

## Introduction

# The Anamorphic Image

Samuel Pepys, compulsive diarist and naval secretary to Charles II during the Restoration period in England, remarks in one of his daily entries about spending the evening experimenting with a new perspective tube and pictures that “deluded the eyes,” causing Pepys to exclaim that such devices “would make a man doubtful that he ever saw anything.”<sup>1</sup> Several entries later we find him disturbed by a dream that depicts him standing over his dying mother, looking down from another angle only to discover that her visage has morphed into that of a young, unfamiliar woman. Pepys is referring in these examples to the imaginary and physical forms of anamorphic affect.

Hans Holbein’s *The Ambassadors* (Figure I.1) is the most widely-known example of anamorphosis. The impact of anamorphosis depends on the inscription of two images or portraits within a single viewing area. Typically, a viewer would be required to shift their position physically in order to see an alternate image within the portrait or scene, usually rendered along a second perspective geometrical plane. In the case of *The Ambassadors*, the viewer moves to the right and, glancing back at the portrait, glimpses not the iconic representation of the two ambassadors as seen from the front view, but a suddenly apparent mortality/morality tale in the form of a perfectly realized skull, a *memento mori*.

The perceptual doubling of anamorphosis produces a rupture in the viewer’s gaze and disrupts the stability of the object under view. Anamorphosis is at base a medium that enacts the suspension of temporal and spatial orientation. Holbein’s painting appears to look back at the viewer, to demand that the spectator actively engage the artwork’s virtual affects. A crucial aspect of the anamorphic experience, then, is the way in which it requires that the experience be written on the body, that the body carry with it the cognitive and autonomic traces of having been unmoored from perceptual anchors and pushed into a mode of spectatorship caught up in affective intensity and perceptual uncertainty.<sup>2</sup>

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<sup>1</sup> Samuel Pepys, “September 21st, 1664” in *The Diary of Samuel Pepys: A New and Complete Transcription*, (eds) Robert Latham, William Matthews, and William A. Armstrong (Berkeley, 2000), p. 277.

<sup>2</sup> Throughout this project I will be working with and developing theories and models of affect from several disciplinary angles, from work on embodiment by Gilles Deleuze and Sara Ahmed, to Simon Penny’s “procedural aesthetics” within new media studies. For the purposes of an opening: affect denotes the inscriptions of sensory and bodily experience that can influence an event but may not be expected or conceptually pre-defined. Brian Massumi discusses affect as “a prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body’s capacity to act.” Amy Herzog describes affect as “a fluid play of intensities, sensations and thought that disintegrates the distinction between ‘subject’ and ‘object’.” Gilles Deleuze,



Fig. 1.1 Hans Holbein the Younger's *The Ambassadors* (1543). Courtesy of the National Gallery, London, UK.

Jacques Lacan first drew critical attention to the Renaissance figure of anamorphosis and Holbein's portrait in his lectures on psychoanalysis and art. Lacan describes anamorphosis as "any kind of construction that is made in such a way that by means of an optical transposition a certain form that wasn't

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*The Fold: Leibniz and the Baroque*, trans. Tom Conley (Minneapolis, 1992); Sara Ahmed, *Queer Phenomenology: Orientations, Objects, Others* (Durham and London, 2006); Simon Penny, "Representation, Enaction, and the Ethics of Simulation," (2004), <<http://ace.uci.edu/penny/texts/ethicsofsimulation.html>>; accessed, October, 2007; Brian Massumi, "The Autonomy of Affect," *Cultural Critique*, 31 (1995): pp. 83–109; Amy Herzog, "Affectivity, Becoming, and the Cinematic Event: Gilles Deleuze and the Futures of Feminist Film Theory" in A. Koivunen and S. Paasonen (eds), *Conference proceedings for Affective Encounters: Rethinking Embodiment in Feminist Media Studies* (Turku, 2001), pp. 83–8.

