

*I stand floating in space, my body suspended in nothingness, my eyes seeing only a vast expanse. Even as I feel my feet firmly planted on solid ground, a rush of strobing lights encompasses my field of vision, creating a sense of being un-stuck, a loss of physical placement that feels perfectly clear, perfectly safe, as if being held tightly by nothing at all.*¹

In January of 2018, I first stepped through the large white portal at the Massachusetts Museum of Contemporary Art (MASS MoCA) and into James Turrell's *ganzfeld* exhibit *Perfectly Clear* (1991). From the German word for "complete field," Turrell's work often employs the *ganzfeld* effect, a form of perceptual deprivation caused by exposure to an unstructured, uniform visual stimulation field. Interested in the ways in which vision constructs reality,² *Perfectly Clear* creates an immersive encounter designed to deprive the eyes of the perceptual cues used to mark boundaries of space and distance, causing sight to become unreliable (Fig. 1); rather, as James Elkins describes in his 1996 book *The Object Stares Back: On the Nature of Seeing*, one's "eyes and mind and body and fingertips all respond,"³ creating a juxtaposition of expansiveness and proximity through the co-functioning of sight, touch, and the body's physical sense of *displacement* in space.

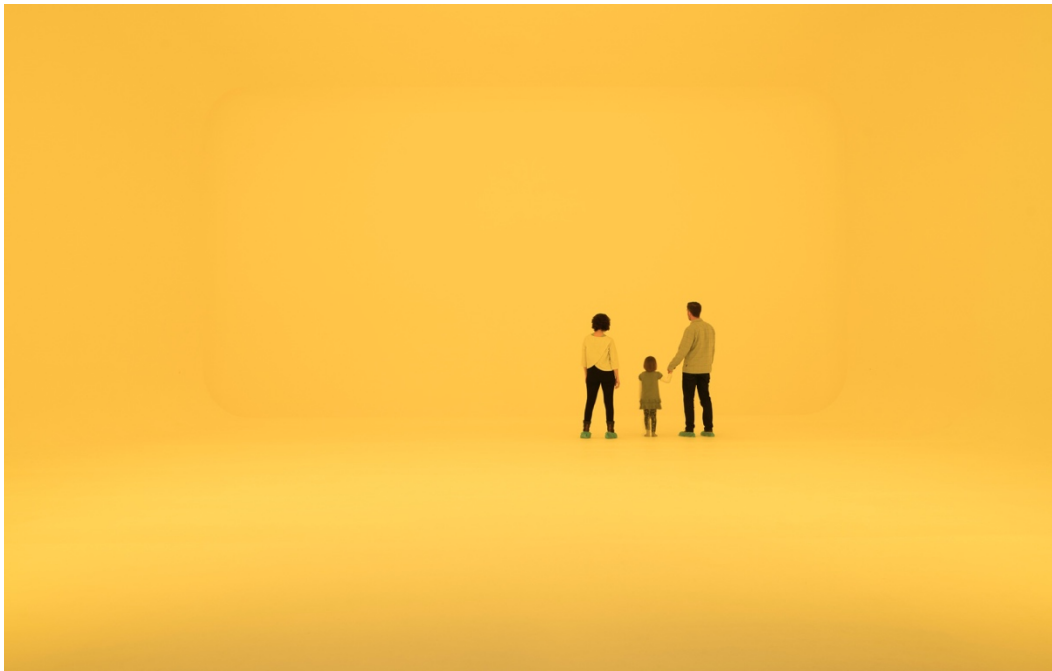


Figure 1. *Perfectly Clear* (Ganzfeld), 1991 Gift of Jennifer Turrell. © James Turrell, Photo by Florian Holzherr. Photo courtesy of the Massachusetts Museum of Contemporary Art, North Adams, MA.

