

ANNA PARLANE

***The tip of the iceberg: Michael Stevenson's A Life of Crudity, Vulgarity, and Blindness, 2012, and perceptual occlusion in contemporary culture*<sup>1</sup>**

**ABSTRACT**

Michael Stevenson's *A Life of Crudity, Vulgarity, and Blindness*, 2012, an installation at Frankfurt's Portikus, remains one of the artist's most poetic works. Continuing Stevenson's long-running investigation into politics in the margins of imperial power, *A Life of Crudity* is one of a series of artworks examining the political history of Panama during the Cold War. The installation transformed Portikus into a building-sized camera obscura. While the work related a specific political history, in this article I describe how the structure of the camera obscura also functioned as an analogy for perception, addressing ideas of fate, political agency and the limits of knowledge. I present Stevenson's *A Life of Crudity* as exemplary of an epistemological depth model, in which what can be seen is merely the tip of the iceberg. I use the formal structure of the camera obscura to anchor a sweeping historical view, connecting intellectual life in Christian early modern Europe to contemporary digital culture. Juxtaposing my analysis of Stevenson's *A Life of Crudity* with a discussion of works by Marcel Duchamp, Ryan Gander, Taryn Simon and Simon Denny, I offer a view of contemporary political and cultural life that has surprising commonalities with the perspective of a religious believer or a conspiracy theorist.

*A Life of Crudity, Vulgarity, and Blindness*, 2012, an installation by the Berlin-based New Zealand artist Michael Stevenson at Frankfurt's Portikus, used the gallery's architecture to create a building-sized camera obscura. The work remains one of the artist's most poetic (fig. 1). However, Stevenson's use of the camera obscura as a formal structure for his work was not only an elegant response to Portikus' architecture, nor was it simply a lyrical articulation of the work's historical subject matter. It also became a means of articulating a state of profound epistemological limitation. The philosophical questions raised by the installation seem particularly

---

<sup>1</sup> An earlier version of this paper was delivered at the annual conference of the Art Association of Australia and New Zealand, at the School of Art, Australian National University, Canberra, 3 December 2016. My thanks to conference participants, and particularly to session coordinators Giles Fielke and Nic Tammens, for their comments and feedback. I also wish to gratefully acknowledge the thoughtful and constructive comments made by the two anonymous reviewers of this article.

pertinent in our globalised political landscape, and can also be connected to a moment in the camera obscura's history.

In early modern Europe, the camera obscura was central to a number of scholarly investigations, both as a model and a tool. While this early modern research would later be marshalled into teleological order under the banner of the "scientific revolution," it was first conducted within a primarily religious intellectual environment. I will use the formal structure of the camera obscura to link the religious perspective that was inherent to scholarship in Christian early modern Europe to Stevenson's use of the device, and also to a perception, in several other contemporary artists' work, of covert influences shaping individual experience or the political landscape. In each of these, what is visible can be distinguished from a larger encompassing reality. Similarly, the structure of the camera obscura creates a cognitive separation between the image and the mechanism that generates this image. In Stevenson's work, I propose that this cognitive separation operates as an analogy for a world in which more exists than we can perceive directly. Moreover, as I will argue, the fragment of the world that enters our field of perception is generated by the invisible remainder, in the same way that the visible tip of an iceberg is elevated above the water by the invisible mass of ice submerged beneath. What we see is an effect of invisible processes.

The suspicion that what is visible is merely a fragmentary or distorted version of what is really going on behind the scenes is the characteristic perspective of the conspiracy theorist. In their conviction that what can be seen is not all there is, the perspectives I will describe in this article are akin to the conspiracist's paranoid perception of hidden depths and covert causation. However, while the conspiracy theorist and the religious believer are united in their belief in a hidden authority, the other contemporary perspectives I will describe do not detect a diabolical puppet master or authoritative god at work surreptitiously orchestrating visible reality. Their perception is of a self-organising, unauthored aggregation of unseen forces. Regardless, this is a world view that can be clearly differentiated from the shimmering surfaces, referentless signs and frictionless appropriations of early postmodernism, and equally from "information age" fantasies of seamless global connectivity and total information accessibility. I regard Stevenson's *A Life of Crudity* as exemplary of an

epistemological depth model, in which what can be seen is evidence of an incomprehensible assemblage of opaque systems, underpinning processes and infrastructures.

As has been known for over two millennia, light passing through a small aperture into a dark room will create an inverted image on the wall opposite the opening.<sup>2</sup> Most camera obscuras, artistic or otherwise, exploit the relative brightness of daylight to project an exterior image into a darkened architectural space. Stevenson's installation at Portikus was unusual in that he used a camera obscura to connect two spaces within the same building. He had been wanting to construct such a system for several years, but the practical difficulties had always proved insurmountable.<sup>3</sup> Portikus' unusual architecture provided the perfect opportunity. A tall, slim building with a steeply pitched roof, Portikus stands on an island in Frankfurt's River Main that isn't much larger than the building itself (fig. 2). With no possibility of exceeding its tiny island footprint, the structure extends vertically, accommodating several floors and culminating in a large storage attic with windows almost completely covering one side of the pitched roof. As Stevenson related to artist Nick Mangan:

Standing in that attic, it's as if you're standing outside, that's how much luminosity there is, and that's why I was fascinated by it. I thought, if there's a space this light, you could actually connect this space to the space below, and turn the building into a camera, so the view would be the view of the space, not the view outside. It's an internal view, from one room into another room ... If you were in the exhibition space, you could not tell where [the object in the image was located]. But if you were standing and looking at the image, the object was actually directly above you, so you were in relation to this thing but you couldn't tell, you really couldn't tell.<sup>4</sup>

---

<sup>2</sup> Laura Snyder credits Chinese philosopher Mo-Ti (470-390 BCE) with the earliest recorded description of a camera obscura in the 5th century BCE. Snyder, 2015, p. 125.

<sup>3</sup> For example, an early proposal for Stevenson's installation *The Smiles are Not Smiles*, 2005, at Vilma Gold, London, involved closing the gallery's exhibition space. The enclosed installation would be able to be 'viewed remotely from a darkened entrance space via a camera obscura.' However, as Stevenson explained to me, the proposal was unable to be realised because of the level of artificial lighting needed for the camera obscura to operate in the windowless gallery. Practical problems also prevented the realisation of a similar early proposal for Stevenson's *Nueva Matemática*, 2012, at Museo Tamayo Arte Contemporáneo, Mexico City. MSA, 'Smiles/Dialectics' box, untitled notes for Vilma Gold proposal, c2005, and Stevenson, 2013.

<sup>4</sup> Michael Stevenson, unpublished interview with Nicholas Mangan, 1 October 2013, Melbourne. Sections of the interview are reproduced in Mangan, 2015, pp. 80-90.

Stevenson built a near-life size model of a Cessna 185 aeroplane in Portikus' attic, like a ship in a bottle (fig.3). With this attic space closed to the public, the plane was only directly visible from a distance, standing on the far bank of the river and looking back in through the attic windows. However, Stevenson's camera obscura transported an image of the plane from the brightly day lit attic into Portikus' darkened exhibition hall two floors below, where it floated like a mirage. Reflected through existing windows and doors, a series of mirrors and lenses, and a purpose-built light-proof shaft grafted onto the exterior of the building, the plane's image travelled a total of eighteen metres to arrive as a ghostly apparition on a fabric screen hanging in the exhibition hall. This fragile image disappeared every time someone opened the front door, reappearing when darkness was restored to the gallery. The entirely analogue image floating in the exhibition hall was generated by the structure of the building itself—architecture as camera—and the waxing and waning intensity of the daylight flooding in through the attic windows. The plane's transformation into an image made of light, and the flight of this image from its physical confinement in the attic, was poetically alluded to by a short text accompanying the exhibition. *Teoría del Vuelo* [Theory of Flight] 1979 by José de Jesús Martínez is a meditation on the sensation of flight in a small aircraft.<sup>5</sup> Translated and republished for Stevenson's exhibition as a feather-light booklet printed on airmail paper, the installation's title is a quote from this document.