visible at first sight transforms itself into a readable image.”<sup>3</sup> Within the context of psychoanalysis, anamorphic media perform the “gaze imagined by me in the field of the Other.”<sup>4</sup> In Lacan’s reading, the breaking off and splitting of the gaze required by anamorphic displacement mediates an “annihilation of the [humanitas] subject” as the participant confronts the separation of the Real and the signifier.<sup>5</sup> The “death” of a coherent reading/viewing humanist subject informs Stephen Greenblatt’s new historicist reading of the Holbein portrait as well, when he observes that the portrait threatens to undermine “the very concept of locatable reality upon which we conventionally rely in our mappings of the world, to subordinate the sign systems we so confidently use to a larger doubt.”<sup>6</sup>

Yet, what is so striking about Pepys’s expressions on one of the many anamorphic technologies and figures so popular throughout the period (an experience reflected in the many examples I will pursue in this book), and the attending psychical anamorphosis of the aspect of his dying mother, is the way in which mediating technology and psyche seem to speak across and back to one another. The “delusion” of the perspective technology becomes, at the level of information and image, both a supplement to and a parallel for the imaginary. In this vein, Frederick Kittler has showed us a kind of transference between the “essences” of human productive life and the materiality of new perceptual media. The maturation of optics, acoustics, and other related technosciences, Kittler espouses, allows for a separation between “matter” and “information.” Such a separation performs a fundamental shift: “essence escapes into apparatuses.”<sup>7</sup>

It is the form and action of “escape” implied by anamorphic images and techne that this project is most concerned with.<sup>8</sup> For, as Pepys’s dreaming and discoursing on perspective reveal, this transference of “essence” is not a complete circuit. The anamorphic images in Pepys’s dream are ghosts that haunt seventeenth-

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<sup>3</sup> Jacques Lacan, *The Ethics of Psychoanalysis 1959–1960: The Seminar of Jacques Lacan*, trans. D. Potter, (New York, 1992), p. 35.

<sup>4</sup> Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis*, (ed.) Jacques-Alain Miller and trans. Alan Sheridan, (New York, 1981), p. 84.

<sup>5</sup> “All this shows that at the very heart of the period in which the subject emerged and geometrical optics was an object of research, Holbein makes visible for us here something that is simply the subject as annihilated” (*Four Fundamental Concepts*, pp. 88–9). The anamorphic object is not unrelated to the mirror stage for Lacan, a moment where the child identifies with a mirror image of itself, while at the same time registering separation between the space of the Real and the image.

<sup>6</sup> Stephen Greenblatt, *Renaissance Self-Fashioning: From More to Shakespeare* (Chicago, 1983), p. 21.

<sup>7</sup> Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford, 1999), p. 16.

<sup>8</sup> I should clarify here that while I will be focusing at times on the structural and technical forms of anamorphic perspective, I am equally focused on tracing and defining what I view as the anamorphic energies that circulate through other textual, imagistic, and technical perceptual and perspective devices and figures in the early-modern period.

century psychic life as well as the genealogy of optical machines that ultimately transform the empirical procedures that judicate the micro and macro aspects of life itself. “Animation” is a term that takes on new meaning with the development of the camera obscura, perspectival devices and installations, the microscope, and, eventually, the cinematic image. The complexity of techne in this sense implies something far more interesting than new media forms envisioned as either extensions of our physical capacities or reflections of already predetermined or emergent social or individual identities and potentials.

This dual movement between the deluding devices of Pepys’s curio cabinet and his dreamscape exemplifies the importance of this emergent technomedia to the formation of a cultural imaginary: as a kind of virtual theatre where the projected and mediated images of intimate interaction feed back into formations of a collective me/we/us. Thus, new media devices such as anamorphic perspective function as virtual life forms—object-events that are deeply inscribed in the feedback loops and “process[es] of a living cultural system.”<sup>9</sup> The “thingness” of objects of perception—objects that proliferate on both the micro level (perception; cognition; psyche) and the macro plane (empiricism; panoptics; the “vanishing point”)—chaotically alter material conditions and abstract meaning making in several dimensions simultaneously (perception, affective/interactive states, economic and authorship values, aesthetics, and political representation).

