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## After The Crash-The Ground and the Sublime in the Works of Hito Steyerl and Trevor Paglen

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*After the Crash:  
The Ground and the Sublime in the works of Hito Steyerl  
and Trevor Paglen*

*Senior Project submitted to  
The Division of Arts of Bard College*

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*by  
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*Dedicated to my friends at Bard, who give me the love, comfort and support I need to pursue my academic career.*



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### Introduction: Shipwrecks, Crashes and Derailments

In the English painter J.M.W. Turner's *Slave Ship* from 1840, a setting sun is multiplied, extending its reflection in the ocean waters beneath and casting its glow into the final moments of daylight in the sky above (Figure 1). The light is pale and contained in the sky, but emerges into a deep red, lengthening along the horizon as it sets. A ship traverses the water, its intricate sails and mast suggest its impressiveness. In comparison to the waves in the foreground, though, the vessel is small. Thus, the ship appears far away. The sun bisects the painting vertically. In the side opposite the ship, the sky is a pallid, overcast gray. However, on the ship's side, a confluence of magenta, fiery orange, navy blue and dark red gives the sky a resemble to bruised flesh. Thus, the painter places the far-off ship in the midst of a powerful storm. Instead of moving towards the pale, undisturbed refuge of the opposite side of the frame, the ship's bow faces fiercer rain, wind and crashing waves. Fish are interspersed throughout the foreground of the painting, thrown around the turbulent waters. Some are depicted through their silhouettes, seen beneath murky gray waves. Others rise to the surface and their gnarling, chomping faces are more visible. A consortium of ten or so of these fish converges into a circle in the bottom-right of the frame. They swim and crash down on top of one other with mouths agape. The point they encircle, the center of their skirmish, is a human leg, seen from the thigh down, its foot in the air and a broken off shackle cuffing its ankle.

The writer and artist Hito Steyerl views the painting *Slave Ship* as a symbol of the decline of linear perspective.<sup>1</sup> In brief, linear perspective emerged out of ancient Euclidean, geometric concepts, though the mechanism was only employed as a representational system in the Early

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<sup>1</sup> Hito Steyerl. "In Free Fall: A Thought Experiment on Vertical Perspective." E-Flux. April 2011. <http://www.e-flux.com/journal/24/67860/in-free-fall-a-thought-experiment-on-verticalperspective/>.

Renaissance, exemplified through Italian painters such as Piero della Francesca and Fra Lippi<sup>2</sup>. The writer Leon Battista Alberti wrote his treatise *De Pictura* in 1425 in which he outlined how a painter could depict figures in space according to mathematical concepts (Figure 2). Alberti considers the canvas to be an “open window through which I see what I want to paint.”<sup>3</sup> He instructs the painter to divide his subject into three *braccia* and then delineate the rest of the canvas according to the size of those divisions.<sup>4</sup> From here, a centric point is drawn with rays extending to the base line of the painting. In effect, these lines converge on this central mark, creating a vanishing point disappearing into infinity. The painter is supposed to draw this point “no higher from the baseline of the quadrangle than the height of the man [she] has to paint there.”<sup>5</sup> Thus, both the viewer and the subject depicted seem to occupy the same plane. In a system of one point perspective such as that sketched by Alberti, the horizon line is represented at the viewer’s eye line. If an object is placed above the horizon line, the vanishing orthogonals slope down onto it; if the object is below this line, the rays point up. Thus, the horizon line mirrors the gaze of the viewer and determines how all objects in a frame will recede into represented space.<sup>6</sup>

However, in Turner’s *Slave Ship*, Steyerl argues the horizon is “tilted, curved, and troubled.”<sup>7</sup> The vanishing point is centered on the sun in the middle of the frame, yet the vanishing line protrudes outwards, thrown off its axis by violent waves. The flurry of red

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<sup>2</sup> Edgerton, Samuel Y. *The Mirror, the Window, and the Telescope: How Renaissance Linear Perspective Changed Our Vision of the Universe*, (Ithaca, NY: Cornell UP, 2009), 41

<sup>3</sup> Leon Battista Alberti. *On Painting*. trans. by John R. Spencer. New Haven: Yale University Press. 1966, 56

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Richard Greene. "Determining the Preferred Viewpoint in Linear Perspective". *Leonardo*. 16, no. 2. 1983, 101

<sup>7</sup> Steyerl, “In Free Fall.”

hanging over the ship extends and contorts the horizon, interrupting clear orthogonals that should, according to Alberti's instructions, protrude downward onto the center of the frame. Steyerl notes that the sun acts as vanishing point. However, she claims its reflection is captured in the ocean and its glow emanates into the clouds overhead, thus causing this central point to be multiplied. Thus the singular clarity of one point perspective is eliminated.<sup>8</sup> Steyerl points to Cubism and photography as two examples of late 19th and early 20th century constructs that disoriented the viewer and offered a multitude of unhinged, overlapping perspectives. Yet, it is in *Slave Ship* that she finds an earlier signifier of the collapse of the horizon line. In her eyes, this destabilization did not only bring with it the decline of planar ways of seeing. Rather, landscapes constructed without a clear vanishing point represented a dismantling of the power structures indebted to such images.

The painting depicts the British slave ship the *Zong*. In 1781, its crew threw overboard and massacred 133 ill and dehydrated slaves so as not to lose the insurance claims on their lives.<sup>9</sup> Steyerl claims the viewer is contorted and distraught in Turner's portrayal of the event, not only from the paintings lack of a stable horizon, but also from the scene's gruesomeness. She believes the painting reveals the virulence of a supposedly objective system of calculable space, claiming Turner highlighted the deplorability of Western imperialism by offering a radical approach to traditional viewpoints. "At the sight of the effects of colonialism and slavery, linear perspective—the central viewpoint, the position of mastery, control, and subjecthood—is abandoned and starts tumbling and tilting, taking with it the idea of space and time as systematic constructions."<sup>10</sup>

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<sup>8</sup> Ibid.

<sup>9</sup> Ian Bernard. "The Zong Massacre (1781)." *BlackPast*. Online Encyclopedia Entry. <http://www.blackpast.org/gah/zong-massacre-1781>

<sup>10</sup> Steyerl, "In Free Fall."

The above statement is a definitive one; it is difficult to ascribe a single painting with the power to take down such a canonical system as linear perspective. Furthermore, though Turner was an admitted abolitionist, one cannot undoubtedly conclude the painter sought to rebel against subjugating power structures through the aesthetics of his artwork.<sup>11</sup> Supposedly, he was inspired to paint the subject after reading *The History and Abolition of the Slave Trade* by Thomas Clarkson.<sup>12</sup> Still, Turner never directly spoke of or wrote about abolitionist themes in any of his works. John Ruskin, the Victorian art critic and first owner of *The Slave Ship*, wrote a well-known homage to the painting and claimed, “If I were reduced to rest Turner’s immortality upon any single work, I should choose this.”<sup>13</sup><sup>14</sup> Still, his writing glossed over the painting’s more gruesome subject matter.

Much of what has been written about *The Slave Ship*, then, focuses on its formal elements and Turner’s ability to capture the overwhelming terror and beauty of nature. Steyerl, on the other hand, makes a connection between its aesthetic innovativeness and its political subtext. She considers the painting’s formal elements to work in conversation with its views on slavery and, furthermore, to lead the viewer to a reconsideration of their own feelings towards the subject. Thus, Steyerl highlights Turner’s ability to use aesthetic considerations to encourage a new mode of thought and way of thinking about the world in his viewer. This practice parallels the writings of English philosopher Edmund Burke, who celebrated the ability of artists to tap into a previously dormant consciousness.

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<sup>11</sup> Fred S. Kleiner, *Gardner's Art Through the Ages: A Global History*, Volume II. (Belmont: Wadsworth, 2008), p. 795.

<sup>12</sup> Ibid.

<sup>13</sup> “Slave Ship” Museum of Fine Arts Boston, <http://www.mfa.org/collections/object/slave-ship-slavers-throwing-overboard-the-dead-and-dying-typhoon-coming-on-31102>

<sup>14</sup> John Ruskin. *The Lamp of Beauty*. (London: Phaidon, 1959), 30-31

Scholars have often found the sublime in Turner's landscape paintings. Burke discussed the interaction of fear and beauty in art, theorizing that what may initially overwhelm and frighten the viewer has the capacity to subsequently elicit admiration, emotion and insight into the nature of one's existence and place in the world. Particularly, scenes depicting the brutality of nature possess this sublime capacity, as the viewer is able to appreciate the fearsome beauty of the wild without placing herself in any actual danger. Burke suggests that the sublime is able to increase the viewer's phenomenological capabilities as pain and danger expand the sensory comprehension of greatness and become "productive of the strongest emotion which the mind is capable of feeling."<sup>15</sup> The philosopher claimed that the illusion of infinity, brought about by the erasure of finite limits, could be found in the sublime landscape. Furthermore, he discusses the effect of intense light, claiming it has the ability to overcome the viewer's sight and obscure all discernible objects or figures.

Burke's interpretation of the sublime is epitomized in *Sun Setting Over a Lake* (Figure 3). The sea and the sky, two entities often depicted in art as limitless and unfathomable, collude into one another, thus blurring a distinction between the two. The horizon line, which should elucidate distance and delineate space, is suggested only through a minute, blood-red blotch. Any figures in the sky or vessels in the lake are lost by the rupturing, inescapable color of the setting sun. Human life and man-made objects, such as ships, are rendered indistinct, which in turn induces fear and confusion in the viewer before that fear taps into a previously dormant mental capacity. Figures are obscured and space collapses. Thus, Turner's subject in *Sun Setting Over the Lake* becomes the sunlight itself. For Burke, viewing the sublime leads to a contemplation of

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<sup>15</sup> Edmund Burke, *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and the Beautiful* (Philadelphia: S.F. Bradford, 1806), pg. 176.

the divine, as God—whom the Bible depicts as both a benevolent and wrathful ruler—is creator of the intimidating yet beautiful natural world.

Despite his emphasis on pristine waterfalls and beautiful lakefronts, Turner's career coincided with the advent of the Industrial Revolution in early 19th century England. In many of his paintings, these two divergent themes—the pastoral and the industrial—seem to work in conversation with one another and, in his later career, he frequently painted industrial objects into his landscapes. In *Rain, Steam and Speed* from 1844 (Figure 4), a dashing locomotive barrels along a diagonal, penetrating a muted, pale, and overcast London day. Its velocity is articulated through its lack of detail; Turner paints the locomotive in motion—soft and distorted as it speeds towards its destination. The soft blue and gold in the air, damp from the showers just occurring or soon to follow, diverge sharply from the brown, industrial steel of the machine. Though Turner crafts a vanishing point through the receding orthogonal of the railroad tracks, the horizon is merely suggested as it becomes engulfed in clouds and steam. What is unclear is whether these clouds emerge from the weather or the locomotive—whether the forces of nature or technology destabilize the horizon. Kenneth Clark describes the painting as symbolic of man's imposed order on and destruction of the natural.<sup>16</sup> He claims structures of linear vision lost their stability as society was catapulted into a world of progress and innovation. From this disorientation, traditional power dynamics between man and nature became problematized. In *Rain, Steam and Speed*, the clouds billowing from the train cover up the visual reference points that once oriented man in representational space. Now, it appeared the forces of the Industrial Revolution had taken away the stable ground that society once oriented itself upon. Both Turner's paintings of the overtly industrial as well as the pristinely natural seem to suggest a critique of

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<sup>16</sup> Inigo Thomas. "The Chase." *London Review of Books* 38.20 (2016): 15-18.

industrialism. By painting recent technology interacting with its environment, such as a locomotive penetrating a landscape, he captures industry literally disrupting the natural and obscuring pastoral beauty with its byproducts. By painting scenes of nature, he shows the viewer a world that will soon slip away as society's obsession with progress renders it antiquated. During an era when machines became omnipresent in the lives of city dwellers and humans as a whole became uprooted from their pastoral roots, Turner's landscape paintings seem to condemn man's apparent need to supersede the forces of nature with their own devices.

However, Turner's later paintings have been open to multiple interpretations in regards to their exploration of technology's relationship to nature. William S. Rodner suggests *Rain, Steam and Speed* speaks not to Turner's animosity but rather his reverence for industrialism.<sup>17</sup> Rodner finds the sublime in the industrialism of Turner's locomotive. He finds the train conveys a sense of terror in large, powerful and obscure objects, all-the-more intensified by its acceleration towards the viewer. Turner played into the anxieties held by Londoners at the time as powerful locomotives often derailed, exploded, and collided into one another.<sup>18</sup> In a famous incident from 1830, the Leader of the House of Commons, William Huskisson, was run over by a train during the opening of the Liverpool and Manchester railway.<sup>19</sup> The opening, then, symbolized not only the introduction of a new means fast and cheap travel, but also steam-powered technology's propensity to be lethal and violent. Considering incidents such as these, Turner tapped into what has been referred to as the technological sublime with *Rain, Steam and Speed*. The painter perhaps acknowledges train pollution by compounding the clouds of a rainy London day with the steam of a locomotive. Caught in its own haze and speed, the train proceeds along a diagonal out

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<sup>17</sup> William S. Rodner. *J.M.W. Turner: Romantic Painter of the Industrial Revolution*, (Berkeley: University of California Press, 1997), 107

<sup>18</sup> Rodner, *J.M.W. Turner*, 153

<sup>19</sup> *Ibid.*



towards the viewer. This feature exemplifies Turner's consideration of the sublime as a force that captured a sort of frightening threat posed to the viewer without placing that viewer in any actual danger.

