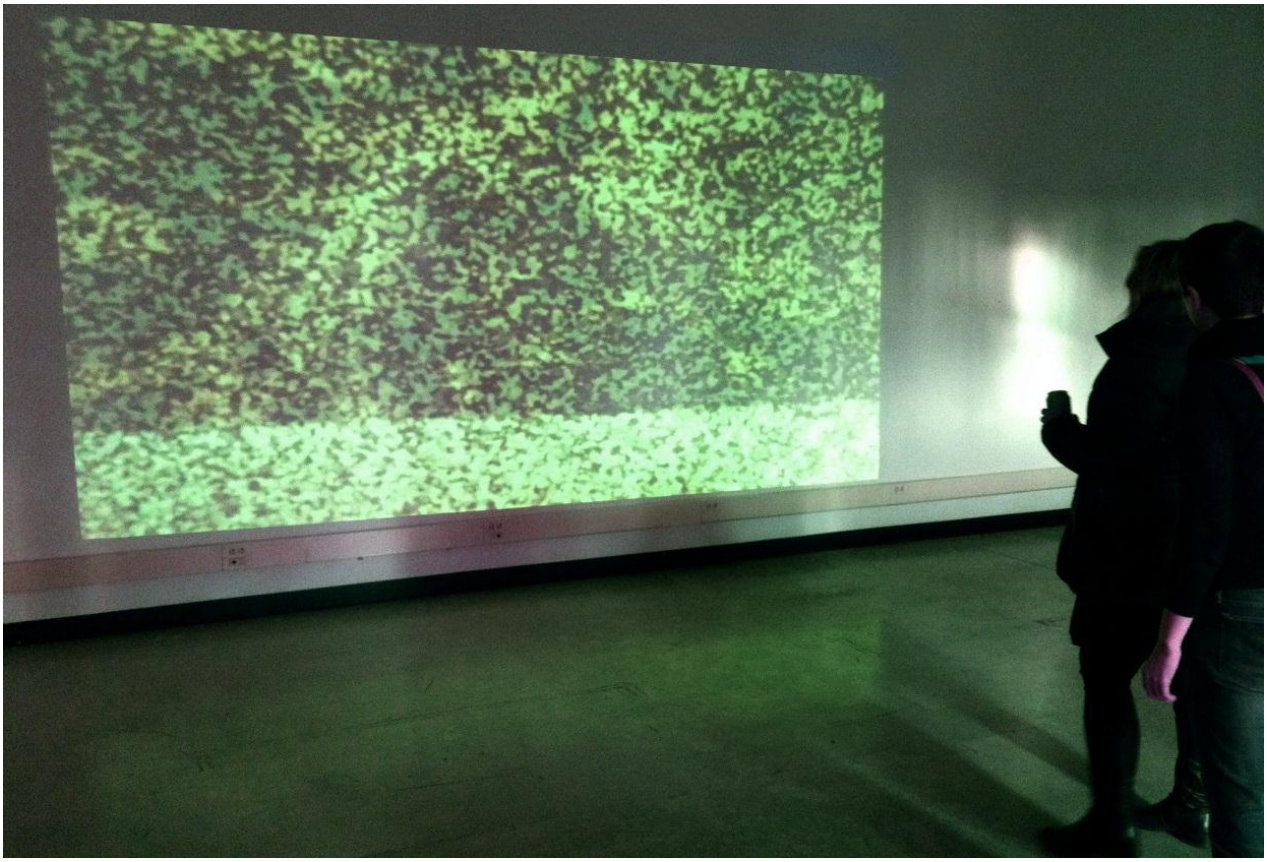

Figure 4: *Perceptual Moment #8*, installation view, interactive video installation, IE Gallery, 2012.

With this in mind, an interactive movement interface was constructed for *Perceptual Moment #8*, first presented in its self-entitled exhibition at IE Gallery in spring 2012. A webcam acted as a movement sensor to track the viewers' bodies within the space, transmitting the sensorial data back to a computer. If the viewer was standing still

in order to view the video, the image projection on the gallery wall screen would slowly turn to simulated "white noise" obfuscating the video. This obfuscation was achieved and controlled through custom-programmed software[25]. In order to access the video within this interactive version, the viewer had to move in the space, making the act of viewing more purposeful and restricted.