Anamorphic perspective is particularly compelling in this sense because it has such immediate power at the level of the cultural and subjective imaginary: anamorphic “devices” produce affects that are inscribed in newly-emerging techniques of truth production and emergent models of time, space, and individual and collective perceptual life. As Bryan Reynolds has termed it, “events” like anamorphic perspective are “transversal,” and thus make social change possible because they occupy and de-stabilize multiple conceptual and affective registers at once.<sup>10</sup> The anamorphic experience is caught up in formative processes related to value (“vanishing point”), conceptual knowledge (the “meta-subject” of empiricism and political representation), aesthetics (the virtual view and “the real”), and embodied cognition and emotive affect.<sup>11</sup>

Anamorphic technomedia and the imaginary figures and processes that commune with them possess both the power of the catalyst and the mnemonic. That is, the “double” action of the anamorphic experience does not just divide and proliferate perceptual agency and meaning, it “records” such displacements

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<sup>9</sup> Gabriele Schwab, “Reader-Response and the Aesthetic Experience of Otherness,” *Stanford Literary Review*, 3/1 (1986): pp. 107–36. See also, “Subjects Without Selves” *Transitional Texts in Modern Fiction* (Cambridge, 1994).

<sup>10</sup> Bryan Reynolds, *Transversal Enterprises in the Drama of Shakespeare and his Contemporaries: Fugitive Explorations* (New York, 2006).

<sup>11</sup> See, Brian Rotman, *Signifying Nothing: The Semiotics of Zero* (New York, 1987), for the connection between the formation of the “meta-subject” in relation to the perspectival vanishing point. For a discussion of perspective’s connection to capitalism, landscape, and territorial value, see Raymond Williams, *The Country and the City* (Oxford, 1975).

through its requirement that the experience be at least in part interactive and autonomic. The body carries with it traces of the anamorphic experience through the intensification of cognitive and perceptual affect; an intensified affect that is at once viscerally unsettling and familiar, while troubling the representational field. Thus, the experience of alterity that anamorphic mediation makes possible persists as both bodily displacement and social memory. This would imply that running parallel to the formation of “empirical” or “Cartesian” consciousness in the seventeenth century—ideologies often calculated through the “invention” and dispersion of perspective and its conceptual machinery—are embodied mentalities that are dependent upon a perceptual state of open indetermination and “becoming.” Such emergences emanate from within networks or “assemblages” of relations between mediating objects, the virtual and mutable fictions of “inside” and “outside” (in both the corporeal and psychic sense), and the physical and conceptual infrastructure of early modern empiricism.

Indeed, Lyle Massey has shown recently that many of the stories told about the development of linear perspective more generally (see Figure I.2) amount to optical illusions when viewed in light of the bodily and physical contexts for perspective practice. When you add the body back in to the theories and mathematics of perspective, you get not the controlling and panoptic Cartesian eye so much as amazing ambiguities over embodied views, representational truths, and deceptive projections. Moreover, as Massey uncovers, the anamorphic stresses on perspective itself are mirrored in twentieth-century interpretations of perspective that result in a further double vision: the clear line of perspective ratio-mathematics as an image of the Western enlightenment seen from one side (“hard” mathematical science); and the subjective territories and plurality of humanist aesthetics from the other (“soft” art).<sup>12</sup>