### **Johannes Kepler and the camera obscura in early modern Europe**

The camera obscura has often been regarded as an analogy for human perception.<sup>6</sup> As Jonathan Crary has argued, during the seventeenth and eighteenth centuries in western Europe the device's structural and optical principles 'coalesced into a dominant paradigm' for explaining the mechanics of human vision and the means of comprehension.<sup>7</sup> John Locke's 1690 *An Essay Concerning Human Understanding*, for example, used the camera obscura as a metaphor for the process of cognition:

[human] understanding is not much unlike a closet wholly shut from light, with only some little opening left ... to let in external visible resemblances, or some idea of things

---

<sup>5</sup> Martínez, 2012.

<sup>6</sup> See for example Kofman, 1998.

<sup>7</sup> Crary, 1992, p. 27.

without; would the pictures coming into such a dark room but stay there and lie so orderly as to be found upon occasion it would very much resemble the understanding of a man.<sup>8</sup>

Locke's reflections were supported by the earlier work of a number of scholars, among them the Dutch astronomer Johannes Kepler, who had established an affinity between the functioning of the camera obscura and the human eye. Following the dissemination of the work of the Islamic scholar Alhacen in Europe, Leonardo da Vinci and Giambattista Della Porta had both proposed during the sixteenth century that the aperture of the eye's pupil functions to admit converging light rays in the same manner as the narrow opening in the camera obscura.<sup>9</sup> Kepler's 1604 *Ad Vitellionem paralipomena* theorised an additional correspondence between the functioning of the eye and that of the camera. He suggested that, just as it does in a camera obscura, an inverted image of the exterior view forms on the internal retinal wall of the eye. Apart from its inversion, he emphasised that this retinal image would be accurate in every detail:

green things are depicted in the color green, and in general any object whatever is pictured in its own color within. The result of this is that if it were possible for this picture on the retina to remain while the retina was taken out into the light ... and if some person were to possess sufficient keenness of vision, that person would recognize the exact configuration of the hemisphere [of the world that is before the eye] in the compass of the retina, small as it is ... not even the smallest points are left out.<sup>10</sup>

Kepler's assertion of the perfect veracity of the retinal image was based on his observations of the camera obscura. The device became an effective stand-in for the invisible processes of human vision, with the accuracy of the mechanical image seemingly underwriting that of human observation. As Crary outlines, the process of representation rendered spectacularly transparent by the operation of the camera obscura reframed human vision as a means of accurately comprehending an objectively existing external reality. For European scholars, the device became a

---

<sup>8</sup> Locke, quoted in Crary, 1992, p. 41-2.

<sup>9</sup> Alhacen (or Alhazen) is a Latin transliteration of the given name of Abū 'Alī al-Ḥasan ibn al-Ḥasan ibn al-Haytham, whose *Kitāb al-Manāẓir* [Book of Optics] was probably completed by 1030, and was translated into Latin sometime around 1200 under the title *De aspectibus*. See Smith, 2015, p. 1.

<sup>10</sup> Kepler, 2000, p. 181-2.

‘philosophical metaphor ... in both rationalist and empiricist thought, of how observation leads to truthful inferences about the world’.<sup>11</sup> In the familiar narrative of pioneering scientific discovery, the work of Kepler is central to the revolutionary movement away from the canon-bound and text-oriented work of his medieval predecessors and towards an observation-based modern experimental science. Kepler’s investigation, and apparent confirmation, of the veracity of his own eyes helped to set the stage for a new way of acquiring knowledge.<sup>12</sup>

Rather than using the camera obscura’s image as a historical exhibit illustrating the progressive acquisition of scientific knowledge, I want to focus on a different aspect of the way that the device seems to analogise human perception. For European scholars like Kepler in the seventeenth century, the extent to which the evidence of the senses was considered complete or reliable was informed by Christianity as much as by early scientific investigations. If Crary is right that the camera obscura became a paradigmatic model of vision in Europe during the early modern period, perhaps the device’s significance was due in part to the *limitations* of its view, and the explicitly *fragmentary* nature of what it shows. The camera obscura replicates with incredible accuracy the colourful, moving images of human sight. However, the limitations of the device and the fragility of its image also replicate some of the fallibilities of the human eye: its poor peripheral vision, its inability to handle very low light, its vulnerability to tiny distortions in the lens or alterations in focal length.

The camera obscura could be regarded as analogous to the inherently limited human perception imagined by some early modern Christians. Jennifer Clement has shown that the value placed on the Christian virtue of humility during the early modern period was intended both to regulate self-regard and ensure the proper acknowledgement of divine providence: ‘in many ways the early modern discourse of humility is precisely about recognizing how little one controls what one’s limits are,

---

<sup>11</sup> Crary, 1992, p. 29.

<sup>12</sup> Historians of science have troubled this progressive narrative by showing that the objectivity of images has never been certain or stable. Lorraine Daston, for example, has described how European botanical illustrators through the seventeenth century carefully departed from mimesis of their objects of study in order to create a more accurate image. The individual specimen was regarded as too idiosyncratic to be representative. In an effort to extract the real ‘from the tangle of the merely visible,’ they omitted colour and shading from their work, creating crisp linear drawings that attempted to reduce the specimen to its essential form. Daston, 2015, p. 32. On the topic of scientific objectivity, see also Daston and Galison, 2007.

and how those limits should compel an awareness of one's dependence on God.'<sup>13</sup> The divine plan that provides the world with form and meaning will always exceed a human understanding that is compromised and tainted by sin, and early modern scientific investigation was shaped by this acknowledgement of human epistemological limitations. John Brooke writes, for example, that Francis Bacon commended empirical investigation of the natural world precisely because he felt such enquiries 'encouraged the Christian virtue of humility. One had to humble oneself before the wondrous facts of nature rather than spin arrogant webs of theory from one's own mind'.<sup>14</sup> Locke's impression of human comprehension as a dark room with only a 'little opening ... to let in some idea of things without' also echoes this idea of humans as semi-blind inhabitants of an orderly cosmos that exceeds their capacity to understand. For many Christians both then and now, unobscured vision is only available to their omniscient God. The book of Corinthians, for example, contrasts distorted and partial human perception with divine omniscience, and also with the perfect vision that believers anticipate they will finally be granted with the advent of the apocalypse: 'For now we see through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known.'<sup>15</sup> This is the Christian equivalent of anticipating escape from Plato's cave and finally comprehending the truth that has thus far been inaccessible.

The camera obscura's image is effected by the confluence of a large number of factors: the convergence of light rays through a narrow aperture; the relative darkness on the obverse side of this aperture; the particular dimensions of the aperture's diameter and its distance from the surface on which the image forms. The image's seemingly magical appearance still has the capacity to entrance viewers in the media-saturated twenty-first century: as Luc Sante has observed, it 'appeals to the unlettered, gaping peasant in all of us'.<sup>16</sup> The camera obscura is in fact an aggregate of spatial elements and physical properties, and its image is the startling outcome of the coincidence of largely invisible operations. What we are able to see, in this image, is

---

<sup>13</sup> Clement, 2015, p. 4. For a detailed discussion of the theology and history of Christian humility see Pardue, 2013.

<sup>14</sup> Brooke, 2000, p. 209. For another analysis of a seventeenth-century natural philosopher's religious acknowledgement of his own limitations, see Katherine Calloway's discussion of John Ray's *The Wisdom of God*, 1691, in Calloway, 2014, pp. 95-115.

<sup>15</sup> 1 Corinthians 13:12 (King James Version).

<sup>16</sup> Sante, 2004, p. 9.



an indication that there are forces at play that we are *not* able to see, and this is the source of its enduring appeal.

Kepler's optical model, based on the camera obscura, provided a fresh perception of the mechanics of vision. However, to his mind his scholarly work was done primarily in the service of his religious beliefs. Kepler undertook his investigations into optics in an effort to resolve problems he had encountered as an astronomer, a pursuit that he regarded in explicitly religious terms and, in his mind at least, with the appropriate humility of the devout. In 1599 he wrote:

To God there are, in the whole material world, material laws, figures and relations of special excellency and of the most appropriate order ... Let us therefore not try to discover more of the heavenly and immaterial world than God has revealed to us. Those laws are within the grasp of the human mind; God wanted us to recognize them by creating us after his own image so that we could share in his own thoughts. For what is there in the human mind besides figures and magnitudes? It is only these which we can apprehend in the right way, and if piety allows us to say so, our understanding is in this respect of the same kind as the divine, at least as far as we are able to grasp something of it in our mortal life.<sup>17</sup>

Whether in the field of astronomy or optics, Kepler's observation of mathematical regularities in the phenomenal world were, for him, evidence of the divine order regulating the universe.<sup>18</sup> In mathematical relationships, he felt he could glimpse something of the coherence of God's calculations. However, as far as Kepler was concerned, he could see what he was being allowed to see: his observations were imbued with wonder but also religious humility in the face of an inscrutable system. It was not only the divine mysteries of the universe that Kepler and his contemporaries regarded as categorically beyond their ken. Diabolical supernatural forces were also demonstrably at play in their world. Kepler was working at a time when repeated and incomprehensible outbreaks of the Black Death were killing millions across Europe, North Africa and the Middle East. Witch trials were also a regular occurrence:

---

<sup>17</sup> Kepler, 1951, 50.