This article examines the ways in which Turrell's use of perceptual deprivation within *Perfectly Clear* causes the audience-participant⁴ to reinterpret their experience of physical reality, creating sensations of intimacy, touch, and disembodied-embodiment. Using a combination of personal narrative and scholarly accounts I ground my analysis in Maurice Merleau-Ponty's theories of the embodied subject as an active co-creator of their situated reality. From this phenomenological perspective, I employ Brian Massumi's writings on visual perception and the co-functioning of the senses within the *ganzfeld*, and James Elkins' theory of sight as a transactional act of metamorphosis that "alters the thing that is seen and transforms the seer."⁵

Background: Perceptual-Deprivation and Touching Light

First introduced in the 1930s by German psychologist Wolfgang Metzger, research interest into the perceptual effects of the *ganzfeld* continued throughout the mid-twentieth century. Early participants described their experiences within the *ganzfeld* in physical terms, such as being in a fog or cloud,⁶ a "mist of light,"⁷ or a "sea of light."⁸ In 1968, Turrell, along with artist Robert Irwin and psychologist Dr. Edward Wortz, began their own research with *ganzfelds* through the Los Angeles County Museum of Art's (LACMA) Art and Technology program. Partially driven by their interest in synesthesia—a physiological response in which the stimulation of one sense activates a different sense response⁹—the three combined the total visual field of the *ganzfeld* with an anechoic chamber (a total aural field) to investigate "the ways light and sound could affect the perception of space."¹⁰ In the 1990 book *James Turrell: The Art of Light and Space* by Craig Adcock, Turrell describes light within the *ganzfeld* as a thing of substance that participants often reach out to "try to touch."¹¹ Working with light as an object that can be actively felt, Turrell's *ganzfelds* transform what is often thought of as an "untouchable essence"¹² into one that can be felt and sensed throughout the entire body.

Disembodied-Embodiment: Engulfed by Nothing

The experience of physical touch and intimacy in *Perfectly Clear* is best described through what Merleau-Ponty calls the embodied subject: the individual who creates meaning through their relational perspective as a feeling being. According to Eric Matthews in *Merleau-Ponty: A Guide for the Perplexed*, the phenomenological experience of the embodied subject does "not make contact with the world through simply thinking

about it, but through experiencing it with [the] senses.”¹³ Through this embodied activation of the senses, the audience-participant’s engagement within the *ganzfeld* becomes a dialogue in which meaning is discovered through interaction with the world.¹⁴ Meaning, which exists “neither ‘inside’ our minds nor in the world itself,”¹⁵ is instead revealed through physical interaction, “in the space between us and the world.”¹⁶

Further, the *ganzfeld* effect creates a heightening of the senses in which the audience-participants’ whole being engages to make sense of the world around them. In her 2016 article “Perceptual Cells: James Turrell’s Vision Machines Between Two Paracinemas” Alla Gadassik notes this heightened engagement of the senses, adding that the lack of perceptual cues creates an experience in which there are “no boundaries.”¹⁷ Without boundaries and without perceptual cues to guide the eyes in the construction of physical reality, Turrell describes the experience as one in which “it becomes difficult to differentiate between seeing from the inside and seeing from the outside.”¹⁸ This article looks deeper into the sensory experience of the embodied subject and the meaning that is constructed when one is confronted with the infinite boundaries created by the *ganzfeld* effect. Through this juxtaposition of sense-making and perceptual deprivation, I argue that the *ganzfeld* effect in *Perfectly Clear* creates an experience of disembodied-embodiment, in which the decentering of visual perception and the reinterpretation of physical reality creates an experience of intimacy, touch, and of being held gently by nothing at all.

Floating in the Light

*Standing at the entrance to Perfectly Clear, a portal which at first appears to be a flat image of color against the smooth, white wall, my eyes gradually adjust to see into the infinite space beyond. As I approach the threshold I stop, standing at the edge of the light, gazing through the portal that now seems to defy logic, to defy the possibilities of depth. From what I perceive as solid ground, I step into a void—leaping, walking into nothingness. My sensation of floating is only interrupted by the solid ground beneath my feet. As I step into Perfectly Clear, my whole body responds. My sense of distance, of gravity, of my physical placement in the room, all dissipate. I float in light.*¹⁹

The overwhelming sensory stimulation caused by the uniform field of light in *Perfectly Clear* creates an experience of proprioceptive confusion and an inability to locate one’s body in space. Defined by the American Heritage® Science Dictionary as the “unconscious perception of movement and spatial orientation arising from stimuli within

the body itself,”²⁰ Elkins argues for the inclusion of proprioception in addition to the usual five senses (sight, sound, touch, taste, and smell) as the body's “innate sense of its own position.”²¹ As the primary way in which human beings experience and encounter the world around them, proprioceptive awareness is the body’s internal vantage point. Elkins compares the proprioceptive sense to physical empathy, describing it as the ways our surroundings “provoke a physical reaction *in* [the] body.”²² As a communicative exchange, the body takes on an empathetic response, whether through adopting the feelings and emotions of those around us, by tensing up when confronted with images of contorted flesh, or by “the body swell[ing] when it enters a wide hall.”²³