Interactive artist David Rokeby states that as opposed to "creating finished works, the interactive artist creates relationships" (qtd. in Burnett 188.) Likewise, the installation iteration of *Perceptual Moment #8* never delivers its final video formulation, since its structure restricts the viewer from watching the entire video from beginning to end. Nor does the installation constitute a closed work in and of itself. Instead, it highlights the body in space and its role of agency within vision.

As well as exploring the body's engagement and wonderment, I also became interested in pushing the viewer's imagination or active reverie within the unfolding of a moving image work. After creating *Perceptual Moment #8* I returned to stop-motion animation to explore narrative interactivity by producing *The Woōds*.

[25]A patcher was created and used through Pure Data open-source software by myself and my programmer Julian Gollner.

The Woōds

Figure 5: *The Woōds*, still frame, interactive stop-motion HD video installation, 2012.

A non-linear narrative puppet animation accessible through interactive media, *The Woōds* features a curious character residing on the fringes of a surreal forest inhabited by giant pinecones, red trees, colorful mushrooms and human-faced birds. The character performs various action loops which fold in on one another and transform from the mundane to the absurd and sometimes the horrific. For instance, 'Celia' (a tongue-in-cheek anagram of 'Alice') might lick a mushroom, lose her mouth and grow a bird beak. Later, she could eat a seed and transform into a cocoon; or give her eyes to the trees so they can watch over her. Each scene can sequentially lead into another, as in a dream, or return to the null position of sleeping or lying awake.

Similarly to *Perceptual Moment #8*, interactivity is used in *The Woōds* to add complexity to the viewing of the work, but goes into deeper levels of relation between the viewer as a subject and the work itself. The viewer and the puppet can 'see' each other with the help of a video camera at night and a Kinect system in the day which allows the puppet to track the viewer. When the sensors locate a person, 'Celia' follows them with her eyes and, should the viewer stop in front of the installation without reacting soon thereafter, she will wave at them, inciting communication. Here, the limit between make-believe and reality is opened up by adding physical agency to the watcher's role.

The viewer can also explore the puppet's universe by communicating with it through text messages sent from their mobile phone. The programming consists of an extensive database for word recognition allowing specific clips to play according to key words in the received messages. However, the work's interactivity is conceptually based on reverie and the words attributed to each clip were chosen through a surrealist game of word association. This structure, coupled with randomness, allows the viewer to eventually realise that their perceived control is not as authoritative as it may have first appeared; thus commenting on interactive art's control paradigm.

WHAT DO YOU SEE?

The experience of *Perceptual Moment #8* elicited many viewer responses. Individuals have notably mentioned the extent to which their body awareness was enhanced during their viewing. Some believed that the walking figure was moving in response to their own bodies, coming closer to them as they approached the projection. Others reported strong feelings of uncanniness which they related to the environment's

colors, as well as the speed and the slant of the walking figure's body. One of the most intriguing comments however, was about the simulated white noise obfuscating the video when the viewer remained still.

WHITE NOISE

Through viewer feedback, it was made apparent that something about the mind's perception of the white noise added to the sensation of wonderment. Akin to a hallucinatory experience, it made the viewer believe they were seeing animated objects, actions and scenarios that were not actually present. These took the form of various shapes and even bright colors, notably pinks and blues. This phenomenon could be attributed to the brain's strive towards making meaning by seeking out patterns and attempting to organize information. Gestalt psychology uncovered a number of "organization laws" in the 1920s that showed the various ways in which the brain deciphered visual stimuli. The main laws include closure, common fate and contiguity of close-together features and these have since been used within computer programming and robotics (Gregory 4). Evidences of these principles can be identified in cartoons, magic eye illustrations, and even computer screen pixels or printed ink dots.

Another important component of perceiving white noise is 'flicker'. Flicker can be described as intermittent flashes of light. Familiar instances of flicker include the refresh rate on a computer monitor. More pronounced flicker, where the pause between the flashes is long enough to be noticed by our eyes, could also be described as a strobe, similar in effect to the flashing black light used at dance clubs. I see the strobe as a pronounced chasm in terms of moving image devices; where it occupies more space or

duration than the images bookending it. Though television static or white noise occurs at variable rates, computer generated flicker can be mathematically constant, which is the case for the *Perceptual Moment #8* installation.