<sup>18</sup> See for example the *Harmonices mundi* [The Harmony of the World], in which Kepler attempted to demonstrate mathematical relationships between musical principles of harmony and the organization of the solar system, in a kind of 'music of the spheres'. Kepler, 1997.



Kepler's elderly mother, in fact, was accused of witchcraft in 1617, and he acted in her legal defence.<sup>19</sup> In short, the phenomenal world in which the "scientific revolution" took place was shaped and ordered by both natural and supernatural forces that were unable to be perceived directly. Rather than a demonstration of the transparency of the world to the observing eye, the camera obscura's allusion to mysterious and unseen forces through the miraculous appearance of its fragmentary image, disconnected from visible causation, reiterates this religious perspective.

### **Covert politics in 1970s Panama**

In Stevenson's *A Life of Crudity*, the image of the plane floating in Portikus' exhibition hall appeared similarly miraculous. For a twenty-first century audience attuned to digital projectors playing looped movie files, the purely analogue nature of the image triggered genuine wonderment. However, the political narrative that Stevenson's work referenced indicates that he, unlike Kepler, doesn't happily attribute divine benevolence to that which is unknown. The confluence of factors that led to the appearance of the plane's image in the Frankfurt gallery included a narrative drawn from Stevenson's long-term investigation of the recent political history of Panama.<sup>20</sup> In this narrative, the order operating behind the scenes seems closer to diabolical than divine.

To indicate this narrative, Stevenson presented a vitrine of books, records and photographs in his installation at Portikus (fig. 4). Like a sequence of footnotes, this material connected the installation to specific historical events and figures. However, in keeping with the theme of limited access established by the structure of the camera obscura and the physical inaccessibility of the plane, this reference material was

---

<sup>19</sup> See Kepler, 1951, p. 156-62 for a lively narrative of the trial. As editor Carola Baumgardt observed, the process of establishing Kepler's mother's innocence was rendered significantly more difficult 'by the fact that she herself and her children in Wüttemberg had often conducted her defense in an extremely clumsy way. They lost their temper when confronted with the authorities, and her son Christoph, particularly in his excitement, became sometimes a witness for the prosecution rather than for the defense.' Kepler, 1951, p. 160.

<sup>20</sup> Other works stemming from this investigation include: *Introducción a la Teoría de la Probabilidad*, 2008 (DVD dubbed from HD and 16mm originals, 25:38 minutes, looped, Spanish language with English subtitles), *Contadora*, 2011 (De La Rue 2300 bill counting machine, bundled photocopy paper bills, flat screen monitor, metal stand, DVD, plinth and Perspex top, 290 x 300 x 240mm, collection of Auckland Art Gallery Toi o Tāmaki), *Nueva Matemática*, 2012 (Free standing, adjustable steel doorframes, salvaged doors, and the sound of a single-engine aircraft in flight, exhibited at Museo Tamayo Arte Contemporáneo, Mexico City), and a second iteration of *Nueva Matemática* titled *Proof of the Devil*, 2013 (exhibited at Michael Lett Gallery, Auckland).

presented in a closed glass case. It was arranged to judiciously reveal certain pieces of information: for the most part, only the covers of the books were visible, although in some cases not even that much was able to be seen. The plane that Stevenson created in the gallery's attic was a copy of one that had belonged to Martínez, the author of the text accompanying the exhibition as well as several other books displayed in the vitrine. Martínez, or as he was more commonly known, Chuchú, was a Renaissance man in 1970s Panama. A university professor, mathematician, poet, playwright and aviation enthusiast, Chuchú was also part-time bodyguard and aide to General Omar Torrijos, Panama's populist left-wing military dictator. He was intimately involved in Panamanian politics during several key struggles against US regional dominance. In this political narrative, power was exercised surreptitiously in behind the scenes negotiations, guerrilla actions and covert violence.

In 1977, after years of negotiations, General Torrijos and US President Jimmy Carter signed an agreement to return the area of land around the Panama Canal—known as the Canal Zone—from US to Panamanian control. The Canal Zone, which bisected Panama, had been a US territory since construction of the canal began in 1903. By the 1970s, many Panamanians regarded the US military's occupation of the zone as an example of neo-colonialism. While the Torrijos-Carter Treaties promised that the Canal Zone would be under full Panamanian control by 1999, Torrijos worried that the agreement could still be overturned. Ronald Reagan, who was expected to be the Republican candidate for the next US election, was a vehement opponent of the treaties. Well-founded rumours suggest Torrijos was secretly planning to sabotage the canal if the US did not respect the agreement.<sup>21</sup> Simultaneously, he was secretly supporting the Sandinistas' revolutionary struggle against the Somoza administration in Nicaragua. The Somoza dynasty had been established during the US occupation of Nicaragua in the 1930s, and enjoyed US support until 1979. It seems that Chuchú regularly flew guns and food in his little plane to the Sandinistas' guerrilla camps in

---

<sup>21</sup> Graham Greene recounted a conversation he had with Torrijos: “We could hold Panama City for forty-eight hours,” he told me. “As for the Canal, it is easy to sabotage. Blow a hole in the Gatun Dam and the Canal will drain into the Atlantic. It would take only a few days to mend the dam, but it would take three years of rain to fill the Canal. During that time it would be guerrilla war”. Greene, 1986, pp. 54-5. See also Kempe, 1990, pp. 87-8. Cyrus Vance, US Secretary of State 1977-80 wrote that from the mid-1960s ‘There was little question in my mind that sooner or later Panama would resort to major violence, even to the point of destroying the canal. ... [which] could be closed by the simplest act of sabotage.’ Vance, 1983, p. 141.

the Nicaraguan mountains, and helped bring Nicaraguan refugees back into Panama. According to his friend the novelist Graham Greene, 'Chuchú was a man of infinite resource when it came to smuggling arms or men.'<sup>22</sup> As it turned out, both Panama's reclamation of the Canal Zone and the Sandinistas' struggle in Nicaragua were ultimately successful. However, shortly after Reagan's inauguration as US President in 1981, Torrijos died in a plane crash. The allegation that the crash was an assassination effected with CIA involvement has been made several times but never proved.<sup>23</sup>

In Stevenson's installation, Chuchú's plane was presented as the vehicle of a political agent operating somewhere on the margins of official legitimacy, engaged in surreptitious combat with a hegemonic power. The bodyguard's plane also, however, became a stand-in for the one that was the means of the General's death. The vitrine of archival material in Stevenson's installation included items such as *Panama en la Encrucijada: Colonia o Nación?* [Panama at the Crossroads: Colony or Nation?] by Jaime G. Gomes Marques, a record of songs written in tribute to Torrijos following 'the dramatic death of the revolutionary leader,' a recording of Torrijos himself speaking, and Chuchú's prize-winning 1987 account of his time with the General.<sup>24</sup> This well-thumbed and heavily book-marked material referred to Stevenson's own research process, but it also framed the installation as a kind of memorial to Torrijos.<sup>25</sup> In this sense, Chuchú's plane became an enigmatic figure of an opaque history. Echoing the covert nature of the political forces determining the lives and fates of Panamanians during the Cold War, Stevenson's use of the structure of the camera obscura prevented access to the plane while also revealing it. It acted as a limited opening onto what could be known.

---

<sup>22</sup> Greene, 1986, p.181. See also Grigsby Vado, 2004.

<sup>23</sup> Former Panamanian chief of staff Colonel Roberto Diaz and investigative journalist Seymour Hersh have both alleged that Torrijos' successor, Manuel Noriega, was responsible for the crash. Noriega was head of Panama's military intelligence under Torrijos, and had close ties to the CIA both before and after Torrijos' death. Scranton, 1991, p. 59. See also Kempe 1990, pp. 27-34 for Noriega's association with the CIA.

<sup>24</sup> Aldrete, n.d.; Marques, 1989; Torrijos, 1985; Martínez, 1987.