Using this last example as the most immediately relevant, I refer back to the experience I described at the beginning of this section: confronted with the sense of floating in *Perfectly Clear*, my body’s response was one of empathetically engaging with the physical expanse I saw before me. Since the space appeared to be endless, my physical reaction was the sensation of my body floating freely while simultaneously being supported from all directions. As Massumi notes in *Parables for the Virtual: Movement, Affect, Sensation*, the heightened activation and co-functioning of the senses within the *ganzfeld* creates a space in which audience-participants “float out of their bodies and lose themselves.”²⁴ Because of the lack of perceptual cues, stepping into the light of *Perfectly Clear* created an experience for me in which my eyes became unreliable, requiring my remaining senses to engage, interpreting and making sense of my world.

Seeking to facilitate co-functioning of the senses, Turrell designs his artworks not as optical illusions, but as experiences which utilize optical phenomena to highlight the ways in which our brains process the images that we see. Benjamin Backus, an associate professor at the Graduate Center for Vision Research at the SUNY College of Optometry, notes that unlike an optical illusion, which relies on a specific relational position of the body, Turrell’s artworks reveal “the fact that everything you see is constructed by your brain.”²⁵ Although this still might sound like an optical illusion, Backus instead claims that “everything you see is an illusion. What we experience are just mental representations.”²⁶ The *ganzfeld* effect disrupts these mental representations that ground us in physical reality by disrupting the constancy of sight.

Turrell’s artworks focus on using light and color as elements of visual sensing to displace visual perception, resulting in full sensory activation for the audience-participant.

In a 2013 interview with PBS journalist and talk show host Charlie Rose, Turrell described the effects of his artworks as “the joy of sensing, which is, the sensual,”²⁷ and lamented the trend to focus on the technical, rather than the emotional and physical experience of his work. Adcock further describes this sensing experience of the audience-participants in Turrell’s artworks as being able to “feel light with their eyes, like pressure on the skin of visual perception.”²⁸ Often taking on a tactile function, the concept of being able to “see texture,”²⁹ and feel with the visual sense, is not as foreign as it sounds. The body knows the soft feel of velvet or the hardness of a rock,³⁰ and can even adjust to anticipate the texture of an unknown substance.³¹ In the absence of physical contact, the observer’s vision takes on a “tactile function”³² of being able to feel the texture of their surroundings.

Seeing with Closed Eyes: Losing Oneself in the Light

*I close my eyes. Or I think I have closed my eyes. When the lights strobe, colors bleed into my vision, penetrating my eyelids. My lids shoot back open. I have roughly nine minutes each time I enter the exhibit, and I do not want to miss a moment of the ever-changing color. With eyes wide open, I notice how the light creates patterns on surfaces I know are a smooth, solid field.*³³

Originally trying to isolate the conditions for pure sight, early experiments with *ganzfelds* instead highlighted the co-functioning of the senses in the interpretation of the physical reality. Not only did the *ganzfeld* fail to isolate mechanisms of pure sight, but some observers reported “difficulty sensing whether their eyes were open or closed,”³⁴ “blank[ing] out,”³⁵ and “complete absence of seeing.”³⁶ This loss of the visual sense is not darkness, but a sense overload, resulting in sight taking on a dreamlike quality.

The loss (or partial loss) of the visual sense presents a new perspective from which one can view the world. Often described as encouraging a meditative or spiritual state, Turrell’s artworks can evoke a deep sense of calm. Through what Claire Bishop calls mimetic engulfment,³⁷ the *ganzfeld* effect engages a full-body sensory experience in which the audience-participant is *inside* the light. Describing it as an environment in which “one begins to coincide with space,”³⁸ Bishop points to the heightened awareness created by Turrell’s fields of colored light and how it “frustrate[s] our ability to reflect on our own perception: subject and object are elided in a space that cannot be plumbed by vision.”³⁹