Though the locomotive is a harsh, industrial brown, its factory steel glows in a reflection of the sun. The day is cloudy and the train's steam may be contributing to this gloom. Still, the train itself speeds through the haze, leaving behind the cloudy obfuscation in the background and proceeding towards safe visibility in the foreground. Furthermore, the train emerges from a pale, tintured-yellow vanishing point that sinks to the median of the frame and hangs below the railway tracks. In addition, the natural environment seems to revolve around this central luminescence as Turner's blue-gray clouds curve towards and away from the vanishing point. Rodner claims this was a typical technique of Turner as the artist frequently painted thick arcs to represent clouds whirl-winding towards a central focal point.<sup>20</sup> He continues to note that Turner was profoundly invested in the interior life of his subject matter. Turner seemed to employ an emotional style to find the heart and soul of his landscapes, figures and objects.<sup>21</sup> A golden sun and its fiery red milieu is the focus of *Sun Setting Over a Lake*. As noted earlier, not only is the sun at the epicenter of the painting, but sunlight can be seen as the subject matter of the work. Turner cloaks the landscape in the sun's warm glow. The viewer has a sense of its divine power, as if it is the progenitor of all life. At the same time, the sun comes to resemble a sublime, inconceivable force whose vivid, explosive color has the capacity to deny a clear viewpoint of the world. Many critics consider the painting's actual subject matter to be God—as both creator and destructive agent.<sup>22</sup> In *Rain, Steam and Speed*, the natural environment and locomotive both

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<sup>20</sup> Rodner, *J.M.W. Turner*, 15-17

<sup>21</sup> *Ibid.*

<sup>22</sup> Rodner, *J.M.W. Turner*, 15

emerge from the sun and sunlight. Perhaps then, Turner suggests that despite the apparent contrast between nature and technology, both emerge from a place of divine origin; God creates the world and humans in it, and industry is the greatest actualization of human power given by God. Turner paints the natural as sublime, allowing his viewer to enter a state of consciousness only achievable through fear. He does the same with the locomotive in *Rain, Steam and Speed*, which encourages the viewer's reverence of technology through a depiction of its powerful, overwhelming force.

With this understanding of Turner's sublime elucidated, one can draw similarities to how Steyerl approaches similar philosophical questions. The sublime is concerned with the overwhelming- of grappling with a loss of stability as a result of this enormity. Immanuel Kant continued Burke's investigation of the sublime in his *Critique of Judgment* by elaborating on the sublime's effect on consciousness. Whereas Burke emphasizes nature's power to bring about the sublime, Kant considers it to be a condition experienced by humans in face of the unknowable and uncontrollable.<sup>23</sup> In his essay, "The Contemporary Sublime," Simon Morley writes that today, the phenomenon is more likely to be found in technological systems than paintings of waterfalls, sunsets and seascapes.<sup>24</sup> He argues information systems and technologies of global communication leave us disoriented, able to grasp at an innumerable amount of data and exchange yet unable to firmly comprehend such plenitude. Steyerl, like Morley, finds Burkean and Kantian interpretations of the sublime in contemporary, networked society. In her 2010 essay *In Free Fall*, though, she uses a term that, in many ways, can be considered synonymous with the technological sublime: groundlessness.

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<sup>23</sup> Kant, Immanuel, and J.H Bernard. *Critique of Judgment*. (Mineola, N.Y.: Dover, 2005), 66

<sup>24</sup> Simon Morley. "The Contemporary Sublime," from *The Sublime*. (London: Whitechapel Gallery, 2010)

Steyerl writes, “At best, we are faced with temporary, contingent, and partial attempts at grounding. But if there is no stable ground available for our social lives and philosophical aspirations, the consequence must be a permanent, or at least intermittent state of free fall.”<sup>25</sup> Our lack of a stable ground, in Steyerl’s eyes, resembles a sublime unknowability—the experience of being confronted with powerful, commanding phenomena but not having the capabilities, knowledge or awareness to grapple with it. Steyerl finds that, in our present moment, truth slowly dissipates into uncertainty and reason loses its even footing. We lose our balance from this descent into an abyss of the overpowering; our line of sight becomes blurred and confused. As in Turner’s *Slave Ship* and *Rain, Steam and Speed*, the viewer is denied a stable horizon as a multitude of perspectives arise. These new visualities become both productive and symptomatic of our loss of understanding in a world saturated with information. Steyerl writes: “Drones survey, track, and kill. But the entertainment industry is busy as well. Especially in 3D cinema, the new characteristics of aerial views are fully exploited by staging vertiginous flights into abysses.”<sup>26</sup> These technologies are mechanisms resulting from attempts for mass communication in a networked world, at the same time the novel visualities they generate present an even more confounding flurry of information. In a sense, they are both products of a destabilized society and producers of it.

However, Steyerl finds value in this sublime enormity. Turner’s *Slave Ship* denied the viewer a stable position by destabilizing the horizon and multiplying the vanishing point. Yet, this visuality represented an attack on the structure of linear perspective, a system that Steyerl claims to have contributed to imperialism and Western authoritarianism. In *Slave Ship*, then, not only our ways of seeing reconsidered, but our relationship to the power structures that enable

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<sup>25</sup> Steyerl, “In Free Fall”

<sup>26</sup> Ibid.

oppressive institutions such as slavery is also affected. Translating this notion to contemporary society, Steyerl writes, “The perspective of free fall teaches us to consider a social and political dreamscape of radicalized class war from above, one that throws jaw-dropping social inequalities into sharp focus.”<sup>27</sup> Thus, destabilization and groundlessness can be productive and generate new, liberating modes of existence. Steyerl writes, “Falling does not only mean falling apart, it can also mean a new certainty falling into place.”<sup>28</sup>

This essay will explore the transitive effects of Steyerl’s notion of free fall through an analysis of what could be considered its philosophical predecessor: the sublime. I will look at the work of Steyerl herself, specifically the film *In Free Fall* from 2010, as well as a number of works by the photographer, writer, and geographer Trevor Paglen. Though it has the same title as her aforementioned essay, the film *In Free Fall* is not merely a filmic representation of the text. While both essay and film emphasize the emancipatory power of giving into and reconsidering the overpowering and the sublime, the former represents this potential through radical, novel lines of vision. The latter is instead concerned with the transitive power of objects and matter in achieving alternative realities through this purported abyss.

The artist, writer and geographer Trevor Paglen is interested in elucidating government secrets, having worked with filmmaker Laura Poitras on the Edward Snowden documentary *Citizenfour* from 2014. If we consider the murky realm of government surveillance to resemble Burke’s sublime, mysterious abyss, then the vertiginous, groundless mechanisms of sight discussed by Steyerl are a parallel subject matter. In particular, Paglen’s series *The Other Night Sky* documents classified U.S. satellites only discovered through advanced software and careful research into systems of planetary orbit. By photographing the ostensibly unphotographable,

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<sup>27</sup> Ibid.

<sup>28</sup> Ibid.

Paglen posits a sublime leaping into a world of unknowns and grappling with ambiguous forces of governmental power. The difficulties inherent in these photographs are exacerbated by a certain aesthetic obscurity, as Paglen photographs the spacecraft from a destabilized, far-off position wherein the satellite becomes distorted and vague. Yet, like Steyerl and philosophers invested in the sublime, Paglen suggests that we might give into this difficulty. Both artists suggest one can utilize the creative potential of imagination and belief to reconsider the citizen's position in resisting mechanisms of surveillance and capitalism. It is undoubtedly a difficult position, but perhaps a valuable one in a world where state power, communication and the means of production appear ever more unbelievable, complex and difficult to place onto stable ground.

## Chapter 1: “Is this for Real?”

Originally produced as three short videos, “After The Crash”, “Before the Crash”, and “The Crash”, Hito Steyerl’s *In Free Fall* was released by the Bristol video agency Picture This as a single video in 2010.<sup>29</sup> In subsequent re-exhibitions, the video has been displayed before special seating designed for its viewer, made to resemble the plush, luxury accommodations of a first class airplane cabin (Figure 5). Comfort has become a recurring facet of Steyerl’s installations. Her 2015 video *Factory of the Sun*, originally shown at that year’s Venice Biennale, was installed before an arrangement of reclining pool chairs (Figure 6). This emphasis on relaxation, however, can seem incongruous with the content of her videos. The work often employs high production, cinematic special effects; coupled with pop music and recycled clips from popular TV shows and movies, Steyerl’s slick edits, computer generated animations and green screen sequences resemble Hollywood actions films and high production video games such as *Call of Duty* (Figure 7).

Despite the viewer’s reclining position, the videos themselves are at times loud, high paced, and energetic. Steyerl employs a conceptual framework that is similarly disruptive, calling on the viewer to question their ideological assumptions through an exploration of network relations, information sharing and class. As both an artist and theoretician, Steyerl’s video work and writing are informed by a strong philosophical basis, positing new modes of being in the world and grappling with a hyper consumerist society, all the while her viewer sinks into the comfort of a sumptuous first class seat or reclining lounge chair. Though the formal and theoretical style of the videos seem to oppose the leisurely means by which they are received in a gallery or museum, Steyerl’s videos employ these sorts of contradictions as conceptual material.

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<sup>29</sup> PictureThis20. “Hito Steyerl interview at Picture This” Online video clip. YouTube. YouTube, May 26, 2011.

She frequently uses irony and humor, as well as juxtaposition and shifts in tone and pacing. At times her videos are somber and muted, before they quickly transition to an upbeat and animated style. These shifts can be disorienting for the viewer, yet they parallel the frenetic pace of the digital economies she investigates, wherein information and data are constantly being downloaded, compressed, shared and re-shared. The editing of *In Free Fall* encapsulates this frantic energy, where crashing—economic, airborne or otherwise—is employed as a metaphor for the disorienting effects of moving from stability to instability, certainty to uncertainty, fact to fiction and humor to solemnity.

*In Free Fall's* introduction begins with an assemblage of plane crash footage pieced together from TV shows and films. Planes burst into flames, split in half mid-air, and nose dive into the Earth (Figure 8). Passengers tense back into their seats with panicked expressions in preparation for impact. Sweaty pilots fumble with controls and radio in mayday calls to command centers. Green radar maps, lines of code and in flight failure messages evoke the aesthetics of early computing. Steyerl scores the beginning of the film with the Talking Heads song “Sax and Violins.” David Byrne’s voice croons over the scenes of aerial chaos with the words, “Falling, falling. Gonna drop like a stone. I’m falling through the atmosphere on a warm afternoon.” The video operates through the distribution platforms and methods of image circulation characteristic of the web. Many clips are stamped with “A.B.C.” and “N.B.C.” watermarks. It seems as Steyerl if recycled footage was pirated from television, uploaded to the net, downloaded by the filmmaker and placed in the video.

The film proceeds into its first part, “After the Crash” with footage of an airplane junkyard in the Mojave Desert. Inspired by the Soviet critic Sergei Tret’iakov’s 1929 essay “The Biography of the Object,” which suggested art should construct narratives around commercial

objects, Steyerl's video employs a Boeing 737 as its protagonist<sup>30</sup>. The camera scans piles of gutted cabins spilling out torn wires, broken chunks of metal and other skeletal remains of aircrafts into the dusty lowland (Figure 9). We are introduced to our first interviewee, Mike, a sixty-something, raspy-voiced former pilot who owns the junkyard. Mike explains that during times of economic downturn, airlines save money by storing their planes in his lot rather than pay to maintain them. Steyerl focuses on the single Boeing 737 in Mike's lot to explore how crises can be ruinous for some, productive for others, and cause a recoding and disorientation of objects and material.

As the title of the video's first part, "After the Crash," suggests, the biography begins with the plane after it has already broken down, been retired and relegated to the scrapyard. Though the aircrafts on his lot are decommissioned and dilapidating, Mike tells us he profits off the planes in his lot through two ways. Mike rigs the planes with explosives and eviscerates them into fiery oblivion for Hollywood films in need of a crash sequence. We are shown a clip of the Keanu Reeves starring action movie *Speed* from 1995, shot on Mike's lot and featuring a bus barreling into a plane, causing the two to explode into a flurry of metal debris. Mike also tells us he sells the planes for scrap to Chinese DVD manufacturers who melt down the aluminum and press it into discs. The film cuts from Mike to a Discovery Channel documentary clip explaining the manufacturing process. At this moment, the tone of the video transitions entirely. The soundtrack changes to upbeat pop music, the sort of background noise that could be co-opted for a sitcom's theme song. The educational television program plays on a small portable DVD player placed beside the metal rubble of the scrapyard (Figure 10). The theme of recycling is everywhere, almost literally as the phrases "so recyclable" and "again and again" are repeated

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<sup>30</sup> Sergei Tret'iakov. "The Biography of the Object" from *October Magazine* (Fall 2006, No. 118), 57-62



constantly, the phrases themselves becoming recycled content. The documentary depicts a plane being melted down into aluminum and transformed into a DVD, all the while the actual DVD of the documentary plays beside the remains of the plane. Again, linear time is fragmented as the reincarnated sits beside the object it originates from; heaps of aluminum rubble are planted next to images of aluminum in liquid form being pressed into new material.

In his essay “What to Do with Pictures,” the art historian David Joselit argues that raw data has begun to resemble a natural resource, such as coal, that needs to be mined. Unlike coal and diamonds, though, data is not scarce. Rather, it is ever multiplying. It is so abundant that without being organized (or mined), fragmentary images, hyperlinks and lines of code pile up into an overwhelming, meaningless mess.<sup>31</sup> Thus, Joselit claims data only makes sense when it is arranged, yet, the same data can be used in support of opposing ideologies. Thus, those arrangements become political in their capacity to be counteractive. Footage of the World Trade Center attacks on 9/11 can be used to elicit American anger or jihadi pride depending on their context and the images contextualizing them. From this process, which Joselit labels “formatting,” knowledge is found through the “discovery or construction of data into meaningful patterns.”<sup>32</sup> Images may remain inherently the same, but they are stretched, pulled, manipulated, re-constructed, managed and mismanaged, thus creating a multitude of new meanings from these patterns.

“After the Crash” encapsulates this notion by using re-using the same tropes, footage, and lines of dialogue. However, the purpose they serve in the film and values they attempt to convey constantly evolve. Mike’s interview is at first strange and ominous. The camera slowly

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<sup>31</sup> David Joselit. “What to do With Pictures.” From *Mass Effect: Art and the Internet in the Twenty-First Century*. Edited by Lauren Cornell and Ed Halter. (Cambridge: The MIT Press, 2015), 246-254

<sup>32</sup> Joselit, *What to do With Pictures*, 248

paces around the arid desert, scanning piles of despoiled aircrafts. The segment is scored by somber, ambient tones. When the first part shifts its focus to the DVD, the pace becomes energetic and the film highly edited. The wipes, dissolves, jump cuts and repetition of shots, coupled with the cheesy, vaguely hip hop beat gives the film the hyper-commercialized feel of a children's television program. Yet, the setting remains ostensibly the same. The former pilot's interview and the action film clips shown in the introductory segment are repeated. "After the Crash" is divided into juxtaposition, but it is one that is fundamentally comprised of the same parts. In this way, Steyerl supports Joselit's theory that in digital image economies, specific forms of management and formatting of data reveal significance, more so than the individual images themselves. Denotation shifts, not by way of the creation of new images, but from the re-organization and management of existing ones.