According to Gregory, low-frequency flicker can produce odd effects similar to hallucinations when they occur at regular rates of five to ten per second (118). As reflected in the viewer responses I collected, bright colors and moving shapes can appear to healthy observers. Their origin is not completely understood, but may arise from bursts of retinal activity overloading the system (Gregory 118). These occurrences interest me as they demonstrate embodied and subjective perception. It is like low-resolution waking dreams that can be stimulated. White noise can allow the viewer to simulate their own worlds before their very eyes.

Filmmaker Stan Brakhage was particularly interested in white noise, especially the type that occurs while staring at the inside of our eyelids when our eyes are closed. He called this noise "hypnagogic patterns" and wrote about his visual and aesthetic encounters extensively, describing them as "grainy roll[s] of (hypnagog) closed-eye shapes," and "slow-motion phosphor cloud-graininess" (140). Perhaps because he understood the eye as an extrusion of the brain,[26] Brakhage closely links hypnagogic patterns to the mind, through imagination, thought and memory. Another vivid metaphor from his essays describes the patterns as "the visible manifestation of abstractedly streaming synaptic thought" (123). Likening white noise to the visions we see when our eyes are closed creates a beautiful link between the moving image, the body and the

[26] In his section on the biology of the eye, Gregory likens the eye to "an outgrowth of the brain" because it is in direct contact to a surface of the brain which has "budded out" to become light-sensitive (53).

way we see in our imagination or dreams.

Another video work by Ken Jacobs is of note in this context as its viewers have reported similar perceptual phenomena to those experiencing *Perceptual Moment #8*. His piece *Celestial Subway Lines* was produced using a magic lantern[27] to create images without referents that pulsate in uneven stroboscopic flashes. Although nothing is being represented but light and shadow, the film creates eerie visions in many viewers. The effect is akin to the work's key influence: the magic lantern from phantasmagoria spectacles popular in the 1800s. In similar vein to horror movies or haunted houses, these spectacles are historically described as having been performed to amuse viewers by appealing to their sense of excitement for simulated fright. The performers would, through rudimentary light projection apparatuses, create ghost-like apparitions. Likewise, Jacobs' piece creates shapes that oscillate between morbid and monstrous creatures.

[27] The magic lantern is an early cinematic projection device that could produce the illusion of movement in the lights and shadows it would cast through jerky movements. Doane provides accounts of magic lantern performances and comparisons to other early devices (218-219).

Figure 6: Ken Jacobs, *Celestial Subway Lines*, video still, 2005. With permission through the fair use act.

Journal Entry no. 4

Riding in the backseat of the car; we drove through forested landscape. I noticed how my eyes could focus to various depths. I could choose which trees I saw, yet never reaching all at once. The front ones were observed too quickly for detail but were abundant in number, color, and were viscerally experienced; through blur. Intellectualization quieted, leaving space only for feeling and reverie. The far back ones could be seen for longer moments, taking me away; everything else disappearing from sight.

These early moments first showed me how my experience of the world consisted of different planes that could be perceived; inside, outside, and beyond.