As Adcock states, the intent is to “change one’s thinking about seeing,”⁴⁰ but the lack of physical-visual orientation turns what for some is a contemplative experience into

one in which audience-participants become confused or disoriented, getting “lost in the light.”⁴¹ In his 2002 article “Learning from the Cornell Box,” Simon Niedenthal notes that Turrell’s *ganzfeld* exhibits create “an encompassing space that is full of light but devoid of visual information,” stating that the physical effect on the body “can be striking.”⁴² The proprioceptive confusion created by the *ganzfeld* effect has resulted in audience-participants becoming disoriented, losing their balance, and even falling over.⁴³ During the 1976 exhibit of *Arhirit* at the Stedelijk Museum in Amsterdam, several audience-participants “felt so disembodied they had to crawl through the space on hands and knees.”⁴⁴ While at the subsequent 1980 exhibit of *City of Arhirit* at the Whitney Museum of American Art in New York City, one visitor “leaned back on the dense leading edge of the *ganzfeld*—what they took to be a solid wall surface—and tumbled into the space of the chamber.”⁴⁵ Although Turrell insists his artworks are not designed to be disorienting to the point of creating a physical hazard,⁴⁶ these early incidents point to the inherently embodied experience of the *ganzfeld* effect in what is often regarded as being primarily in the realm of visual perception.

The Day my World Changed Shape

On a recent spring morning in late April, one month after my last visit to Perfectly Clear, I witnessed a building on the campus of Louisiana State University change shape. As I approached the building in the crisp morning air, scattered clouds bouncing across the sky, my eyes caught an image in the large round window at its peak. In that instant, the building became a façade through which I could gaze (Fig. 2). The window, having caught the reflection of the clouds above, lined up perfectly to create the appearance of a portal to the sky. The gentle ripple of the clouds dancing across the blue sky crossed paths so perfectly with the reflection in the window that, for a moment, the entire building changed shape. I was no longer at the side of a structure whose depth contained two rows of classrooms and a wide hallway. Rather, I stared at a flat façade, reaching through the large round window to the vast sky beyond.⁴⁷



Figure 2. Reflection on the third-floor window of Coates Hall, Louisiana State University, Baton Rouge, LA. Photo by author (unedited).

Although I knew in my mind the actual shape of the building, for that moment, standing in the middle of the parking lot, the structure became a single standing wall. As an embodied subject situated in the world, Matthews notes that: “[p]erception in one sense creates the world perceived, but in another sense does not.”⁴⁸ At that moment, my experience of reality and of the physical structure of the building changed. Although the image I saw was essentially an optical illusion, my attempt to make sense of what I was perceiving visually caused me to reinterpret my construction of reality. Even after I realized the “trick” that the reflection had played on my eyes, I stood there, staring at the structure that had now taken on a completely different shape in my world.

Like Turrell’s artworks, this moment called into question the way in which I perceived the physical world around me. However, even though his artworks appear to manipulate the ways that the audience-participant experiences the world through sight, Turrell, who has a degree in perceptual psychology, reiterates that his use of light is not an optical illusion. Jeffrey Kosky, in his 2013 article “Contemplative Recovery: The Artwork

of James Turrell,” notes the difference between an optical illusion and Turrell’s work as an optical phenomenon:

An illusion vanishes or is at least explained when you adopt the right place from which to see it and examine it with great care and effort. In Turrell’s viewing chambers, there is no right place where you can stand to make the illusion vanish ... There is nothing to see but what you see.⁴⁹

Unlike the reflection in the window which vanished as I changed my position, Turrell’s artworks use light and perceptual deprivation to “pose questions relating to the ways human beings engage the world with their visual systems.”⁵⁰ Rather than creating an illusion to trick the senses, Turrell’s artwork puts the audience-participant in an environment which questions the way in which we co-create reality through our sensual experience of the world.

Entering the Sky

I am twelve years old. I step off the plane into a desert climate and a world in which I suddenly feel pressed flat, shorter than how my 5’4” stature is used to feeling in humid, and often cloudy, New England. More than just the disorientation of being in a foreign land and hearing a strange language, I feel pushed downwards, exposed on all sides and stuck to the earth as if some force were weighing me down. I turn my gaze upwards and see the blue sky—clear, blue, and utterly devoid of clouds.⁵¹

Growing up in the Northeastern United States, I had never witnessed a sky without clouds—an empty sky which creates “an undifferentiated field of blue color whose distance and location are difficult to specify.”⁵² Without visual markers such as clouds, stars, or the contrails of passing airplanes, “the empty sky presents the viewer with what amounts to a homogenous visual field.”⁵³ In other words, this empty sky was my first experience with the visual displacement caused by the ganzfeld effect.