When meaning is constructed through mass amalgamations of data, seemingly everything becomes susceptible to formatting, editing and displacement. Even an icon of industry as copious as a Boeing 737 becomes broken down and regenerated into a multiplicity of forms. In the Discovery Channel documentary played on the portable DVD player, we see the plane become liquefied into pure aluminum before a machine presses it into discs. In this way, the film oscillates between crashing and regeneration. "Every time there's a dip in the economy, it's windfall to us," Mike says. Times of economic crash are when his business is most successful,

Mike's business profits from planes that have already crashed or fallen apart or whose crash Mike will simulate for a Hollywood movie. He tells us, "Every time there's a dip in the economy, it's a windfall for us," as airlines pay him to store their decommissioned planes when it becomes too expensive to maintain them. Thus, in Steyerl's video nothing is finite, as even destruction begets creation. As the filmmaker references in the film, Tret'iakov believed the life

story of the object was more important than that of a human, as matter lives on and continues in different forms.<sup>33</sup> Because of this, the viewer has a hard time taking anything in the film as a truism. Steyerl suggests that as objects and matter die and create new life in their wake, they are attached to new patterns that render them with constantly divergent meanings. Thus, in the video, it becomes difficult for the viewer to assess what is fact or fiction.

In Part Two, “Before the Crash,” we are taken to a time preceding the liquidation of the plane at the center of Steyerl’s biography. A purported expert on the aircraft tells us the plane was blown up for the theatrical climax of the movie *Speed*, a scene that was shot on Mike’s lot. The scene is then played on a portable DVD player placed on the ground next to a deteriorating airplane. Going back further in time, we are taken to 1929, the year of the stock market crash and, as Steyerl points out, Howard Hughes’s 1929 film *Hell’s Angels*, an action film about fighter pilots. Hughes insisted on shooting dangerous, real-life stunts for the film, leading to the crashing deaths of several real pilots and put Hughes, an amateur pilot himself, in a four-day coma. After Hughes bought the airline TWA ten years later, the 4X-JYI was commissioned in 1956. The expert tells us it was purchased by the Israeli military in the 1970s, where it played a crucial role in Operation Entebbe in 1976, rescuing Israeli hostages from Palestinian and German militants. Again, the story fluctuates between the real and the imagined, as news footage of the actual crisis is interspersed with clips from film dramatizations of the event, such as in *Operation Thunderbolt*, where a harrowing Klaus Kinski plays a far-left, German revolutionary.

Holes in the “expert’s” credibility arise when we see him studying a script and calling for lines from off camera. In *In Free Fall*, though, static, undeniable truth gives way to constantly shifting, decoded fragments of images and objects. What matters less for an object is its singular

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<sup>33</sup> Tret’iakov, “The Biography of the Object,” 62

purpose or reality, but rather its ability to fluctuate between uses under constantly changing conditions of time and space. As Joselit claims, in a hyper capitalist economy, objects need to arrange and rearrange themselves into evolving patterns to create any sort of meaning.<sup>34</sup> The plane lives on through Hollywood magic and the hard stamp of the DVD maker. At the end of “Before the Crash,” Steyerl reads a poem, but she makes a telling a slip of the tongue; instead of saying “Matter lives on” she says “Matter loves on.” In a way, both statements apply to her thesis. Matter continues, but it does so through symbiosis. It needs to attract itself to other life forms for it to live on. Its as if the plane needs the bus to ram into it and for the cameras to be rolling, just as it needs the DVD making machines in the Chinese factory to press its matter into new life. Steyerl suggests these are relationships the object enters into for survival.

At one point, a computer-generated animation depicts a DVD rotating in orbit around the Earth (Figure 11). We can take this animation to represent the DVD 4X-JYI was turned into, becoming a symbol for this metamorphosis. Despite the crash, matter lives on and the DVD introduces a new means of flight.

The final part of the film, “Crash,” introduces us to our third protagonist, a man named Kevin, who we soon learn is Steyerl’s cameraman who shot the footage of the planes in the Mojave Desert. Steyerl interviews Kevin at a time of crisis in the filmmaker’s life. Through a Skype interview, Kevin discusses a series of economic hardships that plagued him and his wife, forcing them to sell their home. In Hollywood, Kevin made his living as a post-production effects supervisor, specializing in seamlessly placing images onto TVs or video screens within a film. He points to digital piracy for forcing film production companies to squeeze labor to maximize profits. With work opportunities dwindling, Kevin put his house on the market, only to

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<sup>34</sup> Joselit, “What to do with Pictures,” 246

run into the 2007 subprime mortgage crisis. Kevin describes the feeling by saying, “I felt like the captain of a plane and I was unable to land it”. Similarly, at one point Mike wonders aloud, “Is this real life?” Again, in *In Free Fall*, nothing can either be deemed real or fake. A crash, whether it is that of an airplane or one of financial failure, represents movement from stability and safety into the unknown and surreal. Expert becomes actor and plane becomes DVD. The film’s formal style represents this oscillation. The tone shifts constantly from foreboding to humorous, serious to juvenile. At times, the film becomes trancelike and hallucinatory as clips are slowed down and sped up, repeated, and played on screens within the film or on a green screen backdrop behind the subjects.

In discussing he and wife’s economic tribulations, Kevin conveys the disorienting effects of the crash. However, he also recounts the productive, regenerative properties of this collapse. He remembers thinking “We have to go through this awful crash and then put something together on the other side.”

In the treatise, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* from 1757, the Irish philosopher Edmund Burke writes: “Whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion which the mind is capable of feeling.”<sup>35</sup> What is initially paralyzing in its horror becomes illuminating, as previously dormant regions of mental consciousness are unearthed. For Kevin, the financial crisis was terrifying. But as his trepidation became supplanted by his need to survive: he braced for impact and accepted the loss of a stable ground in order to leap into an alternative reality.

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<sup>35</sup> Edmund Burke, *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and the Beautiful* (Philadelphia: S.F. Bradford, 1806), 176.

In her essay from 2011, similarly titled *In Free Fall: A Thought Experiment on Vertical Perspective*, Steyerl considers the revelatory propensity of this sort of leap into oblivion. “Imagine you are falling,” she writes, “But there is no ground.”<sup>36</sup> Steyerl frames her investigation around the contemporary philosophical idea of groundlessness. She references Martin Heidegger’s metaphor of the abyss and idea of rejecting stable ground. Descent brings disorientation; not only do new states of being emerge, but also new ways of seeing. As one falls, visualities are twisted, contorted, repeated and discombobulated. Steyerl attributes this visual confusion to the loss of a stable horizon. With this loss also comes the forfeiture of a “stable paradigm of orientation,” one that imposes relationships between viewer, object, time, and space.<sup>37</sup> She believes this paradigm was instituted through representational mechanisms such as linear perspective in the Early Renaissance. This system established the position of the viewer and privileged his viewpoint in relation to the objects surveyed. According to Steyerl, through this rearticulation of illusory space, objects and figures became detached from the corporeality of the viewer. Steyerl claims this process of othering created notions of exceptionalism in the beholder, thus engendering the forces of Western imperialism.

In this way, Steyerl considers “the ground” as both metaphor and literal locus. For the former, it is the ingrained foothold by which values are constructed through their relative position to social, political and cultural actors. For the latter, it’s the physical space offered to the viewer through the mathematical delineation of illusory space. Groundlessness means abandoning both of these constructs; it brings with it a reimagining of social relationships as well as the collapse of traditional, hierarchical visualities. Falling, then, contains a sublime rhetoric. The act can be interpreted as the negation of stability and an entrance into the unknown and

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<sup>36</sup> Steyerl. “In Free Fall”

<sup>37</sup> Ibid.

terrifying. However alarming this process may be, though, it contains the potential to bring about radical, previously unimagined forms of liberation. In this way, Steyerl depicts her subject, Kevin, in a condition of sublime free fall after the 2008 financial crisis. The narrative thus becomes that of an out of work freelancer, faced with the paralyzing reality of economic ruin, choosing to move forward, give into his fears and use them as a vehicle to enter a new state of being.

Steyerl believes that society can currently be characterized by this condition of groundlessness. The author finds what she refers to as “the downfall of linear perspective” and the introduction of new visualities of the last century to be symbolic of a wider philosophical condition.<sup>38</sup> By negating certain conditions inherent in the physical world, Steyerl believes linear perspective carried the seeds of its own demise. The system anchors itself around the stable line of the horizon. Its predecessor was early navigation systems where sailors pointed at the horizon to determine their distance from a given point. However, the stability of the horizon relied on the stability of the navigator, a position that was especially difficult to obtain aboard a moving ship. Similarly, linear perspective establishes a position for the viewer that appears empirical but is, in fact, illusory. As Erwin Panofsky notes, linear perspective suggests the viewer is singular and immobile and that “the planar cross section of the visual pyramid can pass for an adequate reproduction of our optical image.”<sup>39</sup> Perspective ignores the curvature of the earth and the horizon line is depicted as flat and straight.<sup>40</sup> Despite its claim to reality, linear perspective is an abstraction. At the same time the vanishing point grants the viewer a body and a stable position, it also neatly constructs the world around her body, giving her control of that which is depicted.

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<sup>38</sup> Ibid.

<sup>39</sup>Erwin Panofsky. *Perspective as Symbolic Form*. Translated by Christopher S. Wood. (New York: Zone Books, 2012), 29

<sup>40</sup> Ibid.

The perspectival gaze led to emboldened confidence in mercantile capitalism and imperial expansion. Thus, the development of linear perspective was both a means of reinforcing Western hegemony as well as a practical mechanism for actualizing imperialist ambitions. It became both a hypothetical and actual means of constructing the world. Panofsky analyzes the science underlying the concept, arguing that the ancients were aware of curvatures in vision when constructing visual representations. Looking at Euclid's *Optics*, he argues not only did the ancients have an understanding of size relative to a given point, but also that they did not see space as homogenous and specific to a single observer.<sup>41</sup> Panofsky concludes that the ancients studied means of representing objects in varying distance according to geometric principles, but ultimately surmises that this method did not involve a cross section of a plane and a visual cone<sup>42</sup>. In his eyes, systems of linear perspective are not a signifier of scientific reality, nor are they the sole means of looking at the world. Rather, Panofsky claims that development of the vanishing point reflected the ideological and political consciousness of the time period from which it emerged.<sup>43</sup>

The orthogonals of linear perspective converge on the eye of the viewer, constructing the represented landscape around his or her viewpoint. Steyerl believes the creation of a dominant viewer allowed depicted objects and figures to be more easily subjugated. This supposedly mathematical worldview encouraged the preeminence of Western man and the mastery of those deemed as other. Perhaps refuge from hegemonic ways of seeing could be found in the 20<sup>th</sup> century technologies. Cinema, cubism and aerial photography all seemed to negate the stability of the viewer and present different perspectives. Steyerl specifically cites montage as an

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<sup>41</sup> Panofsky, *Perspective As a Symbolic Form*, 34

<sup>42</sup> Ibid

<sup>43</sup> Panofsky, *Perspective As Symbolic Form*, 36



example, a cinematic technique that disorients the viewer and reimagines linear time and space.<sup>44</sup> Both aviation and space exploration allowed for new perspectives, particularly by providing new vertiginous ways of seeing. The bird's eye view developed as society used new technologies to stimulate its fascination with the sky and beyond. Depictions of the Earth as seen from above were created by drones and satellites as well as in Hollywood where 3D computer-generated animations allowed filmmakers to craft images of the vertiginous abyss. In these images, the viewer is thrown off the axis, losing his perspectival stability. Instead of residing on a flat, planar surface, the viewer appears suspended in mid-air. In Steyerl's eyes, however, this change from linear to vertical perspective did not bring with it liberation from tyrannical viewpoints. In fact, vertical perspective, "as militaristic as it is pornographic" only abetted hegemonic systems by providing them with a greater viewpoint by which to gaze upon their subjects.<sup>45</sup> Instruments that photographed the Earth from above enabled the expansion of military surveillance and drone warfare. Steyerl claims vertical perspective did not multiply or negate the position of the spectator, but rather placed the viewer above ground, granting her a wider overview and removal from the subjugated below. Like linear perspective, vertical perspective suggests a stable observer and horizon, only now these two facets of representation seem to levitate over the terrestrial and float in mid-air.

Similar to her interpretation of linear perspective, Steyerl considers vertical perspective to be a metaphor for class relations in contemporary society wherein those with power position themselves floating atop the social hierarchy, looking down upon the powerless. However, Steyerl finds this position to be precarious. Vertical perspective seems to suggest a position of stability while it is in reality airborne and unsteady. It is a system whose certitude could implode

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<sup>44</sup> Steyerl, "In Free Fall"

<sup>45</sup> Steyerl, "In Free Fall"

and nose-dive into the Earth at any moment. Aerial images are thus constructed around a mirage of orientation. Perhaps this condition results from there no longer being solitary positions or distinct horizons to speak of. Steyerl references a number of contemporary philosophers who believe society has lost the stable ground on which it once stood. This supposition posits that without orientation, there is no basis for “metaphysical claims or foundational political myths.”<sup>46</sup> Instead, contemporary ways of seeing, epitomized through systems like vertical perspective, offer only an incomplete, illusory attempt at grounding. The writer believes these mechanisms only confuse us into believing there is a place for a stable hegemonic observer to gaze upon the navigable, neatly displayed world before them. Instead, society accelerates into a state of free fall, plunging into an unknowable abyss as the shrapnel of horizons and vanishing points speed past.