<sup>25</sup> It is worth noting that Torrijos was a complex political figure, and is remembered fondly by many, but not all. Stevenson's installation adopts Chuchú's perspective, mourning the loss of an inspiring leader. Margaret Scranton describes Torrijos' domestic legacy as 'mixed'. While Torrijos is often characterised as a 'feisty but pragmatic Latin soldier-diplomat' who 'adamantly opposed the oligarchy and embraced the poor, rural sectors, workers and students' he also 'quashed traditional civilian political activity' and established a 'pattern of corruption and abuse of civil rights'. Scranton, 1991, p. 57. For details of the human rights abuses that took place in the early years of Torrijos' rule, see Hague, 2002, pp. 15-17.

**Inaccessible spaces, hidden mechanisms: the digital image search as a contemporary visual paradigm**

Many contemporary artworks are purposefully enigmatic: they withhold information, and thematise obscurity. Marcel Duchamp's notorious *Étant donnés*, 1946-66, was a prominent early example of this tendency in which what is given serves to indicate what is not.<sup>26</sup> The spatial structure of Duchamp's installation was not unlike that of the camera obscura, in that it was divided into two distinct areas, one light and one dark, connected by a peephole-aperture. This spatial organisation granted viewers standing in the work's shadowy antechamber limited visual access into the brightly lit but physically inaccessible second room, which contained a surreal scene staged around a nude, spreadeagled, female mannequin. Duchamp's fantasy diorama centred, uncomfortably, on the uncanny crevice of the mannequin's strangely sealed vulva, which constituted an impenetrable obstacle in a body otherwise flagrantly available for scopic and sexual objectification. Stevenson's installation, like Duchamp's demonstration of the erotic mechanics of voyeurism, provided its viewer with a fragmentary and distorted glimpse, a gesture towards something that could not be shown. It offers, as I have suggested, an epistemological depth model. In this model, knowledge is necessarily and self-consciously partial because what is visible is produced by an assemblage of factors that are beyond direct perception.

Stevenson's use of the camera obscura in *A Life of Crudity* foregrounded the limitations the work placed on what the viewer could see. However, viewers of this artwork were not only made aware that information was being withheld by the artist. The installation was structured to indicate what was not able to be shown directly but could only be signalled obliquely, as an absence—or, more accurately, as an invisible presence. In the case of Duchamp's *Étant donnés*, this invisible presence was the erotic economy of desire and lack that shapes both human relations and the value of art. Stevenson's work described a political terrain in which events were the product of intersecting covert forces. In the case study of 1970s Panama that he offered, the fate of Omar Torrijos, the nationalist aspirations of Panamanians and the distribution of power in Central America were shaped by the liquid interplay of deep political

---

<sup>26</sup> The full title of Duchamp's work is *Étant donnés: 1° la chute d'eau, 2° le gaz d'éclairage* [Given 1. The Waterfall, 2. The Illuminating Gas], 1946-66.

currents. In the post-Vietnam War and waning Cold War climate of the late 1970s, Carter's conciliatory foreign policy stance, the rise to prominence of Reagan's newly militant conservatism, the international proliferation of decolonisation movements, Torrijos's reckless and ebullient populist nationalism and the desperate revolutionary uprising in Nicaragua all contributed to shifts in the US's longstanding position as regional hegemon. Torrijos' symbolic reclamation of Panama's Canal Zone, and his equally symbolic death, both took place within a mobile, opaque and unpredictable political landscape. The aggregate forces shaping this landscape, which in Stevenson's work amount to a determination of fate, are too large in scale, too complex and too subtle to be perceived directly. They can only be understood via their effects.

British artist Ryan Gander's installation *Ampersand*, 2012, like *A Life of Crudity* and *Étant donnés*, used spatial inaccessibility as a way of expressing epistemological limitations (fig. 5). *Ampersand* was also divided into two rooms, one of which was only accessible as a limited view through an aperture. Like Stevenson, Gander also went to great lengths to devise and construct a large, cumbersome analogue mechanism for delivering what was in effect an image on a screen. When *Ampersand* was exhibited at Melbourne's Australian Centre for Contemporary Art (ACCA) in 2015, ACCA's vast 'gallery 1' was walled-off and inaccessible to viewers except through a single, glowing window. Gander constructed a huge and elaborate conveyor belt in the walled-off area, which bore a miscellany of objects in endless single file past the window. The viewer was provided with a chair in a small dimly lit antechamber from which to watch this often inexplicable procession. Like a hapless contestant on a pointless, prizeless version of TV's *The Generation Game*, or perhaps like the operator of the X-ray baggage scanner in airport security, the viewer only had a few seconds to consider each item before it slid past. The technically complex mechanism that occupied the majority of the exhibition's floor space and delivered the objects to the viewing window, however, was completely hidden from view. It was this mechanism—about which viewers could only guess and wonder—that was the work's invisible referent. The hidden conveyor belt seemed to stand in for the rationale connecting the wildly diverse objects on view, which was similarly opaque.

In that both were designed to generate an image on a screen, the mechanisms deployed by Stevenson and Gander echoed the information delivery systems of digital media. However, the large scale and emphatically analogue nature of these mechanisms also challenged the sense of immateriality commonly associated with such media. Like the image generated by the camera obscura in Stevenson's work, however, the glowing image presented on the screen of a digital device is the product of a vast, and largely unseen, physical apparatus. If the camera obscura was the paradigmatic visual technology of the early modern period in Europe, the digital image search could be considered paradigmatic of ours.<sup>27</sup> If, as I have argued, the camera obscura's image reiterated early modern Christianity's conception of human perception as inherently limited and compromised, the digital image search could be equally emblematic of a contemporary awareness of our perceptual and epistemological limitations. Despite the commercial investment in an aesthetic of intangibility and smooth immediacy (think of Apple's slimline devices, Google's minimalist interfaces, the seamless migration of data between devices, the ubiquity of Wi-Fi, the apparent ephemerality of "the cloud"), as curator Robert Leonard has pointed out, networked culture and digital technology depend on 'data centres the size of football fields drawing down more electricity than some countries. The cloud has a big footprint.'<sup>28</sup> Obscured behind the images that magically appear on the screen are the algorithms written to identify and organise the search results, the political decisions embedded in that code, and the images that are *not* shown. The network's physical infrastructure is similarly obscured: the huge server farms, the global networks of submarine cables, and the systems of electricity generation, which in turn rely on an unbroken supply of cheap oil, the politics associated with control of that oil supply, and the labour of the workers who build and maintain all of these systems. The mechanism that produces the image on the screen is incomprehensible because many elements of it are literally invisible to us, but also because of the staggering scale and complexity of its constituent parts.

Stevenson's use of the camera obscura as a structural framework for his installation at Portikus created a spatial system that was similar, in several key ways, to that of both

---

<sup>27</sup> This seems to be David Joselit's contention in his thought-provoking *After Art*, for example. Joselit, 2012.

<sup>28</sup> Leonard, 2015, p. 11.

Duchamp and Gander's works. All three created a physical structure that afforded an emphatically framed and limited view. In each case, what could be seen—the image—was generated by the structure as a whole, and in turn the image became both effect and index of this largely invisible apparatus of production. The subjects of Stevenson's work were the covert political forces at play in 1970s Panama, and the form of his work directed the viewer's attention to the invisible physical forces at play in the operation of the camera obscura. The known events of Panamanian politics, like the image generated by the camera obscura, were produced by an assemblage of behind-the-scenes factors and forces.

### **Opacity and transparency in the contemporary political landscape**

In its examination of events in Panama during the late 1970s, Stevenson's *A Life of Crudity* retrospectively identified an early example of the challenges that confront our globalised political landscape with increasing intensity. Writing at a time when the spectre of President Trump looms over a geographical area far larger than the USA, and when climate change threatens to disproportionately affect those that are least responsible for generating it, it seems abundantly obvious that political questions are not confined by national borders. What happens locally is, perhaps increasingly, determined by distant events and unpredictable aggregate processes, and recognition of this fact is what I have been calling an epistemological depth model. US photographer Taryn Simon and New Zealand artist Simon Denny have both paid attention, in recent works, to unseen but determining influences on current cultural and political life. Like Stevenson, both of these artists address the power held and wielded by the US. Both artists also explicitly deploy an aesthetic language of revelation and disclosure, but in both cases this apparent access opens only onto another limited view.