January 2018. I am no longer twelve years old. I step through the portal into Turrell’s ganzfeld exhibit *Perfectly Clear*, into and inside of the vast expanse of that very same sky I first encountered almost thirty years ago. As my thoughts return to the memory of my first steps onto the dry desert sand, I am brought back to the weight of the deep blue sky pressing down above me. Except now, at MASS MoCA in North Adams, MA, I enter into, instead of just under, that same blue sky. This time, without the visual cues of the red earth beneath me or the distant trees on the horizon, exposed on all sides and dimensions

of time and space, my body feels the possibility to expand infinitely in every direction all at once. Confronted with the seemingly limitless space, my “body swells”⁵⁴ with proprioceptive empathy, filling the vast openness. The sensation of being inside the *ganzfeld*—instead of crushed under it—creates a physical feeling of lightness, of being embraced and lifted on all sides, rather than pressed from a single direction.

Designed to make sense of our reality, “[o]ur eyes” Elkins claims, “are built to seek out complete figures,”⁵⁵ to use the available markers and fill in any gaps and missing information. However, when confronted with an unstructured visual field devoid of these visual markers, the empty blue sky becomes a chaotic image to the perceptual senses. In an attempt to organize this chaos, which he claims is both “beautiful but intolerable to our eyes,”⁵⁶ human beings have created constellations, playing connect the dots with the stars as a way to be able to imagine visual and perceptual markers in the sky above. Making, as Elkins observes, “a comprehensible unity out of an underlying chaos.”⁵⁷ However, when I entered into the chaos and total engulfment of *Perfectly Clear*, my eyes had no pictures to guide them, no markers to hold onto, and I had to make a new reality—a reality to make sense of the overwhelming lack of visual difference, a reality in which my body became untethered, floating alone in space.

Sharing Space

*Shoes off, socks on; I want to feel the ground beneath me. I keep my gaze fixed on the expansive nothingness that envelopes my peripheral vision. I am alone, the entire endless field of light all to myself—the only soul in a cloud of blue, then green, then purple.*⁵⁸

March 2018. I have returned to MASS MoCA and to take my second journey into the “horizonless landscape”⁵⁹ of Turrell’s *Perfectly Clear*. I am alone, my body floating freely in space. After a while, a family of four adults with an over-talkative father enters the space. I try to drown out the father’s blaring voice as I watch their silhouettes against the endless color, seeing what I cannot see when I am alone: their bodies floating in the void of blue, then green, then purple. I step back. I walk forward. The strobe lights flash and the whole world is immersed in color; my only point of reference is my feet on the ground as I watch the bodies of my fellow audience-participants float as if caught in a cloud (Fig. 3).