In her essay, Steyerl cites a computer-generated model of the Earth, wherein the planet is orbited by a confluence of colored dots that craft a halo around its circumference (Figure 12). These dots represent the amount of space debris, from discarded satellites or defunct spacecraft, which currently inhabit the planet’s orbit. This image serves as an interesting metaphor for the author’s theory of the relationship between objects and people in a state of free fall. These are devices that grasp at a position of stability; they search for knowledge of our planet and the puzzling universe it occupies or attempt to photograph the Earth from previously unseen angles. The irony lies in the reality that instead of granting a sense of understanding or orientation, they pile up into an increasingly jumbled mess of shattered aluminum and fragmented titanium. When in a state of free fall, Steyerl believes that “people may sense themselves as being things, while things may sense that they are people.”<sup>47</sup> Technological systems such as satellites are intended to

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<sup>46</sup> Steyerl, “In Free Fall”

<sup>47</sup> Ibid.

extend our own human capacities of sight, sound and understanding. But Steyerl suggests the result is often the opposite effect. In her eyes we lose our even footing and fall into an abyss of confusion while the objects we sent there to try and maintain our stability float past us. Still, society continues to produce data as well as novel, increasingly complex devices to sift through this data. Perhaps, then, free fall is symptomatic of capitalist abundance. Steyerl believes capitalism is not a singular, indestructible blockade, but rather a litany of pliable, constantly traversing fragments of ideologies, objects and materials. Though this system is looming and unknowable, perhaps approaching it through a sublime rhetoric yields the demise of its authoritarian overseers and the possibility for new, liberated conditions of existence.

Steyerl displays the hyperactive, disorienting effects of digital media production and the alternative visualities they employ in the film *In Free Fall*. Borrowing from Jacques Lacan, Frederic Jameson considers schizophrenia to be “the experience of isolated, disconnected, discontinuous material signifiers which fail to link up into a coherent sequence.”<sup>48</sup> This condition brings about the loss of personal identity and the singular sense of the “I.” The schizophrenic lacks a broad, cohesive sense of language, leading to a breakdown between the signified and the signifier and an inability to construct an ego for oneself. Jameson posits that the technologies of electronic communication found in the 20th century bring with them the power to barrage the viewer’s senses with information, sensation and imagery and contribute to this loss of individuation. One need only to look to the aesthetics of early 1980s MTV, wherein musical forms, pop culture montages, and co-options of commercial media were transplanted onto one another in such a way that the individual significance and imbedded meaning of each entity was lost in a celebration of its empty, formal properties. Jameson worries that the abject image, as he

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<sup>48</sup> Frederic Jameson, “Postmodernism, or, The Cultural Logic of Late Capitalism.” From *The Anti-Aesthetic: Essays on Postmodern Culture*. Edited by Hal Foster, (New York: New Press, 1998), 137

refers to it, lacks the density or significance necessary to invoke questions regarding the self or one's place in the world.<sup>49</sup> In his eyes, postmodernism and the age of electronic media and multinational capitalism brings with it a total erasure of the individual from the detached environment they exist in. He worries this process leads to a de-radicalization of art when compared to its predecessor: modernism. Whereas the former was characterized by a resistance and reinterpretation of capitalist forms, wherein any appropriation of those forms was done for purposes of parody or irony, postmodernism seems to erode the distinction between high and low, accepting these consumerist elements in wholehearted embrace. While modernism offered a critique of bourgeois society, postmodernism “replicates or reproduces—reinforces— the logic of consumer capitalism.”<sup>50</sup> The individual, free-thinking individual becomes consumed in an overwhelming abyss of glossy, processed, stimulating, plastic wrapped signifiers, no longer able distinguish themselves from the hegemonic, oppressive systems these forms emerge from.

Gilles Deleuze and Felix Guattari's *Capitalism and Schizophrenia* was written over the course of eight years from 1972 to 1980. Like Jameson, the French philosopher and psychiatrist, respectively, find semblance between the schizophrenic and the hyperactive, globalized energy of capitalist production. However, they resist the Freudian critique of the schizophrenic as in need of an individualized ego to process the phenomena of the world. The writers point out that Freud, “doesn't like schizophrenics... They mistake words for things, he says. They are apathetic, narcissistic, cut off from reality, incapable of achieving transference.”<sup>51</sup> Deleuze and Guattari believe the schizophrenic “escapes coding, scrambles the codes, and flees in all

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<sup>49</sup> Jameson, *Postmodernism*, 139

<sup>50</sup> Jameson, *Postmodernism*, 144

<sup>51</sup> Gilles Deleuze and Felix Guattari. *Anti-Oedipus: Capitalism and Schizophrenia*. (Minneapolis: University of Minnesota Press, 1983), 23

directions,” resisting Freud’s Oedipalization and becoming orphans, atheists, and nomads.<sup>52</sup> In their eyes, the schizophrenic is a product of capitalism, yet does not comprise its identity. Instead, the schizophrenic’s ability to escape the singular “I” of Freud’s ego construction could potentially bring about capitalism’s death. The system encourages the rapid decoding and deterritorializing of society, followed by an extraneous attempt to connect those disconnected sites of capital production into flows that amass more capital.<sup>53</sup>

The airplane in *In Free Fall* becomes this sort of decoded and deterritorialized object; its purpose and form constantly shift as it becomes liquidated and transformed into different matter along distant geographic points. These processes often occur simultaneously despite their distance. Steyerl exemplifies this concept by placing the portable DVD player, depicting melted aluminum being pressed into discs, next to a dilapidated plane. Yet, Deleuze and Guattari believe this process of regeneration is unstable. Eventually the fragmented nature of multinational systems sharing information along networks will get ahead of themselves. These flows will overload and struggle to recoup the territory and centrality they did away with. The schizophrenic subject they created, though, will continue to resist any homogenization under a singular body politic. This will cause capitalist forces lose control of the subject they overload and overstimulate. Thus, perhaps if the extremities of capitalism bring about its own demise, then an embrace and even an acceleration of capitalism’s forms can bring about its dissolution. Such is the task of postmodernists, who Jameson sees as lacking the distance from capitalist

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<sup>52</sup> Deleuze and Guattari. *Anti-Oedipus*. Pg. 245

<sup>53</sup> Jonah Peretti, "Capitalism and Schizophrenia: Contemporary Visual Culture and the Acceleration of Identity Formation/Dissolution" from *Negations* (Winter, 1996)

forms necessary to radicalize its totalizing hegemony and Deleuze and Guattari view as speeding up a process that is oppressive yet capable of yielding its own demise.

Deleuze and Guattari argue, then, that the means of erasure come through the means of embrace. If capitalism is a system inextricably tied to destruction, perhaps accelerating capitalist production will cause the system to self-implode. Steyerl seems to adopt Deleuze and Guattari's theories on the philosophical notion of accelerationism in *In Free Fall*. She employs elements of hyper-capitalist production, but not in such a way that critiques or casts a negative light on such excess. Her editing style and use of found footage resembles the jumbled montages of early MTV broadcasts. These elements are shown to be unstable as the video's stockpile of commercial media is increased with the introduction of more television clips, songs, and interviews. The film is constantly in flux from the rapid speed by which old forms are pushed out and replaced by new forms. At times, the viewer feels as if she is flipping through channels, viewing a disparate amalgamation of different commercials, films and educational programs creating a cacophony of divergent sounds, moods and forms. In this way, Steyerl does not directly oppose capitalism; rather, she articulates how precarious a system of overly abundant production can be.

In many ways, a green screen can be viewed as a symbol of this sort of hyper-commercial, blockbuster production. A filmmaker can use the device to cheaply and efficiently transport his film to an infinite number of settings, locales and universes. Just as the airplane in *In Free Fall* does, the green screen allows for a litany of meanings and uses. It is an effect subject to and created for Hollywood and capitalism's desire for change. Thus, Steyerl's use of the green screen is fitting for *In Free Fall*. In line with Deleuze and Guattari's theory of accelerationism, Steyerl does not contradict the effect. Rather, it is as if she over-uses the effect.

She employs it for its intended purpose, to transport the setting of her film, but uses it in such abundance that its function is compromised. The expert, played by actor Imri Khan, is at first placed before a green screen depicting footage of Mike's scrapyard as he recites the biography of 4X-JYI (Figure 13). The validity of the information he recites is seemingly substantiated by footage of what could theoretically be the plane he is discussing in its dismantled form. However, footage on the green screen begins to vary, shifting to action movie clips of planes exploding, wind turbines, and a computer generated graphic of a DVD rotating around the Earth. The more the green screen is employed and the more the setting is transported, the more the meaning of what Khan is saying is altered, which ultimately leads to a collapse of his "expert" credibility.

Of the video's use of green screen, Steyerl says, "The green screen has the effect of producing cubist perspective. Perspectives which do not exactly align, that are not subject to the tyranny of the central perspective."<sup>54</sup> Lines of sight characterized by multiple, collapsing viewpoints overwhelm and confuse the viewer. At times Steyerl's subject sits before an image of Mike's lot achieved through a green screen, holding the portable DVD player in his hand which itself shows a green screen image. Screens are everywhere, piling on top of one another and disrupting whatever they may attempt to convey. They negate the centrality of the beholder and seem to result in an anti-gravitational pull into the abyss. It is a celestial expanse reminiscent of Turner's landscapes, but, like the work of the British painter, they collapse the orientation of the horizon and plunge the viewer into a state of uncertainty. These viewpoints offer the viewer no even ground for a viewer to plant his feet upon. They do not posit any truisms. It becomes difficult for the viewer to gauge what is fact and fiction. Hegemonic institutions may feign

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<sup>54</sup> Picturethis20. "Interview with Hito Steyerl."

stability through their devices, but merely mask the fact that the unrivaled convictions they once upheld have slowly dissipated into the ether. Yet in this way, these forms of seeing and anti-authoritarian headspaces demand the participation of the viewer. By not providing the observer with a stable ground from which to observe the objective world, the viewer and the object enter into a state of groundlessness, floating past one another as multiple viewpoints are projected. New ways of seeing are offered, but without orientation, none offer objective verisimilitude. The subjective experience of the viewer, the viewer's own cultural production, and the viewer's management of objects and information into patterns creates the opportunity for a plurality of meanings.

The German philosopher Martin Heidegger critiqued the school of metaphysics for erasing "being" from questions of "the being." That is, metaphysicians such as Kant investigated whether entities existed in the universe, but in doing so, posited that the state of existence was an unequivocal reality. For Heidegger, the question is not "Does God exist?" but rather, "What does it mean to exist?" In his eyes, any ontological thought that does not question the meaning of being, or "Dasein" as he terms it, as its starting point is blind to its own aims. Edmund Husserl, a teacher of Heidegger's, approached existence phenomenologically, striving to analyze the world and its phenomena independent of presuppositions.<sup>55</sup> However, Heidegger took issue with this approach, theorizing that such attempts to negate pre-existing premises suppose that the thinking subject implicit in this act of negating exists in the first place and that existence itself is an absolute. Thus, this supposedly decontextualized worldview is marred by the presupposition of being. Heidegger believed not that human essence is found in our ability to think and perceive, but rather in our very state of being in the world. In his words: "Taking up relationships towards

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<sup>55</sup> Michael Wheeler. "Martin Heidegger", *The Stanford Encyclopedia of Philosophy*. Ed. Edward N. Zalta (Winter 2016 Edition)



the world is possible only because Dasein, as Being-in-the-world, is as it is. This state of Being does not arise just because some entity is present-at-hand outside of Dasein and meets up with it.”<sup>56</sup> Heidegger’s Dasein is a being whose very being is a consideration of their existence. He believes the Dasein has an overarching sense of presence within the world and of being one’s self. In this way, there is no such thing as a completely decontextualized Dasein, as the Dasein is always thrown into the world. Equipped with an awareness and understanding of their own state of being, Heidegger calls Dasein the authentic self.<sup>57</sup> This entity asserts ownership over its own being whereas the inauthentic self is lost to the anxieties of others. Importantly, Heidegger does not posit a return to the primordial, self-sufficient man, but rather, encourages a reconsideration of human networks centered on fixity within one’s own being.<sup>58</sup> If the Dasein is authentic, that is, if they do not possess ownership over their own existence, their being is wasted.

Heidegger’s theories and the language he employs escape simple summation and are difficult to apply to visual culture. Yet, his views on phenomenology and the relationship between subject and object offer an interesting re-consideration of Steyerl’s views on the hegemony of linear perspective. As articulated by Panofsky, Heidegger believes linear perspective fixes the represented object around a central viewer: “to represent means to bring what is present at hand before oneself as something standing over against, to relate it to oneself, to the one representing it, and to force it back into this relationship to oneself as the normative realm.”<sup>59</sup> Objects are not considered in themselves, but instead studied and valued for their relation to the viewer. Heidegger critiques these forms of representation for what he sees as their

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<sup>56</sup> Martin Heidegger. *Being and Time*. (New York: Harper Perennial/Modern Thought, 2008), 85

<sup>57</sup> Ibid.

<sup>58</sup> Wheeler, “Martin Heidegger”

<sup>59</sup> Martin Heidegger. *The Question concerning Technology, and Other Essays*. Translated by John Macquarrie and Edward Robinson. (New York: Harper Torchbooks, 2004), 131

insistence that human beings objectify the entities of the universe under the auspices of their own power. Conversely, Greek man was not fixated on the object but rather his own being within the universe. Humans were not seen as detached observers, but rather in existence with other beings. In that he opened himself to the world, the Greek man was vulnerable, aware of his own being and living in a world comprised of other beings.<sup>60</sup>

Perhaps this Heideggerian insistence on being and openness resembles Steyerl's reverence for free fall. After all, Heidegger is critical of the same masterful subject-object dichotomy as Steyerl. Yet Heidegger views the Dasein as an answer to the problem of what he refers to as thrownness. In his eyes, humans enter into the world, thrown into a predisposed set of seemingly immovable historical, cultural and social conditions.<sup>61</sup> Humans may grasp for mastery of these entities, but if they are too concerned with fixing the phenomena of the world into a subject-object dichotomy, they will lose sight of their own being. Heidegger considers this loss to be a form of groundlessness, in that it lacks the fixity to be found in a contemplation and awareness of what it means to exist. In order for one to begin understanding entities in the world, they need to understand their own presence and what it means to be present. Though Steyerl and Heidegger advocate for an ontological approach that de-centers the viewer from the represented world, the latter believes philosophical inquiries can only take place once the enquirer is firmly aware of their position in the universe and what occupying that position entails.