PERCEPTUAL MOMENT #9 & 10

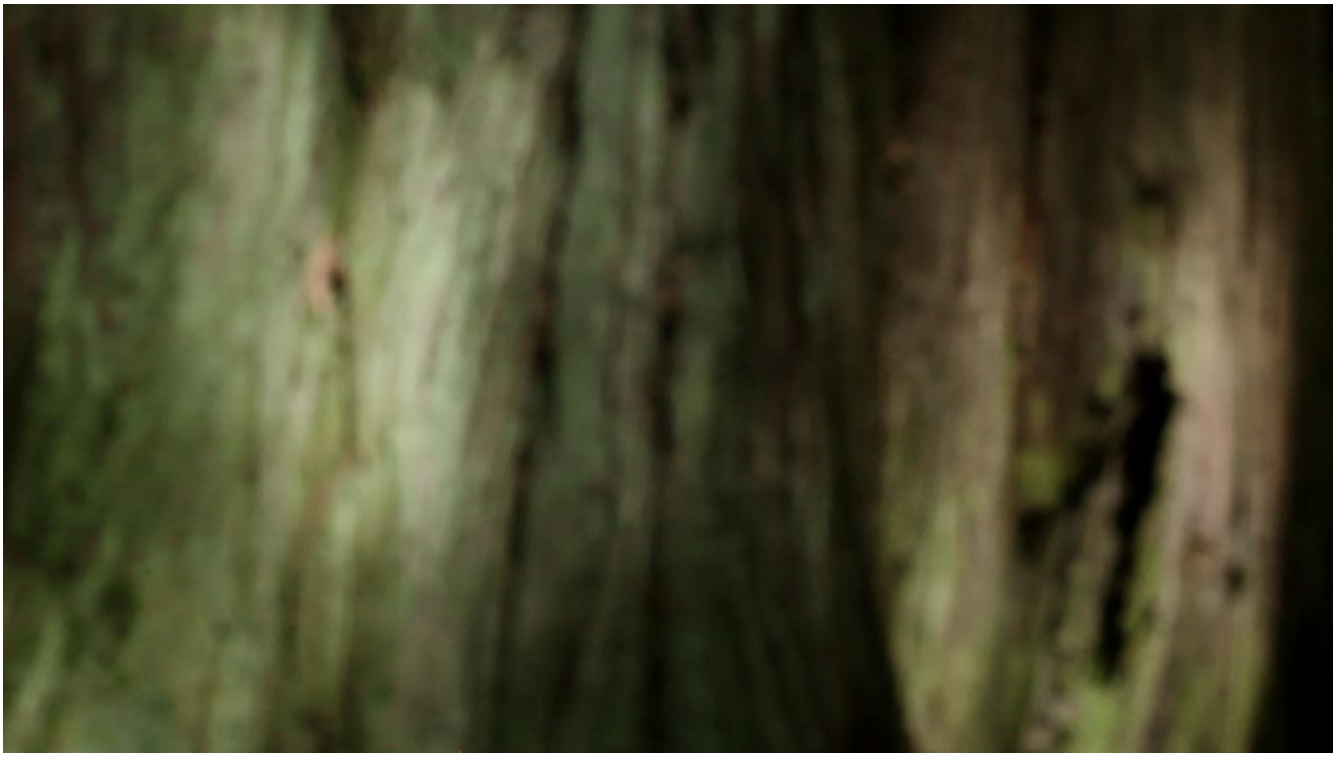

Figure 7: *Perceptual Moment #9*, still frame, HD video, 2012.

WHAT DO I SEE

Perceptual Moment #9 is a short non-narrative video intimately exploring the phenomenology of vision. It presents a close up, contemplative view of a redwood cedar tree in Lighthouse Park, an old growth forest on the west coast of Canada. Employing the camera as mechanistic vision apparatus, the works draws out the initial moment of perception where steam mingled with sunlight rays pulsating around the tree trunk; animating it. Through slow shifts in color saturation, focus, zooms, tonal contrasts and blurs, the work takes the viewer through a deepening meditative visual encounter with its subject. The unstable image opens space for imagined motifs, speaking to the subjectivity of vision. Eyes focus and defocus, moving attention from external to internal,

and back out again. In this state, effacement between corporal, temporal and environmental limits can be experienced.

In producing *Perceptual Moment #9,* I explored a number of devices including machinic vision, the blur, the close-up, and installation formats or viewing environments. The final work took form as two iterations: a peephole box (*Perceptual Moment #9 – Enclave*) and a projection at the end of a dark hallway (*Perceptual Moment #10*), each providing a different viewing experience.

VIEWING ENVIRONMENTS

Before delving into moving image devices apparent within *Perceptual Moment #9*, precisions on the work's viewing environments are required. In encountering the initial moment, my wonderment was considerably enhanced by intimacy. Therefore, my intentions for *Perceptual Moment #9* were to reproduce a personal encounter. By creating various iterations of the work, I found that the viewing environment holds an important role in shaping perception.