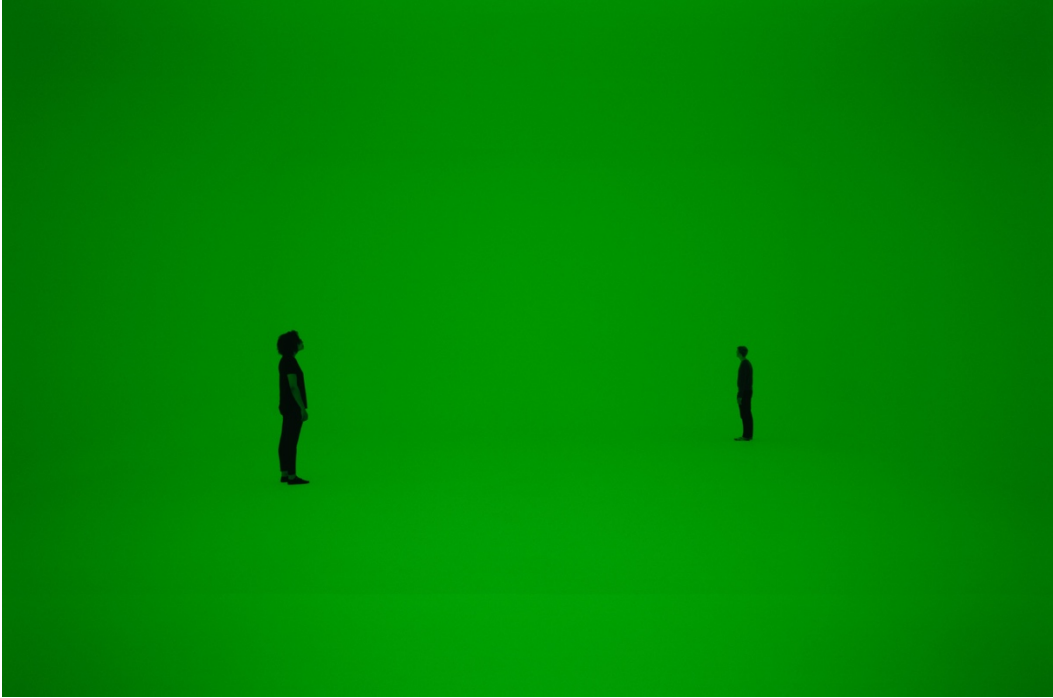


Figure 3. *Perfectly Clear* (Ganzfeld), 1991 Gift of Jennifer Turrell. © James Turrell, Photo by Florian Holzherr. Photo courtesy of the Massachusetts Museum of Contemporary Art, North Adams, MA.

The room is loud today, full of excited, nervous chatter. As I look deeper into the light the cacophonous sound of voices echoes in the room, transforming into a droning score. I float in the light, my body resting softly in its embrace.

“This is what it’s like to live inside a television, an old television.”

The over-talkative father interrupts my calm—his voice pulls me out of the clouds, slamming me to the floor. In a way however, he is correct: at times, the round-cornered rectangular recess in the far wall looks remarkably like the old bubble screen of a tube TV (Fig. 4). I push his voice back into the drone. My eyes linger on the back wall, gazing out, from inside the screen.⁶⁰

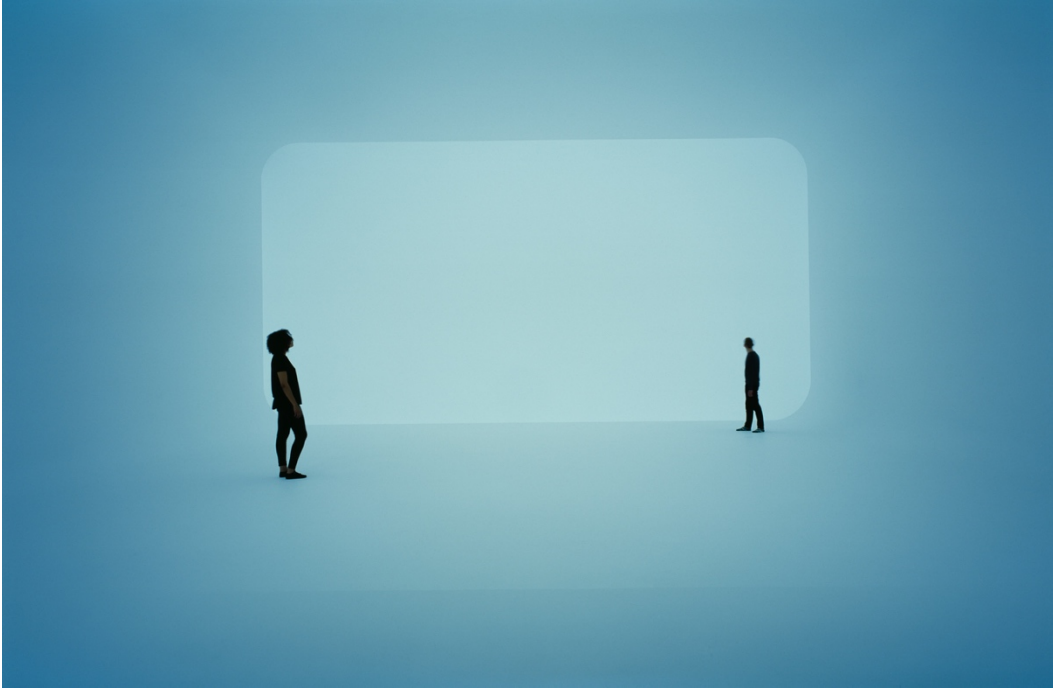


Figure 4. *Perfectly Clear (Ganzfeld)*, 1991 Gift of Jennifer Turrell. © James Turrell, Photo by Florian Holzherr. Photo courtesy of the Massachusetts Museum of Contemporary Art, North Adams, MA.