Simon's *An American Index of the Hidden and Unfamiliar*, 2007, is a series of large-format photographs which the artist presented as an inventory of what lies hidden within the US. Simon has made a specialty of negotiating access into seemingly impenetrable organisations. *An American Index* included photographs taken in the entry hall of the CIA headquarters, a nuclear waste storage facility in Washington State, and the props room at George Lucas's Skywalker Ranch. These were placed alongside photographs of, for example, the braille edition of *Playboy* produced by the



US National Library Service, and a highly charged image of a young woman about to undergo hymen reconstruction surgery that is reminiscent of Duchamp's *Étant donnés*. Themes of blindness, opacity, closure and invisibility recurred through the series.

Writers addressing Simon's work almost invariably interpret her photographs as 'visions of the unseen, and explanations for the unexplained,' emphasising the artist's 'incredible passion for unearthing and re-presenting facts and narratives which are either overlooked by, or deliberately concealed from, public scrutiny'.<sup>29</sup> Homi Bhabha is one of few who have challenged the common presumption that Simon's work is intended as 'an epistemological process of *making visible* or *bringing to light*'.<sup>30</sup> He instead notes that Simon's work identifies blind spots, and 'the emergence of occlusion or obscurity at the point at which we expect to experience full, unfettered visibility'.<sup>31</sup> Simon photographs the visible surfaces of invisible infrastructures, processes and pressures. The disclosures apparently provided by her photographs, and their pose as a window onto a hidden world, are a ruse. Her photograph of the Central Intelligence Agency (CIA) headquarters, for example, is hardly revelatory: it was taken in the building's entrance foyer and shows a door through which access cannot be gained. The glossy surfaces and blandly intimidating corporate décor repel further enquiries.

Simon's *Transatlantic Sub-marine Cables Reaching Land*, *VSNL International*, *Avon*, *New Jersey* similarly depicted the visible extremities of an extensive invisible system. The photograph showed a banal institutional interior, featureless apart from the bundle of bright orange and yellow cables emerging from the linoleum-tiled floor. These are the ends of cables that extend across the floor of the Atlantic Ocean to the UK. As Simon related in the image's accompanying text panel, they are capable of transmitting sixty million simultaneous voice conversations. The photograph served to indicate the existence of things that the camera is unable to represent: the global network of submarine cables of which these are a part, and the data that this network

---

<sup>29</sup> Sussman and Kukielski, 2007, p. 11 and Baker, 2015, p. 8.

<sup>30</sup> Bhabha, 2015, p. 224. Emphasis in original.

<sup>31</sup> *Ibid.*, p. 225.

transmits.<sup>32</sup> The surgical theatre shown in *Hymenoplasty, Cosmetic Surgery, P.A., Fort Lauderdale, Florida* also functioned as a visible stand-in for an aggregate of processes and pressures that could not be depicted: the cultural traditions, conflicting social pressures and medical technologies that intersected to shape this anonymous female body. Itself a cosmetic surgery that will never be seen directly, the hymenoplasty will enable its recipient to stage her deceptive conformity to cultural and familial expectations. Rather than attempting to reveal hidden things, Simon's strategy is to indicate that which is present, but invisible. Her photographs point to things that her camera cannot fully show.

Denny's work deals, as does Simon's and Stevenson's, with the distinction between visibility and obscurity, between what can be shown and what cannot. His installation *Secret Power*, 2015, commissioned for New Zealand's pavilion at last year's Venice Biennale, was based on the visual imagery in the US National Security Agency (NSA) documents leaked by Edward Snowden in 2013 (fig. 6).<sup>33</sup> The clunky infographics and PowerPoint slides in this cache of documents are a starting point for Denny's examination of geopolitical power structures, and, in his words, 'the way that complex intelligence-gathering systems are represented in graphics, logos, images, and diagrams'.<sup>34</sup> In recent years Denny has investigated how branding, architecture and staffing structures give form and visibility to an organisation's culture and priorities, with hacker communities, corporations like Apple, and government bodies all coming under his scrutiny.<sup>35</sup> In *Secret Power*, he examined the visible manifestations of the international surveillance network, "Five Eyes".<sup>36</sup> Shown in the context of Venice's historic Biblioteca Nazionale Marciana, the installation invited productive comparisons between this contemporary intelligence network and the

---

<sup>32</sup> Singaporean artist Charles Lim's eerie *silent clap of the status quo*, 2016, shown at the last Biennale of Sydney, investigates similar terrain. Lim's video consists of excerpts from the thousands of hours of murky and pixellated deep-sea 'inspection videos' of these cables made for maintenance purposes by robot submarines.

<sup>33</sup> Denny's *Secret Power*, 2015, clearly responded to Stevenson's *This is the Trekka*, 2003, which was commissioned for the New Zealand pavilion at the 2003 Venice Biennale. *This is the Trekka* explored little-known Cold War economic and cultural ties between New Zealand and Czechoslovakia. As Denny also did, Stevenson leveraged the Biennale's nationalism into an examination of the covert international connections that undergird nationalist identification.

<sup>34</sup> Simon Denny quoted in Barr and Denny, 2015, p. 95.

<sup>35</sup> See for example London, 2015.

<sup>36</sup> The Five Eyes network (also known by the acronym FVEY) is a co-operative espionage and information-sharing alliance between government intelligence agencies in Australia, Canada, New Zealand, the United Kingdom and the United States.

expansionist acquisition of knowledge and power by those governing sixteenth-century Venice. Extrapolating from the visual information in the Snowden documents, Denny's installation presented an apparent gain in knowledge about the culture and activities of the Five Eyes alliance: a glimpse "inside" the top secret "facility". A diverse array of diagrams, graphics, artefacts and images were displayed in server racks that Denny had adapted into vitrines, mimicking the look and feel of a public-friendly didactic museum display (fig. 7). This material provided an apparent insight into the NSA's organisational culture, with a particular focus on the surprising relationship between the graphic "house style" of its internal communications and the aesthetic of online gaming culture.

Denny's work takes the subtle influence of design and aesthetics seriously: the form of a message and the means of its communication necessarily alters and inflects its content. Representation always entails distortion. Snowden's revelation of a powerful and invasive surveillance network operating illegitimately behind the scenes was shocking. However, as Bhabha notes of Simon's work, the apparent revelation was merely a preface to the recognition of further obscurity or occlusion. In *Secret Power*, Denny carefully undermined the infrastructures of knowledge acquisition that his work addressed. These included the universalist aspirations on which the Marciana Library was founded in the sixteenth century, and several presumptions on which the data collection activities of the Five Eyes alliance are predicated: presumptions about, for example, the accuracy of digital communications and the authenticity of online identities. He also undercut the language of revelation in which his own installation was phrased, by prefacing it with the elegantly self-sabotaging disclaimer:

This exhibition has been produced at a distance from its subject matter. Compiled from publicly accessible online sources only, it may contain inaccuracies. Illustrations necessarily appear out of context and without full explanation; it is possible their meaning has been distorted by changes in format and proximity. Apparent connections may be circumstantial.<sup>37</sup>

The same—that 'apparent connections may be circumstantial'—could perhaps be said of the information gathered by organisations like the NSA. The Five Eyes network's

---

<sup>37</sup> Simon Denny, *Secret Power* introductory exhibition wall text, reproduced in Venice, 2015, p. 106.

effort to surveil and map an unruly political body in its entirety is effected via an enormous technological apparatus. Digitally combed and sifted, distilled, the data fed through this system is converted into a legible, and therefore abbreviated and partial, image of the vast quantities of information surveyed. Like the image generated by the camera obscura, this data map offers a limited view. No one could comprehend the totality of information, not even those responsible for its collection. A complete and unedited view—full revelation—would be simply impossible for any human brain to encompass, but the mechanisms in place to simplify this great mass of data and make it comprehensible to us also necessarily entail its misrepresentation. The infographics and the language of digital processing in Denny's installation, like the conveyor belt in Gander's *Ampersand*, were presented as mechanisms producing a visible image. As Denny showed, however, the visible coherence of this image resulted from the distortions and simplifications effected by the technological systems and aesthetic procedures that produced it.