In this way, Heidegger dismisses the mechanisms of control inherent in representational mechanisms such linear perspective but advocates for humans to grasp a firm control of their own existence. Steyerl's work cannot be easily chalked up to a one-to-one rebuttal of Heideggerian ideology. Yet, *In Free Fall* diverges from the philosopher by not insisting one

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<sup>60</sup> Ibid.

<sup>61</sup> Wheeler. "Martin Heidegger"

must be in control of her own being. Instead, Steyerl encourages a radical leap into a world of uncertainties. The artist does not advocate for a hegemonic relationship wherein the object is centered on the masterful viewer. She does not suggest that one should view being as an insular of-the-moment phenomenon that comes into contact with other phenomena also in existence. Rather, she sees value in a multitude of perspectives, in releasing one's control over one's own being and place in the world. The sublime, as it's found in Steyerl's film *In Free Fall*, contrasts Heideggerian ontology in its embrace of fear, anxiety and the unknown.

In her essay, *In Free Fall*, Steyerl often tends towards absolutes. At times her voice is clear and unwavering, presenting even her most equivocal philosophical assumptions as declarative statements. For example, when discussing the introduction of 20th century visualities, she claims: "Time and space are reimagined through quantum physics and the theory of relativity, while perception is reorganized by warfare, advertisement, and the conveyor belt."<sup>62</sup> To claim a single mechanism had a profound effect on the conditions of industrialized society is one thing, but to specifically declare the conveyor belt altered human's phenomenological processes is a presumptive and, as the essay progresses, a largely unsubstantiated assertion. However, Steyerl's claims are less valuable when they are taken as truisms. She does not intend for her statements to be definitive, but rather, the firm vividness of her writing encourages a new mode of thinking about the world and one's present conditions. In this way, Steyerl grapples with the imagination of her reader, aspiring to ignite a new form of consciousness rather than present them with unequivocal statements to be readily ingested. In *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful*, Burke writes of imagination: "The mind of man possesses a sort of creative power on its own; either in representing at pleasure the images

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<sup>62</sup> Steyerl. "In Free Fall."

of things in the order and manner in which they were received by the senses, or in combining those images in a new manner, and according to a different order.”<sup>63</sup> The latter is largely the process of Steyerl’s writing: she does not present veracious information through clear, ordered mechanisms, but rather offers claims that are hard-to-believe and grandiose as a means of encouraging a new mode of perception and contemplation in her reader.

Ultimately, Steyerl posits that veracity is a difficult thing to come by these days, and her equivocal statements reflect this present state of uncertainty. Taking her writing at face value negates the central argument of her thesis: that our contemporary condition is groundless, and the way to remedy this ambiguity is not through ordered, traditional subject-object mechanisms such as linear perspective, but rather through releasing oneself into multitudinous perspectives, unattached perception and the productive terror of the sublime.

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<sup>63</sup> Ibid.

## Chapter 2: The Landscape Looks Back

In 2016, “post-truth” was selected as Oxford Dictionary’s international word of the year. The term gained popularity after U.K. citizens voted to leave the European Union (Brexit) as well as after the 2016 U.S. Presidential Election. Many writers have claimed we are now living in a “post-truth era,” wherein objective truths are less valuable than one’s ability to appeal to a public’s emotions or personal beliefs.<sup>64</sup> Amy B. Wang, however, notes that the “post” prefix does not mean that we live in an era “after” truth, rather that truth is no longer relevant.

Similarly, Hal Foster notes the real is hard to come by these days, though he does not declare it is gone for good. In his essay, “Real Fictions,” Foster wonders how a socially conscious artist may grapple with truth’s current hiddenness. First, he claims dominant power structures have used contemporary technology, specifically satellite imaging and information mining, to control what truths are revealed to the public. Of course, this is not an entirely new development, as governments and corporations have long attempted to keep information hidden from the public eye. Yet, Foster believes the technology now under the auspices of public and private powers afford dominant regimes the increased ability to control what is revealed to its citizens, both on a macro and a micro level. He writes our current condition is ever more affected by “increased control by corporations and governments... of what is given to us as real in the first place... at all scales from the individual pixel to the vast agglomerations of big data.”<sup>65</sup>

Foster believes the task of the artist is not to try and find these increasingly difficult to come by

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<sup>64</sup> Amy B Wang. “‘Post-truth’ named 2016 word of the year by Oxford Dictionaries.” *The Washington Post*. November 16, 2016. [https://www.washingtonpost.com/news/the-fix/wp/2016/11/16/post-truth-named-2016-word-of-the-year-by-oxford-dictionaries/?utm\\_term=.e9c1610271eb](https://www.washingtonpost.com/news/the-fix/wp/2016/11/16/post-truth-named-2016-word-of-the-year-by-oxford-dictionaries/?utm_term=.e9c1610271eb).

<sup>65</sup> Hal Foster. “Real Fictions.” *Artforum*, (April 2017), 170.

truths. Instead, he references Eyal Weizman's notion of "forensic architecture," wherein both old and new media are used to assemble fragmented representations in disputed events to try and construct a narrative pertaining to "What happened?" In the "post-truth era," where the anti-real is often perpetuated, amassed and celebrated, perhaps the adoption and re-structuring of lies and fiction is the only way to return to the realm of the "real." As we saw with Steyerl's *In Free Fall*, this may mean the documentarian, the traditional purveyor of truth, must now utilize the once entirely antithetical realm of fiction.

Similarly, the artist Trevor Paglen is interested in uncovering the secrets of authoritarian powers. Yet his work does attempt to arrive at a sort of undeniable truth by way of clarity and realism. Interestingly, he employs the same mechanisms used by governments and corporate bodies to target citizens and customers such as drones, data systems and satellite technology. However, Paglen often leaves the representations derived from these technologies blurry and indistinct. By using these sophisticated mechanisms but not providing his viewer clear representations through them, he exemplifies how governments and corporations can similarly use these technologies to fragment and suppress the real.

For his ongoing series *The Other Night Sky*, Paglen seeks to track and photograph classified spacecraft in the Earth's orbit. The artist came across a group of "satellite observers" while researching a project on military secrecy. These amateur astronomers use little more than a stopwatch and binoculars to pinpoint the whereabouts of any of the 200 or so covert satellites the US government has sent into orbit. The artist collaborated with this group to create a software that used amateur datasets to track these spacecraft. Once located, the satellites are photographed

using a number of different cameras and what Paglen describes as “a computer-guided mechanical mount for accurate pointing and to compensate for the Earth’s rotation.”<sup>66</sup>

The function of each satellite and the government agency operating them varies. Some were used to gather meteorological information on Cuba and the former Soviet Union, while others are currently in use to detect and track infrared targets.<sup>67</sup> Some are “Military Meteorological Satellites” and others “Naval Ocean Surveillance Systems.” At first glance, many of the photographs are striking for their high-resolution beauty. A few capture crystal, picturesque landscapes: snowy blue mountains or sculptural rock formations off foggy coastlines. Most are less earthbound; the camera is pointed more vertiginously towards the heavens and captures a multitude of crowded and daunting, yet surprisingly tranquil, star formations in the night sky. The images are, for the most part, innocuous; they wouldn’t be out of place on NASA’s twitter feed or the wallpaper of the next MacBook. When the nature of Paglen’s project is revealed, however, the images take on a more sinister character.

For the most part, it is unclear Paglen’s photographs of satellites are of anything other than a starry expanse (Figure 14). The clearest indication of their subject matter is often the titles of the images themselves, which usually tell us the name of the satellite and perhaps a short description of how Paglen tracked it (*STSS-1 and Two Unidentified Spacecraft over Carson City* (*Space Tracking and Surveillance System; USA 205*, for example).

The photographs are usually taken from extreme distances. The satellites themselves are only represented through time-lapse processes tracking their movements. Paglen’s photograph *USA 193 near Alioth (Code Name Unknown)* from 2007 captures a dark night-sky, barely

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<sup>66</sup> Trevor Paglen. *Invisible: Covert Operations and Classified Landscapes*, (New York: Aperture, 2010), 85

<sup>67</sup> Ibid.

illuminated by the presence of a smattering of stars (Figure 15). Below the brightest and most prominent star, a thin, diagonal streak of light bisects the image. Paglen tells us this was a classified spacecraft sent into orbit by the National Reconnaissance Office. When communication was lost a year after the photograph was taken, the Pentagon shot the spacecraft down.<sup>68</sup> To capture its movements, Paglen uses a long exposure on his camera. The resulting streak of light is present in a number of the images. In photographs where the spacecraft is geostationary (meaning it moves at the same speed as the Earth's orbit), it is represented by a dot or short streak. Paglen writes this is because: "the spacecraft maintains its position over one point on the earth below."<sup>69</sup> In one such photo, *DMSP 5B/F4 from Pyramid Lake Indian Reservation* from 2009, an overcast day off the rocky coast of California is interrupted by a multitude of shooting streaks moving along the same diagonal path across the sky (Figure 16). The setting is beautiful. The spacecraft and stars jutting over the Earth are striking if not slightly disconcerting: the image could serve as the cover H.G. Wells' novel *War of the Worlds*. Although these spacecraft are not alien UFOs, the knowledge that they are classified government objects used for surveillance contributes to a similar sense of mystery.

The paths of these geostationary spacecraft are shortened and isolated in other photos such as *Keyhole/Improved Crystal near Scorpio* from 2007. Other photographs in the series retain the darkened color palette of the night sky or the muted tones of a foggy day. *Keyhole*, conversely, erupts into a fiery orange. Presumably taken at dusk, the smoky, sunset tinted clouds billow away from the Earth and give way to a brightly dotted night, still touched by the warm glow of the day below it. Nowhere in the series is the separation between the terrestrial and galactic more indistinct. Paglen's subject matter, the streak of light that is the satellite, is situated

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<sup>68</sup> Trevor Paglen, *Invisible*, 98

<sup>69</sup> Trevor Paglen, *Invisible*, 85



in the medium of the photo. This is the same point where the thick clouds in the foreground of the photograph thin out, revealing the night sky beneath. One can find the sublime in the photograph. The clouds allude to the human-inhabited world while also drawing references to the divine heavens, the force by which humans came into existence. The cosmos represent a more mysterious, infinite and extraterrestrial explanation of humanity, albeit one that is still connected with the ethereal.

Paglen's *Keyhole* resembles many of Turner's romantic English landscapes. The 1840 painting *Sun Setting over a Lake* is similarly engulfed in vibrant shades of sun-kissed orange and red. Both artists give their works specific titles that describe their subject matter, though both depictions are hazy and indistinct. Whereas Paglen alludes to satellites with small streaks of light in his photographs, Turner paints his sunset with only a slight circle of yellow and a murky blotch to suggest a horizon line beneath it. The subject is less the setting sun than the light and atmosphere engendered from the sunset. For this reason, Turner's later paintings have been noted for their influence on Impressionists working in the second half of the century (Figure 18).<sup>70</sup> Turner uses these shades of yellow to explore the gradations of light in *Sun Setting over a Lake* (Figure 3). Points of translucence and thick washes of paint suggest a seascape, though the water is engulfed in a bright yellow in a reflection of the sunset. The sun meets the water at the horizon. Though this convergence casts the sky below and sea beneath it in a pale yellow, the median of the painting, the area radiating out from the sun itself, is a fierce red. In this way, Turner elucidates how a sunset, at its moment of highest intensity right before it dips below the horizon, not only envelops its surroundings in light and color, but saturates primary colors into

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<sup>70</sup> Nicola Moorby, "The Making of a Modern Master: Painting with Open Eyes"; from *J.M.W. Turner*. Ed. by Ian Warrell. (Millbrook: Tate Publishing, 2007),57.

convergence with each other. It is as if the yellow cast from the sunlight is so vivid that it bursts into a fiery red.

As Anne K. Mellor points out, the blistering light of *Sun Setting over a Lake* celebrates the sun as God's apparatus to provide life to the universe and annihilate its visibility.<sup>71</sup> Paglen's *Keyhole* is presumably taken at a similar time of day as that depicted in *Sun Setting Over a Lake*. The photograph retains the bloody, sun-drenched color palette of Turner's painting. Furthermore, the two resemble each other in their striking, overwhelming sublimity. Whereas the painting is bisected by the horizon line separating sea from sky, Paglen's image bisects sky from sky. The red clouds of dusk emerging from the foreground of the frame are placed beneath a dark, starry night. Just as the blinding sun in Turner's painting obfuscates a clear sense of space, *Keyhole* presents a view of the billowing clouds that seems more proximate to the Earth than the infinite, celestial expanse it is coupled with. Turner and Paglen both blur physical parameters in their work. This parallels Burke's notion that the sublime landscape often disorients the viewer by depriving her of a physical relation to a represented space. Ultimately, the viewer is meant to stand in awe of a power that goes beyond the human, man-made or corporeal. In turn, she establishes a metaphysical relationship to her own psyche and, in the case of Turner's painting, greater faith in her divine creator.