Unlike the typical museum experience, *Popular Science* describes Turrell's *ganzfeld* installation at MASS MoCA as “a canvas you can walk through,”⁶¹ in which visitors tend to “lose all sense of place— [sic] like being suspended in sea foam at sunset.”⁶² Described by Turrell as a thing that “occupies space,”⁶³ light in the *ganzfeld* takes on a physical form, creating a tactile sensation that can be palpably felt by the audience-participant. A sensation, as I described at the beginning of this article: as one of being held tightly by nothing at all.

Although I find it difficult to put into concrete terms, the feeling is that of the lightest touch over the whole expanse of my skin, while conversely being totally alone in an infinitely empty space. My limbs seem to float and lift with ease, and my body feels weightless, as if I stood suspended in a pool of deep water. My inability to judge the distance of the room and the uniform field of color gives a sense of expansion in my spine; I simultaneously stretch outwards while also feeling a slight compression of the surrounding mist of light and color. Sharing this space with the physical presence of light creates a world which forces my body to define a new perspective, a new embodiment in my own body, a sense of disembodied-embodiment.

Conclusion

*I step through the portal of light, as if I am calmly walking off a cliff. I am no longer afraid of heights, because I know the light will not let me fall.*⁶⁴

Like the window, like the empty sky, *Perfectly Clear* engages the co-functioning nature of the senses in order to physically respond to and interact with the world. As an embodied subject, my body is my only reference point to ground me in physical reality. It is “something I ‘live,’ something I inhabit, as the vehicle of my subjective experience.”⁶⁵ By using light as a form of perceptual deprivation, *Perfectly Clear* displaces my proprioceptive sense of placement in space. What I see is no longer reliable. What I feel is directly connected to the expanse that I see. Through the lack of visual stimulation and feeling of infinite space, my body starts to float, starts to expand, starts to reconcile and reinvent its reality. My mind connects the dots of my sensual experience. Turrell’s object of light affects a change in my embodied self, creating a feeling of disembodied-embodiment of my current placement in the void. By stepping into the light of the *ganzfeld*, the audience-participant becomes an active co-creator in Turrell’s *Perfectly Clear*, both a subject and object, one who “is *in* the world ... who acts on the world as well as being acted upon by it.”⁶⁶

My first experience with Turrell’s *ganzfelds* was through photographs, breathtaking images and poetic descriptions that failed to capture the overwhelmingly sensual feeling of being inside one of his artworks. By analyzing the embodied experience of *Perfectly Clear* through personal narrative and scholarly accounts, my hope is to give some window into the importance of physicality, touch, and proprioceptive consciousness that Turrell’s artworks engage. By using light to displace the audience-participants’ sense of sight, *Perfectly Clear* creates an opportunity for the broadening of perceptual possibilities that can go far beyond what we see, and reach into how we view ourselves and the world around us.

Endnotes

¹ First visit to “James Turrell: Into the Light” at the Massachusetts Museum of Contemporary Art (MASS MoCA), in North Adams, MA, January 2018.

² MASS MoCA, “James Turrell: Into the Light” (Exhibition brochure, 2017), 2.