The camera obscura in Stevenson's *A Life of Crudity* was also a mechanism that enabled a limited opening onto visibility. I contend that Stevenson's work, like the others I have discussed, did not only offer the framed and bounded nature of the camera obscura's image as an analogy for the limitations of human perception. Each of these works focused emphatically on the mechanisms by which visibility is produced. What we can see is the product of systems, infrastructures and processes that are incomprehensible in their totality, and the artworks indicated the existence of these mechanisms which continually operate to shape and facilitate visibility. In short: if we take Stevenson's *A Life of Crudity* as an analogy for the limited knowledge available via human sensory perception, it is the camera obscura itself that stands in for the ninety percent of the iceberg hidden from view. Given the presence of the visible image, the viewer was invited to deduce the existence of the mechanism that produced it: the great mass of submerged ice that keeps the tip of the iceberg floating above the surface of the water. The invisible referents of Stevenson's work were the properties of the space and architecture, the reflection and refraction of light, and the

laws of physics that were all essential to the camera's operation, and which provided the conditions of possibility for the appearance of the image.<sup>38</sup>

### **The Aleph: the immanent transcendent in Cantor and Borges**

Despite the fact that Stevenson's installation was wedded so emphatically to these physical properties of light and architecture, the aesthetic oppositions it established—binaries of light and darkness, of physicality and ephemerality, of imprisonment and flight—firmly couched its investigation in metaphysical terms. While focusing on a highly specific political history, *A Life of Crudity* also poetically extended out from this history to broadly address epistemology, and the possibility of grasping that which transcends human perception.

This broader scope of the work's intellectual enterprise was indicated in the vitrine of books and other resources installed on Portikus' mezzanine. In addition to the material specifically addressing the Panamanian political history which was the installation's ostensible subject, Stevenson included copies of mathematician Georg Cantor's *Contributions to the Founding of the Theory of Transfinite Numbers* and also a translation of Jorge Luis Borges' *El Aleph*, a collection of short fiction in which the Argentinian writer explored his longstanding fascination with the concept of infinity and its related paradoxes.<sup>39</sup> Chuchú, the poet-mathematician, pilot and protagonist of Stevenson's installation, was, like Borges, familiar with Cantor's work. In the late nineteenth century, Cantor had made a pioneering attempt to formally define infinity using mathematics. This project, which was at least in part motivated by his religious convictions, was an effort to use what was known in order to make deductions about the unknown. Cantor extrapolated from mathematically provable properties of finite numbers in order to demonstrate that there is not one but an endless succession of ever-larger infinities. For the mathematician, this amounted to something verging on a mathematical proof of the existence of God. He speculated about the existence of an

---

<sup>38</sup> The invitation card produced for the exhibition emphasised the installation's structural dependence on daylight. Noting that the 'Exhibition can only be viewed during daylight hours,' it listed the changing time of sunset over the two month course of the exhibition (29 September – 2 December) as Frankfurt moved from autumn into winter. The materials list of Stevenson's installation reiterated this emphasis by including 'daylight' as a key physical component of the work.

<sup>39</sup> Cantor, 1954, and Borges, 1977.

unreachable, ultimate level of infinity that he referred to as the Absolute.<sup>40</sup> Like Johannes Kepler also had, Cantor felt that the language of mathematics was unusually suited to addressing concepts associated with divinity. He adopted the first letter of the Hebrew alphabet—aleph—as mathematical notation for the infinities that he referred to as ‘transfinite numbers.’ Aleph-zero, or  $\aleph_0$ , denotes the smallest transfinite number; aleph-one, or  $\aleph_1$ , is the next largest, and so on.

The fact that both Jewish and Christian mystics have long used aleph as a symbol for the infinite unity of God—the one that contains everything—would certainly not have escaped Cantor’s notice.<sup>41</sup> Neither did it escape the notice of Borges, whose 1945 story ‘The Aleph’ was directly inspired by the heady mix of pioneering mathematics and theological speculation in Cantor’s work.<sup>42</sup> In an imaginative literalisation of this mystical-mathematical concept, Borges’ story posited the existence of a point in space that contained no less than the entire universe, simultaneously. The Aleph, as it was called in the story, was located (in a typically Borgesian juxtaposition of the sublime and the ridiculously mundane) under the nineteenth step of the cellar staircase in a house on Buenos Aires’ Calle Garay, a house owned by a man named Carlos Argentino Daneri who was not only an appallingly bad poet but also an intensely irritating person. Like the apertures in the other artworks I have described, Borges’ Aleph was a revelatory opening onto another kind of space. As the narrator related, it was a window onto infinity, two or three centimetres in diameter. Looking into the Aleph, he felt dizzy and wept, ‘because my eyes had seen that secret, hypothetical object whose name has been usurped by men but which no man has ever truly looked upon: the inconceivable universe’.<sup>43</sup>

In both Borges’ fiction and Cantor’s mathematics, the infinite—that which categorically exceeds human perception—is approached via the finite and

---

<sup>40</sup> See Barrow, 2005, pp. 68-71 for an account of Cantor’s discovery. For a recent discussion of Cantor’s mathematical work in terms of its contribution to Christian theology, see Russell, 2011.

<sup>41</sup> For a discussion of Cantor’s work in relation to the symbolic use of aleph in the Jewish Kabbalah, see Aczel, 2000.

<sup>42</sup> As Borges acknowledged to Selden Rodman, he borrowed the title of his story from mathematician Bertrand Russell’s account of Cantor’s transfinite numbers. Rodman, 1974, p. 19. Gene H. Bell-Villada also outlines the connection that Borges’ story has with Kabbalistic and Cantorian number systems. Bell-Villada, 1999, p. 233-4.

<sup>43</sup> Borges, 1998, p. 284. The copy of Borges’ story that Stevenson included in the vitrine at Portikus was a French translation published in 1977. I have referred to the English translation by Andrew Hurley published in 1998.

comprehensible. Clues to what we cannot see are immanent in the mundane visible world. The work of both the mathematician and the writer hinges on the conviction that our perception of the world does not scratch its surface, that there are hidden depths unimaginable to our limited cognition. In the artworks I have discussed, this conviction is given physical form through the literal separation of space. In Stevenson's *A Life of Crudity*, as in Duchamp's *Étant donnés* and Gander's *Ampersand*, space was partitioned and thereby rendered only partially accessible. In each case, the limited view that was made possible by an aperture or window served primarily to evidence the fact that the work contained a second concealed and inaccessible area. However, in each case what could be glimpsed from behind the scenes was ultimately fairly prosaic, even deflating. Chuchú's Cessna 185, the parade of banal objects in Gander's *Ampersand*, the bright orange cables in Taryn Simon's *Transatlantic Sub-marine Cables Reaching Land*: these are relatively everyday things. They are not in and of themselves startling, fantastical or otherworldly. Borges made the insufferable Carlos Argentino Daneri the gatekeeper of the Aleph, and these works similarly convey a sense of the transcendent or unknowable that is inseparable from the utterly banal. The transcendent is immanent, it is embedded in the mundane world. However, where Borges' Aleph was an opening onto infinity, a shortcut to God, the visionary experience available to the viewer of Stevenson's *A Life of Crudity* was less direct.

This is the core of my argument: Stevenson's work does not only suggest that there are forces at play in the world that we can neither see nor comprehend; instead, it suggests that what is invisible to us produces visible reality. We can therefore extrapolate from the known and visible—the mundane world of everyday reality—in order to glimpse something of the vast mechanism operating behind the scenes. The contemporary artworks I have discussed all imagine this mechanism as an aggregate of infrastructures, priorities and processes which included data modelling techniques, networks of cables, consumption habits, the erotic charge of voyeurism, the laws governing the refraction and reflection of light, social and cultural expectations, software interface designs, covert political directives and institutional décor. More like a Latourian network than an authoritative God, such unimaginable assemblages



ceaselessly operate to produce the reality we experience.<sup>44</sup> In *A Life of Crudity*, the camera obscura analogised such an aggregate mechanism. It was an assemblage of natural and artificial elements working in concert to produce the image that appeared—as if by magic—in the viewer’s field of vision. Disconnected from visible causation, the image was nevertheless generated by an alliance of elements which included the architecture of the gallery. Standing in Portikus’ darkened exhibition hall, I experienced a sudden bodily awareness of my own physical immersion in the system ceaselessly producing the image floating in front of me. It was this that provided the work with its charge.