Paglen has acknowledged the aesthetic similitude of his work to Turner's paintings. In *The Other Night Sky*, he photographs spacecraft from extremely long distances using high-powered cameras built from his own design. Despite the photographer's intention, to uncover and highlight secret apparatuses of government surveillance, from such a distance, the images

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<sup>71</sup> Anne Mellor, "Coleridge's 'This Lime-Tree Bower My Prison' and the Categories of English Landscape" from *Studies in Romanticism*, Vol. 18, No. 2 (Summer, 1979), (Boston: Boston University, 1979), pg. 265

become “softened and distorted by heat haze.” In this way, they resemble the profusion of sun-drenched yellow and red cloaking Turner’s *Sun Setting over a Lake*, as well as the dewy and golden London mist of *Rain, Steam and Speed*.<sup>72</sup> Like the artists he references, Paglen sees his practice in response to his present historical moment. He considers Abstract Expressionists and Dadaists as having admitted a failure of representation in response to 20th century atrocities.<sup>73</sup> Paglen considers Turner to have responded to human detachment from a pastoral heritage as a result of the Industrial Revolution as well as the 19th century’s “annihilation of space with time.”<sup>74</sup>

The age of information could be considered the present historical moment Paglen operates out of and responds to. With the sheer, insurmountable amount of data being produced at all moments, the government has become increasingly creative and ambitious in its attempts to organize, track, and gather intelligence on its citizens. Whistleblower Edward Snowden’s 2013 revelations uncovered the rigorous extent of intelligence agencies attempts to capture its citizen’s data. However, digital surveillance is a convoluted concept. The average user would likely struggle to grasp exactly how information is shared and accumulated, let alone how the government uses complex apparatuses to keep track of such information. Paglen suggests, though, that this is a benefit enjoyed by systems of power. Misapprehension is a way of generating a lack of transparency. The more difficult it is for a citizen to comprehend the technology being used, the more difficult it is for them to understand how their privacy is being violated by such technology.<sup>75</sup>

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<sup>72</sup> Julian Stallabrass. “Negative Dialectics in the Google Era: A Conversation with Trevor Paglen” from *October Magazine* (Fall 2006, No. 118), 7

<sup>73</sup> Ibid.

<sup>74</sup> Ibid

<sup>75</sup> Paglen. *Invisible*. 151

In an interview with Paglen, Julian Stallabrass refers to this quandary as part of the era of the “data sublime” wherein fear and awe are generated from a contemplation of vast and complex technological systems.<sup>76</sup> This wonderment resembles the technological sublime of Turner’s *Rain, Steam and Speed*. The painting depicts a frightening mechanism of industrial force, but at the same times considers how technology could be considered an extension of human’s God-given capabilities. However, it is difficult to find much to revere in *The Other Night Sky*’s subject matter. A blistering sunset can elicit fear and admiration in its viewer, but military satellites designed to capture photos of targets from hundreds of miles away or accumulate the technological data of citizens do little but elicit fear.

In an interview with Lauren Cornell, Paglen states that much of his recent practice is “about simply trying to understand what the highly-technical infrastructures described in the Snowden documents actually were.”<sup>77</sup> His intention is then to track and photograph classified spacecraft to elucidate the extent of governmental programs of surveillance. But perhaps this project would be better undertaken with a clearer, more precise description or visual reference of how these mechanisms work. Instead, Paglen’s photographs represent the satellites at the center of his study as small dashes or lose them entirely in the expanse of a starry night. The titles in the series contain the names of the satellites, though these labels give little insight into their function, coming across instead as befuddling techno jargon. Paglen’s accompanying text, exhibited on a title card on a gallery wall or printed alongside the images in a publication, is the only means by which the viewer understands the figures they are looking at are, indeed, spacecraft. Thus, the

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<sup>76</sup> Stallabrass. *Negative Dialectics*, 12

<sup>77</sup> Lauren Cornell. “In the Realm of Posthuman Documents: Lauren Cornell in Conversation with Trevor Paglen and Hito Steyerl” Ed. by Lauren Cornell and Tom Eccles. *Invisible Adversaries*. (Annandale-on-Hudson: Center for Curatorial Studies, Hessel Museum of Art, Bard College, 2016), 245

photographs resemble the sublime in their mysteriousness, but approach a subject matter that perhaps requires clarity rather than obfuscation. The images are vague in their depiction of threatening, state-run apparatuses. As explained earlier, this threat is abetted by their vagueness.

However, Paglen identifies this conflict in his work. In his essay, “Sources and Methods,”<sup>78</sup> he claims his practice is “interested in the limits of the visible world, in the nature of evidence and the fuzzy and contradictory relationship between vision, imaging, knowing, belief, and truth.”<sup>79</sup> In his eyes, contemporary imaging no longer achieves total transparency. In an era when the manipulation of photographs is more possible and prevalent than ever before, the veracity of images is less and less obtainable. He identifies cultural producers as existing in a dilemma: how to use visual information to produce images in an age where the validity of such images is ever more questionable? Paglen’s response is not to counter authoritarian mechanisms involving complex technological surveillance with clear and direct viewpoints. Rather, it is to give in to the obscurity they posit and investigate this reconnaissance through their own devices.

Again, the sublime is at play. Turner’s landscape paintings capture Burkean concepts in their depiction of raw, powerful scenes of nature. At first these scenes intimidate the viewer, then tap into a dormant part of the viewer’s mind wherein fear brings about an affected consciousness. By embracing fear, Turner hopes his viewer is able to develop a divergent understanding of her surroundings. Paglen’s *Other Night Sky* series, of course, does not suggest the viewer find beauty in government surveillance. Instead, his photographs capture daunting systems of power through difficult formal properties. He hopes this technique challenges his viewer, causing her to re-interpret the hegemonic systems she lives under.

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<sup>78</sup> Paglen, *Invisible*, 151

At the same time, perhaps these photographs give these complex systems a degree of accessibility. As Paglen points out, networked systems often seem to lack physicality. He writes in an essay on the website *The Intercept*: “Digital surveillance programs require concrete data centers; intelligence agencies are based in real buildings; surveillance systems ultimately consist of technologies, people, and the vast network of material resources that supports them.”<sup>80</sup> Terms such as “the net” and “the cloud” suggest etherealness, as if data dissipates into thin air and reappears on the device of the intended recipient.<sup>81</sup>

The government, however, is acutely aware of the actual concreteness of the web. Agencies frequently gain access to physical hardware, databases, and fiber optic cables to gather the networked information of citizens. In artist lectures, Paglen presents complex maps of underwater sea cables, once secretly held by the NSA before being leaked to the public.<sup>82</sup> In an ongoing series, Paglen works with teams of scuba divers to document these cables. The 2015 photograph, *Columbus III, NSA/GCHQ-Tapped Undersea Cable*, captures one such cable connecting the US to Portugal (Figure 19). The image depicts the ocean floor, captured through a haze of salt water and illuminated through a trace of sunlight beaming down from the surface. As the title suggests, the NSA gathered and monitored information transferred through the system. This photograph bears a resemblance to *The Other Night Sky* images such as *Keyhole 12-3/Improved Crystal* (Figure 17) both in the hazy obfuscation of the titular subject matter, and in the fact that the subject matter is a reconnaissance device, either created by the government or tapped into by it.

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<sup>80</sup> Trevor Paglen. "New Photos of the N.S.A. and Other Top Intelligence Agencies Revealed for the First Time." *The Intercept*. <https://theintercept.com/2014/02/10/new-photos-of-nsa-and-others/>.

<sup>81</sup> Cornell, "In the Realm of the Posthuman", 243

<sup>82</sup> Trevor Paglen. "Artist talk: Trevor Paglen." Lecture, Human Rights Project from Bard College, Annandale-on-Hudson, NY, September 20, 2016

Paglen grapples with ominous, cumbersome systems of state power in these series. But perhaps by emphasizing their physical existence and place in the world, he emphasizes how they can be documented, understood and resisted. Turner's sublime managed the insurmountable power of nature through painting, leading to an appreciation for that which initially causes trepidation. It can similarly be argued that Paglen documents menacing forces of surveillance, but through the act of photographing them, rejects mechanisms that enable their power, mystification, and intangibility. These images of the technological sublime, however daunting or insurmountable, are consumable. No matter how inconceivable or hidden they may be, these systems occupy physical space. What Paglen attempts to elucidate is how this space can be accessed.

However, this accessibility is inconspicuous. The systems in Paglen's photographs are captured indistinctly and they are not easily ingested or understood. In many ways, this difficulty is intentional. Paglen writes that cultural producers can no longer achieve complete transparency in their images, as viewers are increasingly conditioned to doubt the validity of visual representations.<sup>83</sup> Thus, in the artist's eyes, viewers would struggle to trust the "truths" told by a more direct image, regardless of its supposed transparency. Furthermore, the artist requires effort on the part of the viewer in such a way that parallels the effort required to exert one's political freedoms. As Paglen tells Stallabrass: "Photographing a secret military base means insisting on the right to do it, and enacting that right. Thus, we have a sort of political performance."<sup>84</sup>

The artist understands the privileges that come with American citizenship. The act of tracking and photographing a classified system of government surveillance could lead to persecution if it were executed under a more authoritarian regime. Paglen's work is not a

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<sup>83</sup> Stallabrass, *Negative Dialectics*, 6

<sup>84</sup> *Ibid.*

celebration of American civil liberties, rather he hopes to remind his viewer that those liberties exist and should be enacted, despite impediments instituted by the government. Though the American citizen has the right to do it, resisting the US government can be an arduous task. Using complex algorithms to track and document government satellites is certainly not easy, nor is scuba diving to the bottom of the ocean to locate fiber optic cables. However, this is the theory of the technological sublime Paglen grapples with; giving in to what appears daunting and overwhelming in order to unearth a new state of being previously unimaginable.

In this same way, Paglen's work can be viewed as a commentary on the position of the artist as activist. Paglen worked with filmmaker Laura Poitras for her profile of NSA whistleblower Edward Snowden *Citizenfour*. All three are engaged with questions of government secrecy; however, it is interesting to consider the points where Paglen's practice diverges. Poitras, as a documentarian, and Snowden, as a whistleblower, ground their work in the uncovering of facts. Snowden released official government documents revealing phone corporations had been providing the US government with their customer's records. Laura Poitras, along with journalist Glenn Greenwald, provided frameworks by which this information could be released to the public. Paglen, on the other hand, does not work with such concrete truth claims. His practice does not reveal the inner workings of the US government through evidence that is undeniably fact. Rather, he posits ambiguity, calling on the viewer to question both her beliefs and the claims the artist posits.

In a photograph such as *Keyhole/Advanced Ikon in Milky Way* (Figure 20) from 2007, for example, Paglen photographs the galactic expanse from an extreme distance. Compared to the other images in his *The Other Night Sky* series, the frame is overwhelmed and filled with an insurmountable myriad of stars and planetary figures. The photograph is unending and



inconceivable. Yet, the title of the image, along with the parenthetical subtext reading: “(Optical Reconnaissance Satellite; USA 161),” implores the viewer to believe that there is a tangible object at the center of the image. It is not only an object that is man-made, but one that is produced by the government for the purposes of gathering information on the very person who may be viewing the image.

There is nothing in the photograph to unequivocally suggest a mechanism of state suppression is depicted, rather the viewer is forced to believe or disbelieve Paglen’s claims. In this way, the viewer is forced to exercise her own imagination to conceive of a potential surveillance apparatus within the frame. The assertions made in these images could be considered an exemplar of the means by which the public reacts and places their confidence in the disclosure of government inequities, especially when those inequities involve increasingly less physical, clear-cut mechanisms. Citing a historical example, the 1972 Watergate scandal involved a break-in and subsequent arrest of its perpetrators. The so called “smoking gun” tape, released to the public in July of 1974, recorded President Nixon, just days after the break-in, colluding with his staff to obstruct the FBI’s investigation into the crime.<sup>85</sup> Thus, there was physical evidence of executive injustices provided to the people. There was little ambiguity in the disclosures of the President’s actions.

However, recent revelations of governmental abuse of power, such as those revealed in the Snowden leaks, involve abuses that are less tangible. Though Snowden, Poitras and Greenwald leaked official documents such as court orders, the programs of global surveillance at the center of such documents circulated around networks. Office headquarters were not

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<sup>85</sup> Wikipedia contributors, "Watergate scandal," *Wikipedia, The Free Encyclopedia*, [https://en.wikipedia.org/w/index.php?title=Watergate\\_scandal&oldid=778322066](https://en.wikipedia.org/w/index.php?title=Watergate_scandal&oldid=778322066)

penetrated and spied on, but rather data centers, fiber optic cables, and online information.

Lacking concreteness, these revelations require the citizen's faith and ability to imagine how such processes may work. Similarly, Paglen's photographs in *The Other Night Sky* series demand effort on the part of the viewer, presenting him with an ambiguous image that encourages belief in a hidden subtext. Paglen, as an artist, presents not only tangible material pointing to transgressions, but rather captures the process by which the citizen opposes hegemonic forces and exercises her civil liberties in light of such injustices. It is a process of not just knowing, but also of imagination and belief. The artist, as weaver of both truth and fiction, possesses the unique ability to explore such ambiguities and allows for the viewer to not only consume facts, but additionally re-consider the means by which facts and fabrications are constructed.

In this way, as well as through aesthetic considerations, Paglen investigates the condition of groundlessness in his work. The celestial expanses captured in *The Other Night Sky* draw the viewer into the unknown. We are not afforded a stable, terrestrial position from which to observe the night sky. There is no clear delineation indicating where the camera is situated. The lens seemingly floats above and past the Earth, residing somewhere amongst the stars and planets it captures. In some images, such as *Keyhole/Improved Crystal, near Scorpio* (Figure 17) the horizon is merely alluded to; in others, like *Keyhole/Advanced Ikon in Milky Way* (Figure 20), it is negated altogether. Gone is the measured architecture of linear perspective, with its precise, calculated orthogonals converging onto a single vanishing point. The limitations of time and space are obfuscated. The traditional dichotomy of subject and object is lost. Paglen tells us his photographs document governmental systems of reconnaissance, however indistinct, they may be. With the absence of a linear planar surface, though, the viewer and the satellite seemingly occupy the same unattached, floating space

In the essay *In Free Fall*, Steyerl discusses technologies of floating and vertiginous observation. She writes that aerial views, Google Earth software, and surveillance panoramas radicalize linear perspective, but do not overcome its structural hierarchy.<sup>86</sup> The hegemonic forces present in a traditional subject-object dichotomy are intensified to the point where this dichotomy becomes a relationship of the superior looking down onto the inferior. The scope and mobility of such gazes allow the observer to become increasingly more invasive and all-knowing, both “micro and macroscopic.”<sup>87</sup> The spacecraft at the center of Paglen’s research and photography fit into this description of 21st century technologies of aerial visibility. Paglen tells us USA 129, the satellite captured in *Keyhold/Improved Crystal near Scorpio* (Figure 17) is capable of peering down onto land and detecting a human face. Thus, human subjects on Earth unknowingly become inferior members of a visual hierarchy existing between the observer and the observed.