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<sup>12</sup> Lyle Massey, *Picturing Space, Displacing Bodies: Anamorphosis in Early Modern Theories of Perspective* (University Park, 2007). There have been several significant studies of the history of perspective from both art historical and mathematical-scientific angles, and I will refer to many of these throughout this book. Svetlana Alpers, *The Art of Describing: Dutch Art in the Seventeenth Century* (Chicago, 1983); Hubert Damisch, *The Origin of Perspective*, trans. John Goodman (Cambridge, 1995); James Elkins, *The Poetics of Perspective* (Ithaca, 1994); Samuel Edgerton, *The Renaissance Rediscovery of Linear Perspective* (New York, 1975); E.H. Gombrich, *Art and Illusion* (New York, 1960); William Ivins, *Art & Geometry: A Study in Space Intuitions* (Cambridge, 1946); Martin Kemp, *The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat* (New Haven, 1990); Erwin Panofsky, *Perspective as Symbolic Form*, trans. Christopher Wood (New York, 1991); Kim H. Veltman, *Linear Perspective and the Visual Dimensions of Science and Art, Studies on Leonardo da Vinci 1* (Munich, 1986); Williams, *The Country and the City*. For some further examples of anamorphosis as a literary and figural device throughout early modern literature, see also Lyle Massey, “Anamorphosis Through Descartes or Anamorphosis Gone Awry,” *Renaissance Quarterly*, 50/4 (1997): pp. 1148–9, and Alison Thorne, *Vision and Rhetoric in Shakespeare: Looking through Language* (New York, 2000).