The peephole

Physical viewing spaces constructed for moving images have been analyzed through film theory in terms of their affect on the viewer. The usual environment is the cinema theatre, consisting of specific structures such as darkness, screen size and viewing distance to form a conventional space. Film theory has understood the viewing environment as controlling the way a film is perceived; generally aimed at detracting the viewer from their surroundings for full immersion into the moving image. This immersion has

been argued in different ways. Jean-Louis Baudry has critiqued the theatre as subconsciously interpellating the spectator into the film's inherent ideology, camouflaging the constructs behind the film's imagery and narrative (Baudry 2/40). Other theorists have posed the situation as voyeuristic, where viewers use imagination to create their own meanings and emotional simulations (Currie 153). Although viewing environments can present difficulties uneasily ignored, especially through a feminist lens,[28] I understand this constructed space as rife with potential for affective visual perception.

The peephole, encompassing private personal viewing experiences, has been of particular interest for my research into embodiment and wonderment. The peephole box can be perceived with the expectation that it contains a window onto another world, separate from the one in which the viewer is located. As it only provides viewing possibilities for one person at a time, it also creates a sense of privacy, and thus a uniquely personal experience. Bachelard, in his *Poetics of Space*, describes the box as a secretive space that can erase the outside world, opening up wonderment:

[28] As a feminist artist, I am deeply aware of the problematics of hegemonic heteronormativity present in constructed cinematic viewing environments. The peephole is one viewership model which has been situated as particularly voyeuristic, in part because of its role in the history of sexual exploitation.

Feminist film theoretician Laura Mulvey likens scopophilia or the pleasure of viewing to the 'peeping Tom' whose sexual satisfaction necessarily requires the voyeuristic act of looking (Chaudhuri 34). She considers the cinema as more voyeuristically problematic than other forms of media because of the way the theatre, coupled with film montage language, directly tells the viewer how they should be directing their gaze (Chaudhuri 35).

Inextricably linked to this voyeuristic function is the privately personal experience, which is enhanced through the peephole. Mulvey describes this as "peeping in on a private world, separate from the rest of the audience" (Chaudhuri 35). To this I might add that the separation of viewers from one another can also create a situation where usual social conventions are left behind.

> Chests, especially small caskets, over which we have more complete mastery, are objects that may be opened. …dialectics no longer exist. The outside is effaced with one stroke, an atmosphere of novelty and surprise reigns. The outside has no more meaning. ... a new dimension -- the dimension of intimacy -- has just opened up. (Bachelard, *Poetics of Space* 85)

Along with the promise of a new, intimate world as described by Bachelard, the peephole lures us in by appealing to our sense of curiosity. Laura Mulvey links the pleasure of curiosity to the box by analyzing the myth of Pandora (54). As such, I understand the peephole as inspiring wonderment through curiosity, interiority and the promise of a secret or intimate surprise.

Figure 8: *Perceptual Moment #9 – Enclave*, detail, video peephole box, 2012.

Perceptual Moment #9 took the form of a wooden peephole box environment, with silver hinges and a black velvet interior, which created a dark void where the video, on a small LCD screen, seemed to float in space. Some viewers described their experience as perceiving something inside their head. They effectively had the sensation that they were leaving their bodies behind to enter this space, and described feelings of disembodiment[29]. Theoretically speaking, returning to Merleau-Ponty's phenomenology of visual perception, they were no longer experiencing the reality of the world their bodies were in. This iteration thus provided a strong counterpoint to the *Perceptual Moment #8* interactive installation by experimenting with sensations of disembodiment and the moving image. Placing emphasis on viewer feedback in my creative approach, I have created several other iterations of *Perceptual Moment #9* to experiment with visual environments, including a self-contained hallway.

[29] A smaller number of viewers felt they could not immerse themselves in the experience because of physical discomfort in leaning forward and squinting an eye, and were therefore left feeling overly embodied instead. However, such sensations are to varying extents implied in similar experiences, whether through devices as historic as the peephole or contemporary virtual reality headsets, amongst others. Alternate heights and sitting positions for the work could remedy these discomforts, but would bring diegetic installation issues alongside them which could detract from the wonderment aspect most important to the piece.

The Hallway

Figure 9: *Perceptual Moment #10*, hallway iteration prototype, 2012.

The hallway installation constituted *Perceptual Moment #10*. Although the moving images were the same as the previous work in the series, this iteration created a different experience requiring its own title.