The illusory, hidden condition of these satellites allows them to sit safely atop a vertiginous axis, without being detected by those it captures. However, Paglen rejects the refuge of this constructed verticality. Steyerl believes that aerial technologies such as those photographed in *The Other Night Sky* suggest only an illusory, fragile system that attempts to stabilize the viewer in vertiginous perspective. In actuality, horizons are shattered and visualities are multiplied. There is no stable ground to stand on and “we no longer know whether we are objects or subjects as we spiral down in an imperceptible free fall.”<sup>88</sup> This condition is represented in Paglen’s series, as the camera seemingly floats around and amongst the celestial spacecraft and stars it captures. The photographer provides the viewer with images of objects

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<sup>86</sup> Steyerl, “In Free Fall”

<sup>87</sup> Ibid.

<sup>88</sup> Ibid.

that their producers attempt to make invisible; he photographs objects that are only intended to be voyeuristic devices of photography themselves. In this way, the seeker becomes sought and the traditional dichromatic hegemonies of vision disintegrate.

As shown in Steyerl's video *In Free Fall*, this condition of abandon can be daunting and uncomfortable. Paglen photographs the starry expanse, a setting that seems endless and unimaginable. The governmental devices that occupy these settings strive for stability, transplanting the structural mechanisms of linear perspective to extend from the Earth to the sky above. Yet, both Steyerl and Paglen articulate how precarious this position can be. Without the stability of the horizon or ground, the devices of vertiginous vision enter into a state of radical descent. No longer separated by the orthogonals of linear perspective, subject and object zoom past one another. The viewer becomes a participant in the production of content, meaning and modes of vision. This allows for a multiplicity of perspectives and subjective interpretations. By accepting this leap into the abyss, not only are state transgressions revealed, but also alternative means of considering civil liberties and governmental abuses, as well as new forms of resistance.

However, Paglen's ability to inspire his viewers to undertake their own forms of social action is questionable when considering the complexity of his artistic production. The average citizen does not have access to high-resolution digital cameras, expensive photography equipment, or the software used to calculate the whereabouts of covert satellites. They especially lack many of the unique abilities afforded to Paglen as an artist, specifically a successful one, well established in the art market and within art institutions. In 2014, Paglen rented a helicopter to take aerial photographs of three intelligence agencies: The National Security Agency (NSA), National Geospatial Intelligence Agency (NGA), and the National Reconnaissance Office (NRO), the last of which creates, launches and maintains the classified satellites photographed in

*The Other Night Sky* (Figure 21).<sup>89</sup> In an accompanying essay to the work, Paglen tells us that images of the NSA offices were previously limited to a single photograph taken in 1970 and provided by the agency. Paglen writes that his photographs of intelligence agency headquarters physicalize clandestine operations that often appear nonphysical, in turn expanding “the visual vocabulary we use to ‘see’ the U.S. intelligence community.”<sup>90</sup>

Despite these claims in his essay, Paglen fails to clearly divulge how these photos initially materialized. At first, it seems he approached the project with ease: renting a helicopter, flying to the NSA’s headquarters and photographing agencies that are seemingly unphotographable. Further along in his text, though, he tells us the CIA denied his repeated requests to aerially photograph their office building. Thus, a key component of Paglen’s practice is revealed: his collaboration with the same authoritarian forces at the center of his critique. If Paglen did not photograph the CIA headquarters because he was denied access, the government must have granted access to those agencies he did fly over and document. The willingness of three of these government agencies to allow the artist to photograph heavily guarded airspace over their office buildings seems to contradict Paglen’s characterization of these agencies as veiled, invasive, voyeuristic and despotic.

Though these discrepancies arise and, as seen through his essay on *The Intercept*, can at times be left unacknowledged by the photographer, Paglen uses the privileged position of the artist to highlight injustices and encourage a general public to adopt new means of resistance. The artist, unlike the whistleblower or defector, is not responsible for uncovering verisimilitude. The power of surveillance mechanisms is abetted by their elusiveness and mystery. Paglen is in a unique position to counter this threat by providing his viewer with a series of previously

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<sup>89</sup> Paglen. “New Photos of the N.S.A.”

<sup>90</sup> Ibid.

inaccessible viewpoints. He hopes that an understanding of the physicality of the objects and places outlined, regardless of whether such viewpoints can be recreated by the viewer, would ideally encourage the viewer to utilize their own devices in contesting invasive and encroaching regimes.

Conclusion: "...Analogous to Terror"

When they are suggested through a project like *The Other Night Sky*, the sorts of modes of resistance encouraged by Paglen come with their limitations. He is an artist with access to a wealth of knowledge and resources, allowing him to produce a laborious, complex and expensive series. It is perhaps difficult to imagine his viewer being motivated to create his own software to track the movements of satellites and then hiking to hillsides to photograph them. The systems of government surveillance Paglen documents are daunting and complex. Considering the vagueness of the photos and the distance they were taken, he seems to do little to make them less impenetrable. Whereas Burke viewed the sublime as capable of unearthing the most powerful emotions in humans, Kant considered the sublime state of mind to be "pleasure which is possible only by means of a displeasure." He viewed the sublime as boundless, with humans able to understand its totality yet lacking the cognitive capabilities to craft a representation of its magnitude in their imagination.<sup>91</sup> The sublime, then, illustrates the very limits of representation.<sup>92</sup> Burke believed the sublime to be a force so incomprehensible and endless, it instilled in us a negative awareness of the limitations of our own consciousness.

Paglen's work, however, seeks to find productive means of grappling with sublime and overwhelming forces, epitomizing Burke's definition of the sublime as "whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror."<sup>93</sup> He rejects the metaphysical omnipresence that characterizes networked systems of government intelligence, by taking photographs of the physical space they occupy. This act can be interpreted as a means of making tangible what Kant believes to be incomprehensible.

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<sup>91</sup> Kant, *Critique of Judgment*, 65

<sup>92</sup> Joao Ribas, and Maria Burmester. *Under the Clouds: From Paranoia to the Digital Sublime* (Serralves Museu de Arte Contemporanea, 2015). 10

<sup>93</sup> Burke, *Sublime*, 176

Still, the ambiguity and obscurity of these images remains, as well as the difficulty in producing them. But Paglen taps into what has always been a contingent feature of the sublime: imagination. The artist calls on his viewer to utilize her imagination and invest belief in the claims he posits. If the sublime is incapable of being fully visualized and understood, as contemporary forces of surveillance often are, then perhaps comprehension must give way to imagination. The task no longer becomes to understand, but to give way to the incomprehensible and terrifying in order to reconsider the relationship one can exist in with objects and entities outside of one's control.

This is largely the thesis of *In Free Fall*, wherein Steyerl admits the instability of a contemporary networked society. She highlights the disorientation manifested from novel ways of seeing, but emphasizes the transitive, generative effects of such imbalance. She suggests that if we no longer look at things through the hierarchical, subject-object relationship of linear perspective, then new, liberated, and congruous modes of experiencing the world's phenomena emerge.

Undoubtedly contradictions arise in much of Paglen's work. In *The Other Night Sky*, as well as his undersea-cable series and documentation of intelligence agencies' headquarters, the artist attempts to, on the one hand, materialize oppressive systems that seems to lack physicality, while on the other leave them enmeshed in a degree of obfuscation. However, this practice harks back to much of Steyerl's theory. She believes that in that in contemporary society, the circulation of images and matter, as well as an increase in detached, multitudinous perspectives, means that traditional modes of perception and understanding are no longer possible. Perhaps, then, Paglen's images depicting governmental secrets and technologies of power are not easily comprehended because the ability to arrive at such comprehension is increasingly arduous.



Instead, Paglen suggests that his viewer must grapple with the sublime forces of surveillance by leaving aside the terrestrial certainty of perception.

Returning to Steyerl's video *In Free Fall*, as explained in Chapter 1, it is difficult to take many of the artist's bold claims at face value. Her reader/viewer may be motivated towards a utopian vision of the world wherein objects and subjects whirl past, float around and crash into one another. Ideally this process disorients and liberates the oppressed from the oppressor. However, this world may sound unattainable and, at times, too good to be true. When considering the very real consequences of a financial crises, it is difficult to suggest to those experiencing such loss to merely give in to the process in order to reemerge with a radicalized ideology, let alone exacerbate the process further in hopes this burdensome system may crumble in upon itself. However, we can take one of *In Free Fall's* subjects, Kevin, to be an exemplar of the more practical applications of both Steyerl and Paglen's thinking. Kevin is not the hero of the story. Rather, he is a person who the video finds in the midst of an extremely trying time. A financial crisis, the loss of one's home and the inability for one to pursue their chosen profession are difficulties that come without an easy solution. Steyerl and Paglen suggest that increasingly, contentious conditions and realities lack clear-cut answers. When data is infinitely shared, downloaded, streamed, and torrented, meaning and certitude seem to be increasingly hard to get a hold of.

Yet, these artists suggest that there is a value to letting go of a system that provides singular answers to complex questions. Steyerl cites linear perspective as a system that attempted to order the heterogeneous and multifarious into an ill-fitting, abstracted worldview. Paglen looks at covert surveillance apparatuses that force unknowing citizens into an unwanted superior-inferior dichotomy. Inequities of contemporary society often exist in this sort of relationship. It is

that of the other and the othered, the ignorant creating any enemy from he whom he doesn't understand, the tyrant looking down from his wall. Negating these sort of one-to-one relationships is a daunting task. Yet, perhaps by embracing multitudinous perspectives and radical ways of seeing the world, we can begin to grapple with a world of unknown-knowns, alternative facts, and post-truths.

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Image List

Figure 1: Joseph Mallord William Turner. *The Slave Ship*. 1844. Museum of Fine Arts, Boston, Courtesy of ArtStor



Figure 2: Perspective diagram, from Giacomo Barozzi da Vignola, *Le due regole della prospettiva pratica*, Rome, 1583. Courtesy of Samuel Y. Edgerton. *The Mirror, the Window, and the Telescope: How Renaissance Linear Perspective Changed Our Vision of the Universe*. Ithaca, NY: Cornell UP, 2009. Pg. xiii.

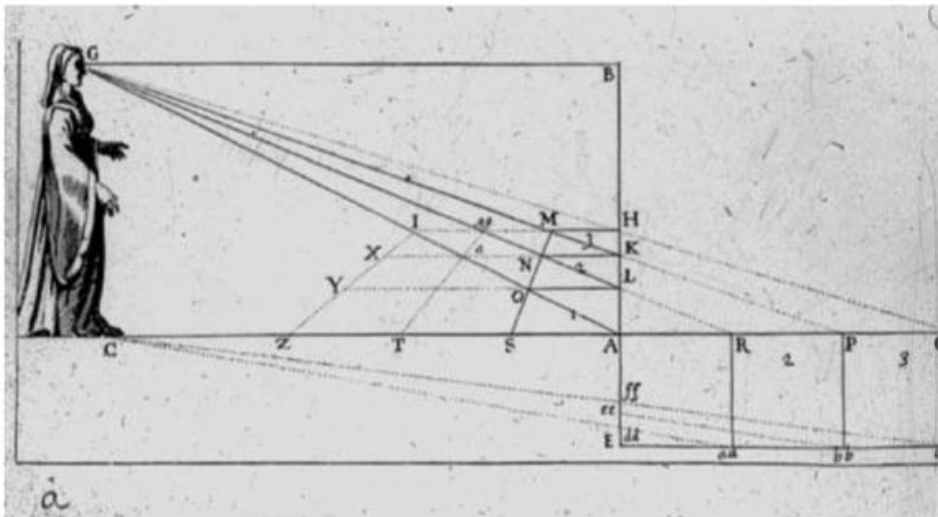


Figure 3: Joseph Mallord William Turner. *Sun Setting Over a Lake*. c. 1840. Tate Gallery, London. Image courtesy ArtStor



Figure 4: Joseph Mallord William Turner. *Rain, Steam & Speed*. 1844, National Gallery, London, Image courtesy ArtStor.



Figure 5: Hito Steyerl, *In Free Fall*, 2010, installation view from *Hito Steyerl*, Artists Space, 2015. Image courtesy the artist; Andrew Kreps, New York; and Wilfried Lentz, Rotterdam.



Figure 6: Hito Steyerl, *Factory of the Sun*, 2015, installation view from *Hito Steyerl: Factory of the Sun*, MOCA Grand Avenue, 2015. Image courtesy the artist, Venice Biennale.

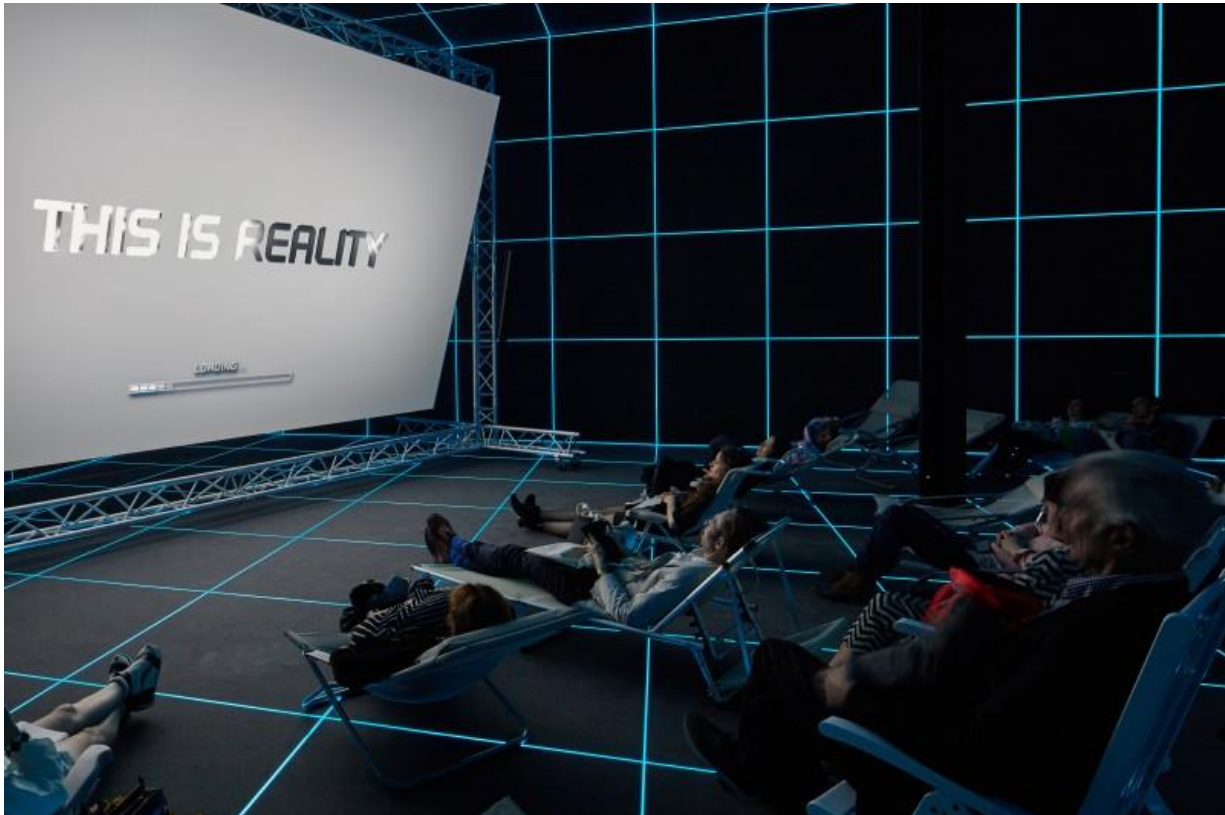


Figure 7: Hito Steyerl. *Factory of the Sun*, 2015. Single channel HD video, environment. Image courtesy the artist, Andrew Kreps Gallery, New York, and Kunsthall Charlottenborg.