### ***Teoría del Vuelo* and the transcendent perception of the pilot**

In the political narrative that Stevenson’s work related, Chuchú was a political agent and witness to an unfolding history, but as the author of *Teoría del Vuelo* he also acted as a philosophical guide. Chuchú’s plane performed a similarly dual role. In a gesture that deftly combined his mathematical knowledge with his talent as a poet, Chuchú named his plane Aleph-1: the second rung on Cantor’s ladder of infinities. It was a vehicle of Panamanian resistance to US hegemony, and also a vehicle of philosophical speculation. Chuchú’s 1979 text *Teoría del Vuelo* was a lyrical meditation on the sensation of flight and, like Stevenson’s installation, it established a binary opposition with metaphysical resonance. Contrasting the process of takeoff with the feeling of airborne weightlessness, Chuchú’s text echoed the binary of light and darkness in *A Life of Crudity* with an opposition between flight and a gravity-bound existence on the ground. During takeoff, he related, the plane is ‘large, ungainly, lethargic’ and must be aggressively forced into movement. Lifting off from the runway, however:

The whole machine shudders, immediately coming awake without any transitional phase, shaking off its lethargy like a child fresh from sleep. Now, as it accelerates, it acquires a certain spirituality ... But it never dematerializes, as if the spirituality that has still not fully possessed the aircraft were also an attribute of matter. The pilot shares in this new dimension of matter ... there comes a point where he weighs nothing

---

<sup>44</sup> See Latour, 2005 for an introduction to his Actor-Network-Theory.

and all he has to do is direct the plane through the faintest pressure to its elevator, almost as if he were doing so by thought alone<sup>45</sup>

In *Teoría del Vuelo*, Chuchú recounted how the exquisite delicacy of the pilot's adjustments to the airborne plane allow a momentary release from the dull insensitivity of life on the ground: 'that hard ground that allows us to walk clumsily about and perceive only the crudest and roughest aspects of things.'<sup>46</sup> In contrast, the pilot in flight is perception embodied: 'It is his role to be open, to be the border and the frontier, to be awareness.'<sup>47</sup>

However, in both Chuchú's text and Stevenson's installation, these binary oppositions were established only in order to complicate them. Neither associated a sense of transcendence with dematerialisation. As Chuchú noted, even in flight the plane 'never dematerializes,' as its spirituality is 'also an attribute of matter.' In Stevenson's installation, the apparent dematerialisation of the model plane into light via the operation of the camera obscura ultimately served to draw attention to the physical infrastructure of the camera's apparatus. Both works suggested that a sense of transcendence (by which I mean an awareness of what normally eludes perception) is only possible via an engagement with one's physical surroundings. As Cantor found, the existence of infinity could be proved by careful attention to the properties of finite numbers.

The pilot's temporary escape from what Chuchú described as 'a life of crudity, vulgarity, and blindness' does not derive from his or her elevated view of the world.<sup>48</sup> For Chuchú, the pilot's special perspective does not result from the scopic overview he or she is afforded—an overview resembling, perhaps, the global data map that the Five Eyes intelligence network aspires to achieve. Chuchú claimed that the pilot's ability to 'be awareness' comes, instead, from a detailed knowledge of the mechanics of the plane, which enables an acute sensitivity and intuitive responsiveness to any changes in the sound or quality of the engine. While airborne, he noted, the pilot's life itself depends on his or her knowledge of the relationship between temperature and oil

---

<sup>45</sup> Martínez, 2012, pp. 29-30.

<sup>46</sup> *Ibid.*, p. 32.

<sup>47</sup> *Ibid.*, p. 32.

<sup>48</sup> *Ibid.*, p. 31.

pressure. The ‘new dimension of matter’ that the pilot experiences while airborne is attained through his or her focused bodily and sensory engagement with the plane, a sensitivity which is sharpened by the proximity of death.

It seems to me that both Chuchú’s text and Stevenson’s installation sought to bridge the camera obscura’s cognitive separation of the visible from the real. The transcendental state that a pilot can achieve during flight, the ability to sense what is not immediately visible, is ‘a new dimension of matter’. There is, in fact, no categorical opposition between what is in front of the pilot’s eyes and the obscure operations of the apparatus that enables this view. They are continuous, connected, part of the same system. Similarly, the camera obscura’s image is not categorically different from the apparatus that produces it. As Stevenson pointed out, standing in front of the image floating in Portikus’s exhibition hall, ‘you were in relation to this thing, but you couldn’t tell, you really couldn’t tell.’ The image enabled a view of Stevenson’s model of Chuchú’s plane, which was physically nearby but inaccessible. The image was also generated by the structure of the building in which the viewer stood. It was an index of the encompassing structure that produced it, and of which it was a part.

It is important to note, however, that neither Chuchú or Stevenson claimed to offer knowledge of systems and processes that remain categorically unknowable. What they offered was a way to achieve a fleeting recognition of the fact that there is also ice beneath the surface, that there is much we cannot comprehend or control. They simply indicated the extent of our epistemological limitations. For Kepler at the turn of the seventeenth century, the mathematical regularities he could observe in the physical world seemed to provide a fragmentary glimpse of the majestic totality of creation, a totality that Kepler knew was only properly comprehensible to its omniscient creator. He regarded the knowledge he was afforded—he himself also being a fragment of God’s divine plan—to be necessarily incomplete. Stevenson and the other artists I have discussed have also offered an impression of a world in which knowledge is made possible, but is also shaped and limited, by an obscured infrastructure or apparatus. In *A Life of Crudity*, Stevenson approached a general epistemological condition through a specific political history, not only demonstrating that questions about fate and the limits of knowledge are related to politics, but that

they are one and the same. The camera obscura in *A Life of Crudity* offered a limited view. In this, it was an analogue of the apparatus that is the world operating ceaselessly around us: the seamless, unauthored and incomprehensible coincidence of actions, processes and infrastructures which produces a mirage-like fragment that we can see. The submerged mass of ice that raises the iceberg's tip into the field of visibility remains itself invisible. However, like the rotations of the earth that produced the hours of daylight which in turn animated Stevenson's camera obscura, this invisible part is a condition of possibility for the visible fragment. The fact of its existence, however, can only be perceived indirectly, through its effects.

*Anna Parlane is a writer and occasional curator based in Melbourne. She is currently completing a PhD in art history at the University of Melbourne.*

## **Bibliography**

**Aczel, 2000:** Amir D. Aczel, *The Mystery of the Aleph: Mathematics, the Kabbalah, and the Search for Infinity*, New York: Four Walls Eight Windows, 2000.

**Aldrete, n.d.:** Jose Rios Aldrete, *Al General*, arrangements by Ismael de la Rosa, Elefante Records, n.d., LP recording.

**Baker, 2015:** Simon Baker, 'A Refusal to Float Free of Origin or Destination', in *Rear Views, a Star-Forming Nebula, and the Office of Foreign Propaganda: The Works of Taryn Simon*, exh. cat., London: Tate Publishing, 2015, pp. 7-10.

**Barr and Denny, 2015:** Mary Barr and Simon Denny, 'Mary Barr Talks to Simon Denny', in *Secret Power: Simon Denny*, exh. cat., Milan and London: Mousse Publishing and Koenig Books, 2015, pp. 95-98.

**Barrow, 2005:** John D. Barrow, *The Infinite Book: A Short Guide to the Boundless, Timeless and Endless*, London: Johnathan Cape, 2005.

**Bell-Villada, 1999:** Gene H. Bell-Villada, *Borges and his Fiction: A Guide to his Mind and Art*, Austin: University of Texas Press, 1999.

**Bhabha, 2015:** Homi K. Bhabha, 'Beyond Photography', in *Rear Views, a Star-Forming Nebula, and the Office of Foreign Propaganda: The Works of Taryn Simon*, exh. cat., London: Tate Publishing, 2015, pp. 222-31.

**Borges, 1977:** Jorge Luis Borges, *L'Aleph*, trans. Roger Caillois and René L.-F. Durand, Paris: Gallimard, 1977.

**Borges, 1998:** Jorge Luis Borges, *Collected Fictions*, trans. Andrew Hurley, New York: Viking, 1998.

**Brooke, 2000:** John Hedley Brooke, "'Wise Men Nowadays Think Otherwise": John Ray, Natural Theology and the Meanings of Anthropocentrism', *Notes and Records of the Royal Society of London* 54, no. 2, May 2000, pp. 199-213.

**Calloway, 2014:** Katherine Calloway, *Natural Theology in the Scientific Revolution: God's Scientists*, London: Pickering & Chatto, 2014.