As a prototype for the exhibition viewing environment, I created a twelve feet long

by seven feet tall hallway that was blackened on the inside[30]. Mat black paint covered the walls to minimize light reflection, while a black floor carpet and velvet ceiling muffled noise, airflow and underfoot sensation. The hallway was only three feet in width to promote solo viewership, and the video was placed at eye level on a small floating back-projected screen on the far wall of the structure. I produced this environment to replicate *Perceptual Moment #9 – Enclave's* peephole box experience on a full-bodied scale. This version provided the viewer with a similarly personal experience. Instead of disembodiment however, the experience provided by the work was effectively embodied, placing primary importance on the sense of vision.

As explored through *Perceptual Moment #9*'s different installations, the viewing environment through which a moving image work is accessed mediates the viewer's experience. These situations can influence whether the work will be perceived in an embodied, immersive way or as a more disembodied voyeuristic experience. Similar sensations can occur for the creator in the production phase of the work, through the use of the camera as a vision environment.

VISION PROSTHESIS

As previously mentioned, I liken my use of the camera[31] in the *Perceptual Moments*

[30] This prototype version was also blackened on the outside for a finished aesthetic, which detracted from its experience for some viewers, who read the structure as a sculpture. Others likened the structure to a cathedral-like space and felt that this transposed them into a specific emotional state before entering and encountering the video work, which enhanced their experience.

[31] The use of the camera as extension of the body has been contemporarily theorized by philosophers including most notably Vilém Flusser, and Giorgio Agamben (picking up from Michel Foucault, amongst other analyses) positioning it politically as an 'apparatus.' *(continued on next page)*

series to vision prosthesis that artificially augments my sense of vision. Being modeled on the eye in many ways, the single lens reflex camera can heighten my visual capabilities by augmenting focal precision. I use the camera phenomenologically in my research and as such will briefly situate it in the creation process so that it may be recalled later in discussing the moving image devices within *Perceptual Moment #9*.

With a camera, a visual moment can be perceived in the "now;" immersing myself in the visuals, noticing details and letting them slip away knowing I will have access to a recorded recollection later. Beyond memory however, the camera can mimic my eyes, and perfect their function, taking me deeper into perception[32]. Filmmaker Dziga Vertov described his 'kino-eye' as demonstrating the mimetic relationship of the camera to the eye; that "the camera perceives more and better" and in his view thus demonstrate(s) the eye's inherent failures (Shaw 159). For instance, the camera provides the viewer with the ability to bring any point of focus within reach. The aperture can reveal what hides

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[31] (continued) Flusser describes the camera apparatus as enhancing the sense of vision through science, but also as a producer of symbols (26). It traps the photographer into the role of functionary. The photographer is no longer merely interested in seeing the world, but rather in attempting to exhaust the camera's possibilities; representing the world through photography becomes a pretext by which to push the functions of the camera (Flusser 26).The camera is thus not merely a machine or a tool, it also transforms its user's subjectivity: "the functionary controls the apparatus thanks to the control of its exterior and is controlled by it thanks to the impenetrability of its interior [the 'black box']" (Flusser 28). Since the apparatus' function therefore lies in an act of mechanical governance (as opposed to governance by the functionary) it must, according to Agamben, create its own subject through a process of subjectification (11). In the context of humans subjecting to technology, the apparatus is also discussed politically, especially positioned alongside Althusser's theoretical repressive and ideological "state apparatuses", for example.

However, it is not my goal to attempt a discussion around the camera as apparatus, as it would not be serviced by the brevity of this essay; nor do I take a stance around this paradigm. Instead, I wish to point to my own creative phenomenological use of the camera in a moment of perception. Nevertheless, keeping the notion of the apparatus close by can be a valuable antidote to engaging too deeply in thinking of the camera simply as a benevolent solution to failings of the sense of sight.

[32] In *The Address of the Eye*, Sobchack explains that film amplified perceptual experience, yet "offers more and well as less in relation to direct lived-body engagement with phenomena" (183).

within the shadows. A viewer can become all-seeing through the lens. For *Perceptual Moment* #9, I shot the moment twice. Once with fixed lens settings, so as to capture a straightforward account of the event while experiencing it firsthand, unperturbed. Then a second time, experimenting with the lens as an eye, focusing at different micro depths, and gauging changes within my interpretation of the perception. As with other works in the series, I enhanced this phenomenological experience digitally through video editing to make the optical shifts more tangible.