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- ³ James Elkins, *The Object Stares Back: On the Nature of Seeing* (New York: Simon & Schuster, 1996), 24.
- ⁴ I specifically use the term *audience-participant* because of the integral role that the audience, or viewer, has in the co-creation of Turrell's artworks. The audience-participant is particularly important in *Perfectly Clear*, as the artwork is not situated in the room, the light, or the structure, but rather in the discovered meaning that is experienced between the ganzfeld effect and the audience-participant.
- ⁵ Elkins, 11-2.
- ⁶ J. E. Hochberg, W. Triebel, and G. Seaman, "Color adaptation under conditions of homogeneous visual stimulation (Ganzfeld)," *Journal of Experimental Psychology* 41, 1951, quoted in Avant, Lloyd, "Vision in the Ganzfeld," *Psychological Bulletin* 64, no. 4 (1965): 246.
- ⁷ Wolfgang Metzger, "Optische Untersuchungen am Ganzfeld: II. Zur phänomenologie des homogenen Ganzfelds," *Psychologische Forschung*, 1930: 13, quoted in Cohen, Walter. "Spatial and Textural Characteristics of the Ganzfeld," *The American Journal of Psychology*, no. 3 (1957): 403.
- ⁸ James J. Gibson and Dickens Waddell, "Homogeneous Retinal Stimulation and Visual Perception," *The American Journal of Psychology* 65, no. 2 (1952): 267.
- ⁹ "Synesthesia," OED Online. Oxford University Press. Accessed March 2018. <https://en.oxforddictionaries.com/definition/synaesthesia>
- ¹⁰ Craig Adcock, *James Turrell: The Art of Light and Space* (Berkeley: University of California Press, 1990), 69.
- ¹¹ James Turrell, quoted in Adcock, 2.
- ¹² Adcock, 1.
- ¹³ Eric Matthews, *Merleau-Ponty: A Guide for the Perplexed*, (New York: Continuum, 2006), 89.
- ¹⁴ Matthews, 92.
- ¹⁵ *Ibid.*, 34-5.
- ¹⁶ *Ibid.*
- ¹⁷ Alla Gadassik, "Perceptual Cells: James Turrell's Vision Machines Between Two Paracinemas." *Leonardo* 49, no. 4, (2016): 313.
- ¹⁸ James Turrell, quoted in Claire Bishop, *Installation Art: A Critical History* (London: Tate, 2010), 85.
- ¹⁹ First visit to "Into the Light."
- ²⁰ "Proprioception," The American Heritage® Science Dictionary. Accessed March 28, 2018. <https://www.ahdictionary.com/word/search.html?q=proprioception>.
- ²¹ Elkins, 137.
- ²² *Ibid.*, 138.
- ²³ *Ibid.*

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- ²⁴ Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham: Duke University Press, 2002), 145.
- ²⁵ Benjamin Backus, quoted in Shaunacy Ferro, “The Mind-Bending Science of James Turrell’s Art,” *Popular Science*, September, 2013. <http://www.popsci.com/science/article/2013-07/james-turrell-psychology>.
- ²⁶ Ibid.
- ²⁷ Turrell, James, “James Turrell.” Interview by Charlie Rose. *Charlie Rose*, June 28, 2013, video, 24:59, <https://charlierose.com/videos/17416>.
- ²⁸ Adcock, 2.
- ²⁹ Massumi, 157.
- ³⁰ Ibid.
- ³¹ Ibid.
- ³² Ibid., 158.
- ³³ First visit to “Into the Light.”
- ³⁴ Massumi, 145.
- ³⁵ Ibid.
- ³⁶ Ibid.
- ³⁷ Bishop, 82.
- ³⁸ Ibid.
- ³⁹ Ibid., 87.
- ⁴⁰ Adcock, 140.
- ⁴¹ Bishop, 87.
- ⁴² Simon Niedenthal, “Learning from the Cornell Box,” *Leonardo* 35, no. 3 (2002): 253.
- ⁴³ Adcock, 140.
- ⁴⁴ Niedenthal, 253.
- ⁴⁵ Adcock, 140.
- ⁴⁶ Ibid.
- ⁴⁷ Outside of Coates Hall at Louisiana State University in Baton Rouge, LA. April 2018.
- ⁴⁸ Matthews, 36.
- ⁴⁹ Jeffrey L. Kosky, “Contemplative Recovery: The Artwork of James Turrell,” *Crosscurrents* 63, no. 1 (2013): 51.
- ⁵⁰ Adcock, 38.
- ⁵¹ Outside of Ben Gurion Airport, Tel Aviv, Israel. March 1990.
- ⁵² Adcock, 137.
- ⁵³ Ibid.

⁵⁴ Elkins, 138.

⁵⁵ Ibid., 125.

⁵⁶ Ibid., 126.

⁵⁷ Ibid., 126-8.

⁵⁸ Second visit to “James Turrell: Into the Light” at MASS MoCA, in North Adams, MA. March 2018.

⁵⁹ MASS MoCA, 4.

⁶⁰ Second visit to “Into the Light.”

⁶¹ “Artist-Grade Construction,” *Popular Mechanics*, November 2017, 44.

⁶² Ibid.

⁶³ Turrell, interview.

⁶⁴ Second visit to “Into the Light.”

⁶⁵ Matthews, 51.

⁶⁶ Ibid., 37.