**Cantor, 1954:** Georg Cantor, *Contributions to the Founding of the Theory of Transfinite Numbers* (1915), trans. Philip E. B. Jourdain, New York: Dover Publications, 1954.

**Clement, 2015:** Jennifer Clement, *Reading Humility in Early Modern England*, Farnham, Surrey and Burlington, VT: Ashgate, 2015.

**Crary, 1992:** Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, Cambridge, MA: MIT Press, 1992.

**Daston, 2015:** Lorraine Daston, 'Epistemic Images', in Alina Payne (ed), *Vision and Its Instruments: Art, Science, and Technology in Early Modern Europe*, University Park, PA: Pennsylvania State University Press, 2015, pp. 13-35.

**Daston and Galison, 2007:** Lorraine Daston and Peter Galison, *Objectivity*, New York: Zone Books, 2007.

**Greene, 1986:** Graham Greene, *Getting to Know the General: The story of an involvement*, Middlesex: Penguin Books, 1986.

**Grigsby Vado, 2004:** William Grigsby Vado, 'Nicaragua: Passionate Memories from Times of Solidarity', *Envío*, 276, July 2004, <http://www.envio.org.ni/articulo/2213>; accessed February 14, 2017.

**Hague, 2002:** Daryl Hague, "'There Is No History of Colonized Intellectuals': The Search for an Authentic Self in the Theatre of Chuchú Martínez', Ph.D diss., State University of New York at Binghamton, 2002.

**Joselit, 2012:** David Joselit, *After Art*, Princeton, NJ: Princeton University Press, 2012.

**Kempe, 1990:** Frederick Kempe, *Divorcing the Dictator: America's Bungled Affair with Noriega*, New York: G.P. Putnam's Sons, 1990.

**Kepler, 1951:** Johannes Kepler, *Johannes Kepler: Life and Letters*, ed. Carola Baumgardt, New York: Philosophical Library, 1951.

**Kepler, 1997:** Johannes Kepler, *The Harmony of the World* (1619), trans. with notes by E. J. Aiton, A. M. Duncan and J. V. Field, Philadelphia: American Philosophical Society, 1997.

**Kepler, 2000:** Johannes Kepler, *Optics: Paralipomena to Witelo and Optical Part of Astronomy* (1604), trans. William H. Donahue, Santa Fe: Green Lion Press, 2000.

**Kofman, 1998:** Sarah Kofman, *Camera Obscura: Of Ideology* (1973), trans. Will Straw, London: Athlone, 1998.

**Latour, 2005:** Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford and New York: Oxford University Press, 2005.

**Leonard, 2015:** Robert Leonard, 'Too Much Information', in *Secret Power: Simon Denny*, exh. cat., Milan and London: Mousse Publishing and Koenig Books, 2015, pp. 11-16.

**London, 2015:** *Simon Denny: Products for Organising*, exh. cat., London: Serpentine Sackler Gallery and Koenig Books, 2015

**Mangan 2015:** Nicholas Mangan, 'Progress in Action', Ph.D diss., Monash University, 2015.

**Marques, 1989:** Jaime G. Gomes Marques, *Panamá en la Encrucijada: Colonia o Nacion?*, Panama: Editorial Panamá, 1989.

**Martínez, 1987:** José de Jesús Martínez, *Mi General Torrijos*, Ciudad de La Habana: Casa de las Américas, 1987.

**Martínez 2012:** José de Jesús Martínez, *Teoría del Vuelo* (1979), trans. Michelle Suderman, Berlin, Mexico City and Frankfurt am Main: Verlag der Buchhandlung Walther König, Museo Tamayo Arte Contemporáneo and Portikus, 2012.

**MSA:** Berlin, Michael Stevenson Archive, artist's studio.

**Pardue, 2013:** Stephen Pardue, *The Mind of Christ: Humility and the Intellect in Early Christian Theology*, Huntingdon: Bloomsbury Publishing, 2013.

**Rodman, 1974:** Selden Rodman, *Tongues of Fallen Angels*, New York: New Directions, 1974.

**Russell, 2011:** Robert John Russell, 'God and Infinity: Theological Insights from Cantor's Mathematics,' in Michael Heller and W. Hugh Woodin (eds.), *Infinity: New Research Frontiers*, Cambridge: Cambridge University Press, 2011, pp. 275-89.



**Sante, 2004:** Luc Sante, 'Introduction', in Abelardo Morell, *Camera Obscura*, New York: Bulfinch Press, 2004, pp. 7-9.

**Scranton, 1991:** Margaret E. Scranton, *The Noriega Years: U.S.-Panamanian Relations, 1981-1990*, Boulder and London: Lynne Rienner Publishers, 1991.

**Smith, 2015:** Mark A. Smith, *From Sight to Light: The Passage from Ancient to Modern Optics*, Chicago: University of Chicago Press, 2015.

**Snyder, 2015:** Laura Snyder, *Eye of the Beholder: Johannes Vermeer, Antoni Van Leeuwenhoek, and the Reinvention of Seeing*, New York: WW Norton & Company, 2015.

**Stevenson, 2013:** Michael Stevenson, interview with the author, December 10, 2013, Berlin.

**Sussman and Kukielski, 2007:** Elisabeth Sussman and Tina Kukielski, 'Introduction', in *An American Index of the Hidden and Unfamiliar: Taryn Simon*, exh. cat., Göttingen: Steidl, 2007, pp. 11-15.

**Torrijos, 1985:** Omar Torrijos, *Omar, en su propia voz*, Indica, 1985, LP recording.

**Vance, 1983:** Cyrus Vance, *Hard Choices: Critical Years in America's Foreign Policy*, New York: Simon and Schuster, 1983.

**Venice, 2015:** *Secret Power: Simon Denny*, exh. cat., New Zealand Pavilion, 56<sup>th</sup> International Art Exhibition, La Biennale di Venezia, Milan and London: Mousse Publishing and Koenig Books, 2015.

## List of Illustrations

**Figure 1.** Michael Stevenson, *A Life of Crudity, Vulgarly, and Blindness*, 2012 (detail). Plexiglas, cardboard, wood, steel, mirror, buttermilk, sunlight, 16 x 8 x 17m. Installation at Portikus, Frankfurt am Main. Image courtesy of the artist and Portikus. Photo: Helena Schlichting.



**Figure 2.** Michael Stevenson, *A Life of Crudity, Vulgarity, and Blindness*, 2012 (detail). Plexiglas, cardboard, wood, steel, mirror, buttermilk, sunlight, 16 x 8 x 17m. Installation at Portikus, Frankfurt am Main. Image courtesy of the artist and Portikus. Photo: Helena Schlichting.



**Figure 3.** Michael Stevenson, *A Life of Crudity, Vulgarity, and Blindness*, 2012 (detail). Plexiglas, cardboard, wood, steel, mirror, buttermilk, sunlight, 16 x 8 x 17m. Installation at Portikus, Frankfurt am Main. Image courtesy of the artist and Portikus. Photo: Helena Schlichting.





**Figure 4.** Michael Stevenson, *A Life of Crudity, Vulgarity, and Blindness*, 2012 (detail). Plexiglas, cardboard, wood, steel, mirror, buttermilk, sunlight, 16 x 8 x 17m. Installation at Portikus, Frankfurt am Main. Image courtesy of the artist and Portikus. Photo: Helena Schlichting.



**Figure 5.** Ryan Gander, *Ampersand*, 2012. Private collection of 66 objects, conveyor belt display device, viewing window, Eames lounge chair, dimensions variable. Ishikawa Collection, Okayama. Installation at Australian Centre for Contemporary Art, Melbourne, 2015. ©Ryan Gander/DACS. Licensed by Viscopy, 2017. Image courtesy of the artist. Photo: Andrew Curtis.



**Figure 6.** Simon Denny, *Secret Power*, 2015 (detail). Mixed media installation, dimensions variable. Installation at Biblioteca Nazionale Marciana, New Zealand Pavilion, La Biennale di Venezia. Image courtesy of the artist and Michael Lett, Auckland. Photo: Jens Ziehe.





**Figure 7.** Simon Denny, *Modded Server-Rack Display with Some Interpretations of David Darchicourt Designs for NSA Defense Intelligence*, exhibited as part of *Secret Power*, 2015. Mixed media installation, dimensions variable. Installation at Biblioteca Nazionale Marciana, New Zealand Pavilion, La Biennale di Venezia. Image courtesy of the artist and Michael Lett, Auckland. Photo: Nick Ash.