Thinking about the camera in terms of vision prosthesis makes me recall an installation titled *Spectrum Divide* by Beijing-based British artist Matt Hope. Viewers are invited into a room basking in complete darkness, except for the faint light of a twelve inch monitor resting on the floor. Nothing is visible in the room but the monitor, to which a small video camera is connected. The monitor clearly shows a grid of white frames on the back gallery wall, which are in fact constituted by thousands of light sources emitting a light spectrum invisible to the human eye.

The viewer experiences blindness, while machines indicate that there is something to be seen. In this way, Hope's subtle work confronts the weakness of sense perception, trapping the viewer in an experience of body obsolescence akin to a Stellarc performance. Although aesthetically and formally different from my current body of work on the phenomenology of perception, Hope's piece provides a different reading on the inaccuracy of the human eye by confronting natural sight to machine vision. This is an unavoidable consideration in the context of media art and affective perception, particularly when exploring and exploiting the inaccuracies of the human eye.

Figure 10: Matt Hope, *Spectrum Divide*, Saamlung Gallery, 2012. With permission by the artist.

WHAT DO YOU SEE?

THE BLUR

After briefly examining the camera as a device, it became apparent that its chief component in terms of physicality and similarity to the eye is that of the focus. It is responsible for depth of field, as well as an effect in analogous opposition to itself: the blur. Within aesthetic considerations and wonderment, the blur has primacy as a moving image device in *Perceptual Moment* #9. This section therefore emphasizes the blur, which will encompass focus and distance, despite divergences between their manifestations and readings.

The blur can provide highly affective visual experiences in humans. It can change the perception of distance, both in natural eyesight and in the moving image (Held, Cooper, and Banks). In film phenomenology, depth is linked to wonderment as it is "the most existential of all dimensions" (Shaw 56). Conversely, for individuals with impaired vision, blurry vision can on the one hand be frightening, yet it can also be experienced as a space for interiority; an opportunity to turn the gaze inwards while visual stimulus from the outside world is muted. Moreover, by virtue of its muting ability, the blur can "[put] into relief what we had taken for granted…" (Frampton 123). Because the visual blur functions by fluidly merging together all of the elements in the picture plane, it poses an interesting interpretation paradigm.

A blurry image can make all points of reference and semiotics disappear from an image. As opposed to disappearance caused by light – over or underexposure – or by physical erasure, the blur functions through a normalization of sorts. What is particularly appealing about moving image blur as opposed to a constant blur in eyesight or an image is that it generally does not merely exist; its normalizing or blending process unfolds before the eye over time. In its early stage, limits and separations between objects and negative space become fuzzy. Details vanish. Then, entire elements lose hold of their location and specificity. Everything that was contained in the world within the image harmoniously bleeds together; difference loses its hold. In its advanced state, the blur leaves the viewer with but one color. Without a pattern or information to grasp and make meaning of, the mind can imagine its own images. In this way, blur can be experienced as a slow transitory voyage from the physical world to a state of reverie. The blur thus relates back to the chasm.

The blur in *Perceptual Moment #9* stimulated similar viewer responses to those acknowledged in the *Perceptual Moment #8* installation. As imagined animated shapes and colors were perceived in the white noise video, viewers interpreted widely different imagery from watching the tree in its blurriest states. One viewer imagined the tree trunk bleeding profusely, and this was congruous with each subsequent viewing. Another saw an uncanny hanged figure. Other responses[33] included meditative states of interiority once the eyes stopped trying to focus, causing some individuals to feel relaxed and 'in tune with nature.' Because so many devices were at play with *Perceptual Moment #9*, it became difficult to systematically separate the devices and interpret the wonderment instigated by each one.

Affect in the blur device has also been recognized in vision science. Vision experiments have noted that focus and depth of field can strongly skew our perception and emotional responses to human faces[34]. This is of particular interest in the context of affect, as the "face" or plane (Deleuze 87), as a close-up, forms Deleuze's affectation-image.

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[33] As with the peephole iteration however, this work was not unanimously suitable; some viewers were frustrated at the blur, as opposed to their easier acceptance of the chasm and white noise.