Figure 8: Steyerl. *In Free Fall*. Image courtesy the artist, Vimeo.





Figure 9: Steyerl. *In Free Fall*. Image courtesy the artist, Vimeo.



Figure 10: Steyerl. *In Free Fall*. Image courtesy the artist, Vimeo.



Figure 11: Steyerl. *In Free Fall*. Image courtesy the artist, Vimeo.



Figure 12: “Space debris or junk (such as rocket stages, defunct satellites, and explosion and collision fragments) orbiting the earth. Image courtesy Hito Steyerl and Frankfurter Allgemeine Zeitung.



Figure 13: Steyerl. *In Free Fall*. Image courtesy the artist, Vimeo.



In the 70s this batch of Boeing 707  
was sold by TWA to Israel.

Figure 14: Trevor Paglen, *MILSTAR 3 in Sagittarius (Inactive Communication and Targeting Satellite; USA 143)*, 2008. Image courtesy ArtStor.

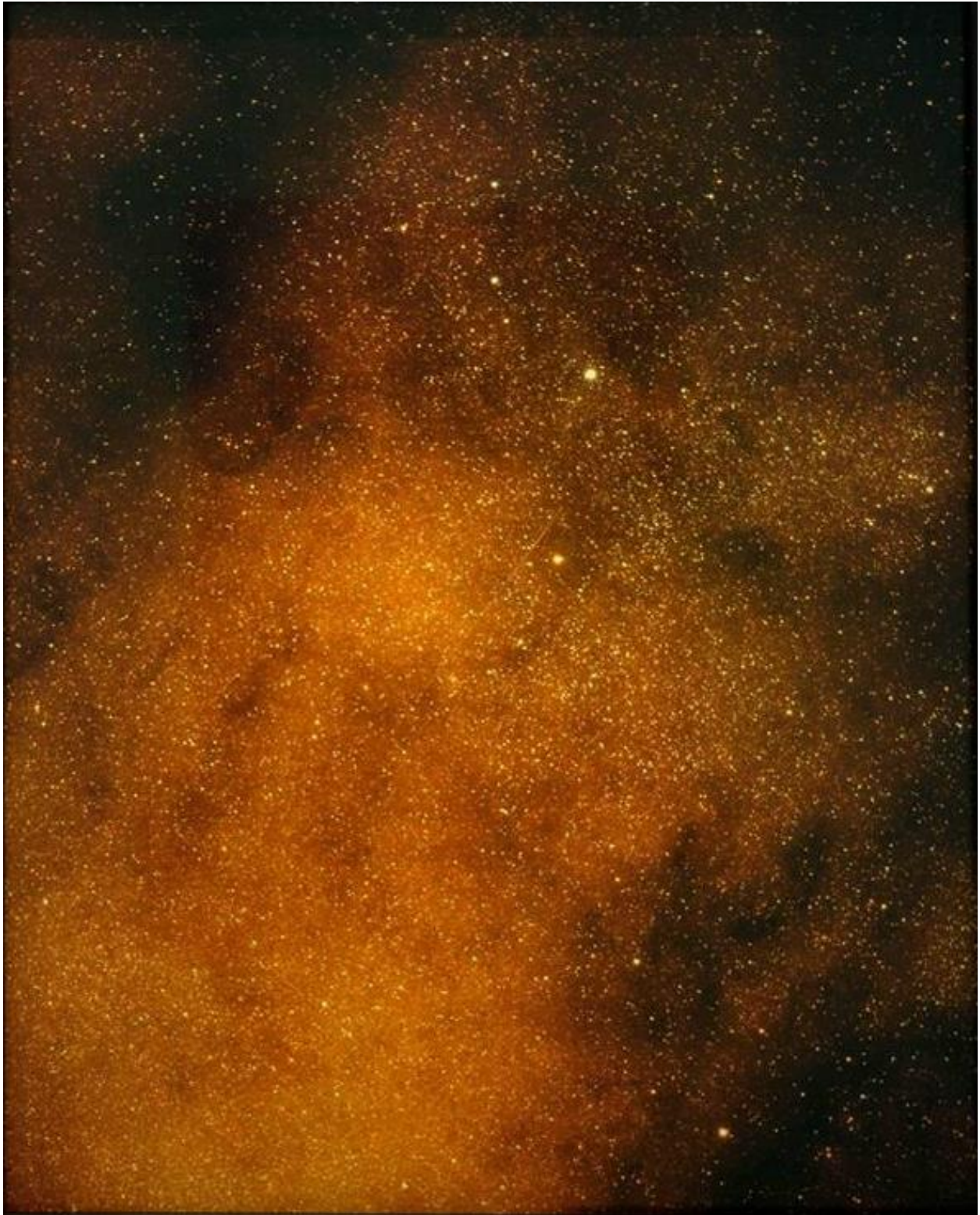


Figure 15: Trevor Paglen. *USA 193 Near Alioth (Code Name Unknown)*. 2007, Image courtesy Altman Siegel.



Figure 16: Trevor Paglen, *DMSP 5B/F4 from Pyramid Lake Indian Reservation*, 2009, Image courtesy the artist, Altman Siegel.



Figure 17: Trevor Paglen. as *Keyhole/Improved Crystal near Scorpio*. 2007, Image courtesy ArtStor.

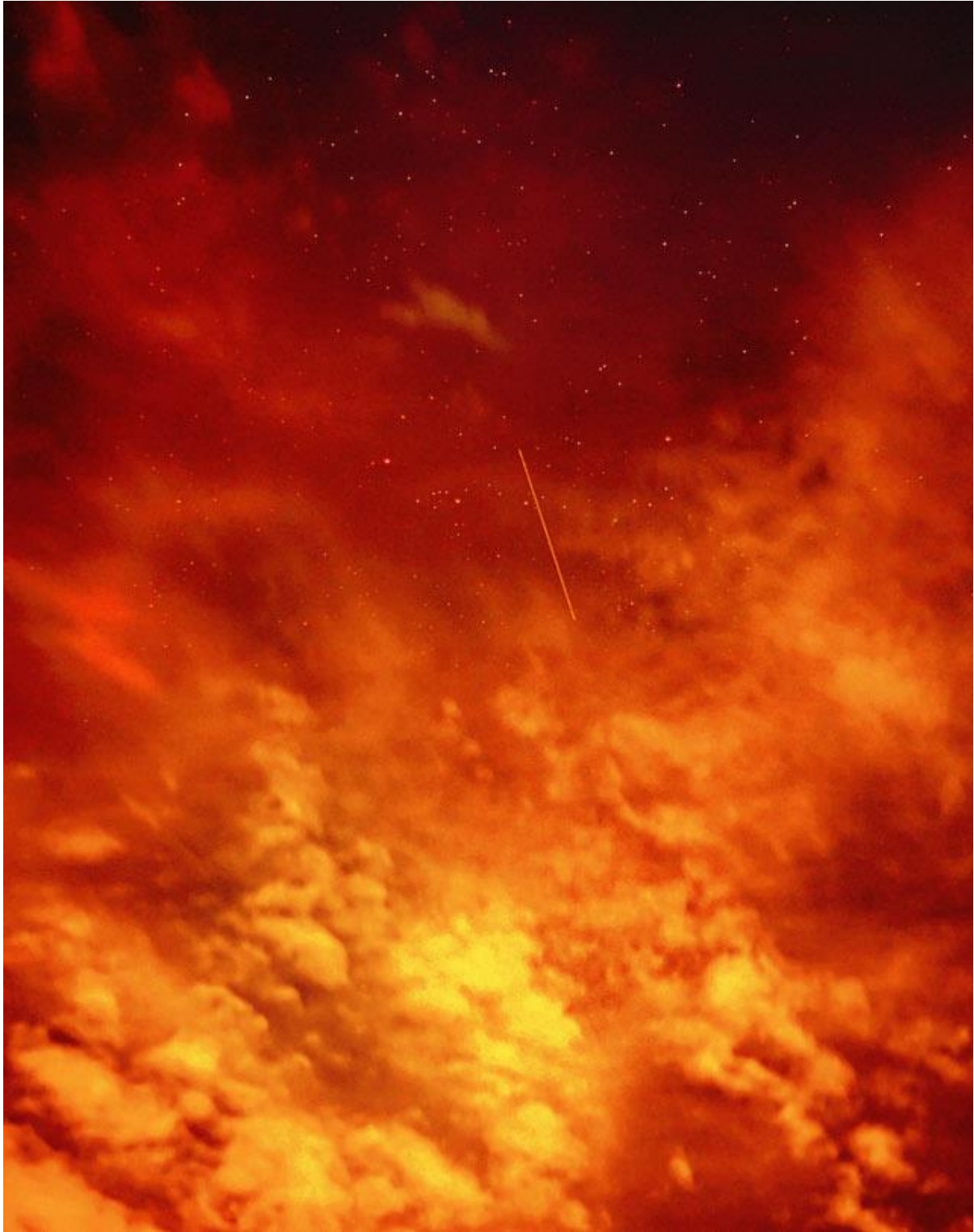


Figure 18: Claude Monet. *Impression, Soleil Llevant*, 1877. Musée Marmottan Monet, Paris. Image courtesy Wikimedia Commons.



Figure 19: Trevor Paglen, *Columbus III, NSA/GCHQ-Tapped Undersea Cable*, 2015, Image courtesy the artist, Metro Pictures, and Vice Media.

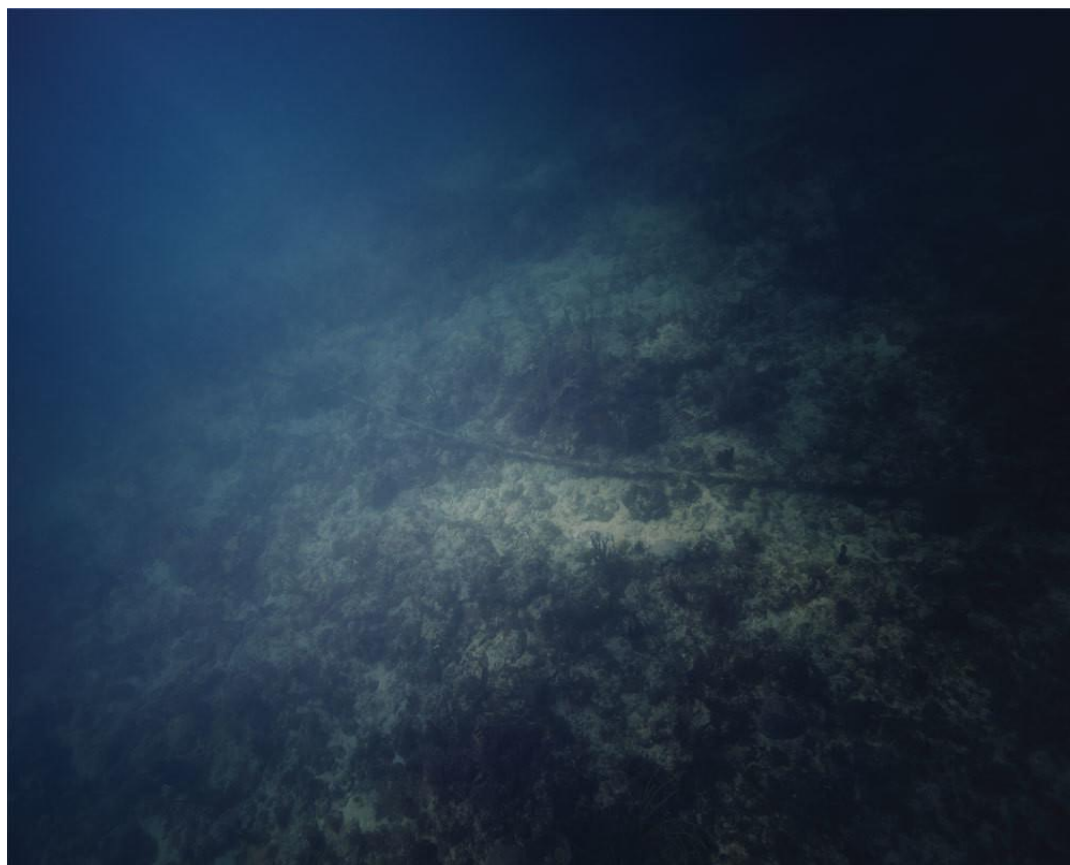




Figure 20: Trevor Paglen, *Keyhole/Advanced Ikon in Milky Way*, 2007. Image courtesy the artist, University of California, Berkley Art Museum, and Bellwether Gallery.



Figure 21: Trevor Paglen, *National Security Agency, Fort Meade, Maryland*, 2014. Image courtesy the artist and First Look Media.