[34] Experiments conducted at University of Berkeley's vision science lab sought to demystify the standard photography rule of the 50mm lens in close-range portraiture to calculate adjustments in S3D video projection. The lab presented a sample of viewers with both standard portrait photographs of one individual as well as computer generated (CG) versions of his face; each created in an array of different lens thicknesses. The facial representations produced with shorter lenses appeared rounder and were described as "good, peaceful, pleasant, approachable" whereas the images taken from a larger distance (longer lens) were described as "smarter, stronger." (Cooper, Piazza, and Banks; Perona)

A CG video presenting the facial focal shifts is available here:
http://www.journalofvision.org/content/12/5/8.full#xref-ref-26-1 24 Jan. 2013.

The close-up

According to Deleuze, the affectation-image is termed as such because it is the most affective and wonderment-producing visual component of a moving image. It is constituted of a face or any plane[35] filling the screen to provide the viewer with "micro movement[s] of expression" (Shaw 156). The face/plane is pivotal for wonderment and affect in Deleuze's writing on cinema, where he states that "sometimes the face thinks about something, is fixed on to an object, and this is the sense of admiration or astonishment that the English word 'wonder' has preserved" (88). The affectation-image must be constituted in the form of a close-up.[36] As the close-up fills the screen with a plane from which details extrude, to the exclusion of contexts and background, it becomes highly optical and phenomenological as opposed to predominantly intellectual (156). It is defamiliarized and removed from representation; it becomes an entity devoid of known semiological coordinates (Shaw 158). This void, empty of any predetermined meaning, returns us to the idea of the chasm once more; as the fissure in visual language from which imagination can rise. The concept of the affectation-image in its close, sensual encounter of the unfamiliar, or defamiliarized referent, is how I understand the imagistic experience of *Perceptual Moment* #9. The trunk as close-up-face of the tree and the undulating lightness, steam, contrast and blur as its visible expressions; potential producers of wonderment[37].

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[35] Deleuze uses a clock as an example: "it has a face as receptive immobile surface, receptive plate of inscription, impassive suspense: it is a reflecting and reflective unity" (87).

[36] Deleuze states that "… there is no close-up *of* the face, the face is in itself close-up, the close-up is by itself face and both are affect, affectation-image" (Deleuze 88).

[37] "This is the affectation-image: it has as its limit the simple affect of fear … But as its substance it has the compound affect of desire and of astonishment..." (Deleuze 101).

Looking Forward

By exploiting perceptual phenomena and the viewer's imagination, moving image art can uncover links between how we see and how vision affects us. Created through a phenomenological creative approach, each *Perceptual Moments* work proposes another vantage point on visual perception and the interpretation thereof.

I have found that wonderment plays a significant but neglected role in how we interpret what we see. In analyzing vision through moving image art production, I have begun to decipher wonderment and its role in affect. I have used journal entries in an attempt to share what I understand to be the moment where wonder occurs. In writing them, I have sought to lay bare my fascination with vision. They provide a personal lens with which to contrast the theoretical context of wonderment and the experience of vision.

Conscious and physical[38] subjectivity, as well as imagination, are central factors in perceiving wonderment, but technical devices can also be influential. The devices explored throughout the series and expounded in this essay, including the chasm, the blur, and white noise, could be seen to form the beginnings of a lexicon within an interrelated visual language for wonderment and affect. This language has become a way for me to discuss phenomenological experiences with others, which can shed light on how we perceive, interpret and define reality.

Looking forward, I will continue to explore visual perception, how it operates when confronted with a moving image, and how it can provide wonderment. I will persist in recording moments of visual fascination for subsequent reflection and will continue

[38] (embodiment) – see p. 24

experimenting with new forms of installation. To focus on deconstructing visual perception, thus far the use of sound has been deliberately omitted from my research. In its time-baseness and often visceral perceptibility, I believe sound holds extensive possibilities within the realm of wonderment production. I am excited about the ways it might transform my understanding of affect and what creative outcomes might emerge in future work.

In the end I have found that, for me, the key to producing affect and wonderment in moving image art lies in carefully creating space for the viewer's own imaginative insertion; in the potential for poetic reverie.

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