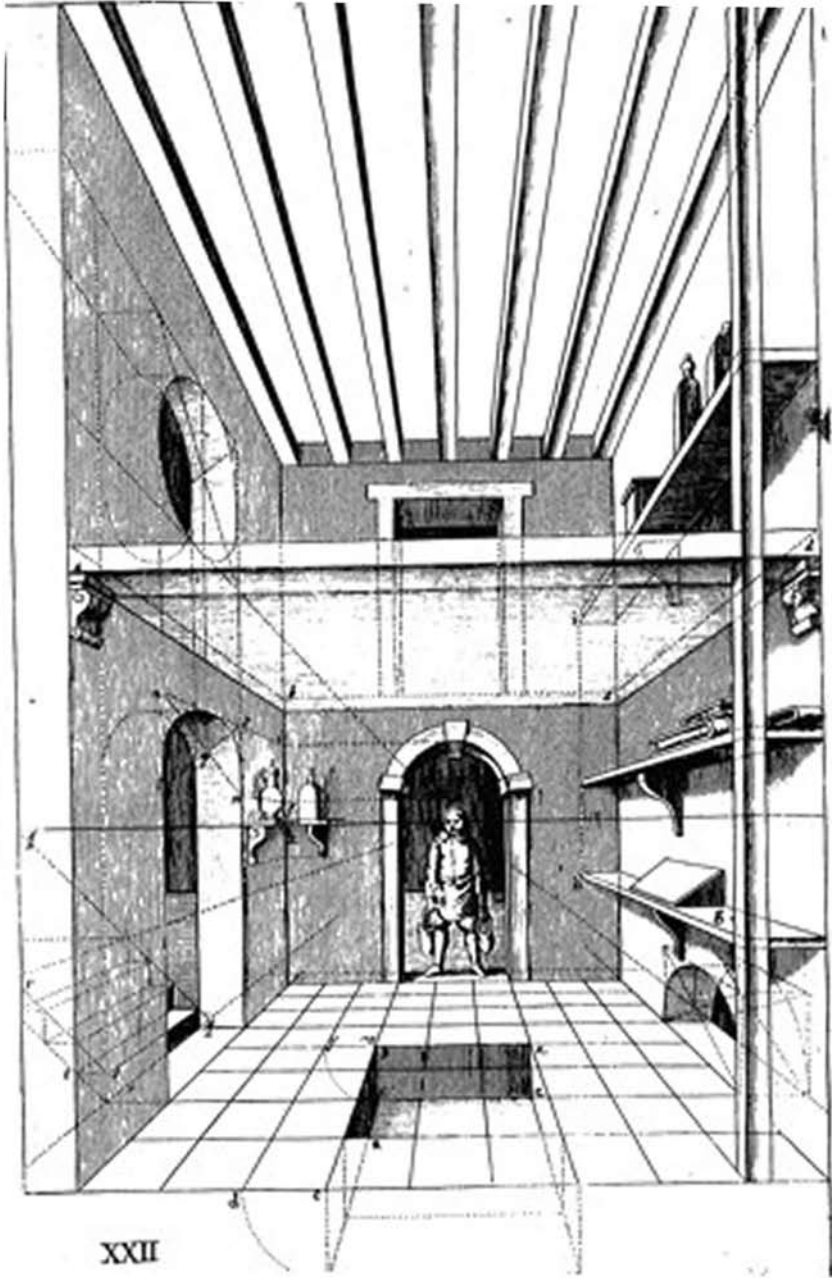


Fig. 1.2

Demonstration of vanishing point perspective, Joseph Moxon's *Practical Perspective* (1670). Courtesy of Smithsonian Institution Libraries, Washington, DC.

I want to argue for something more at stake here, however, than an opportunity to revise the ascendance of value systems and embodied aesthetics related to panoptic or non-panoptic perspective systems; or even the confused reciprocity of looking and controlling implied by Michel Foucault's stunning interpretation of perspectival disorder in Diego Velasquez's *Las Meninas*.<sup>13</sup> At stake in my exploration of anamorphosis in early modern literature and technoscience is the intimate confusion of mediation via the technical interface and the methodologies of reading mediated bodies in and out of history. As such, at one level, this book is about anamorphosis as way of reading for embodiment as "events" of becoming within early modern anamorphic media and figures; as places where the entanglement of technics, bodies, texts, and interactive spaces became unstable sites of mediated perception and bodily and social meaning. Early modern anamorphic media betray a complex co-evolution of the technological interface with larger shifts in perception and embodiment, and amid creative events for cognitive-, affective-, and subjective-becoming in the world. These are events imbued with transversal movement, seductive power, and ethical possibility—events of becoming that are ghosts to our own hallucinatory geometries in the present: games, satellites, webs, and interfaces.

At another level, however, this project is concerned with how anamorphic mediation implies a different relationship to perceptual, autonomic, and historical temporality more broadly speaking. Anamorphic events are events that promote affective meaning as temporally out of sync, as "askew," in the early modern sense, to what is conceptually coherent and familiar. As my readings in the chapters that follow demonstrate, anamorphic events in the early modern period are often performative sites that literally render and reproduce "askew" embodiments. We find such embodiments in the bodily desire of *simulacra* that emerge within Epicurean notions of mediated perception, a hugely popular genre throughout the Restoration in particular that found its way into a variety of literary genres, and that was pervasive in the interactive spaces of merchant-class perspective and mathematical manuals (see Figures I.3, I.4, and I.5). Nor is such anamorphic energy absent from the more conventional scientific and philosophical explorations into optics and perspective. When Robert Hooke declares that the small particles under his microscope are "bent on liberty," we should feel the warping (indeed baroquely aggressive) transformation of these bodies as much as we register the call out to the concept of enlightened liberty.<sup>14</sup>

Anamorphosis not only warps the bodies that are mediated at the intersections of early modern literature and technoscience, it also skews our sense of historical temporality. As Valerie Rohy has brought to light, even askew, queer, or revisionist histories often support the notion that "doing history" is a productive alterity in

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<sup>13</sup> Michel Foucault, "Las Meninas" in *The Order of Things: An Archaeology of the Human Sciences* (New York, 1970), pp. 3–11.

<sup>14</sup> Robert Hooke, *Micrographia: or some physiological descriptions of minute bodies made by magnifying glasses: with observations and inquiries thereupon* (London, 1667).



Fig. I.3 Frontispiece, Jean Nicéron's *La Perspective Curieuse* (1652).  
Courtesy of Smithsonian Institution Libraries, Washington, DC.

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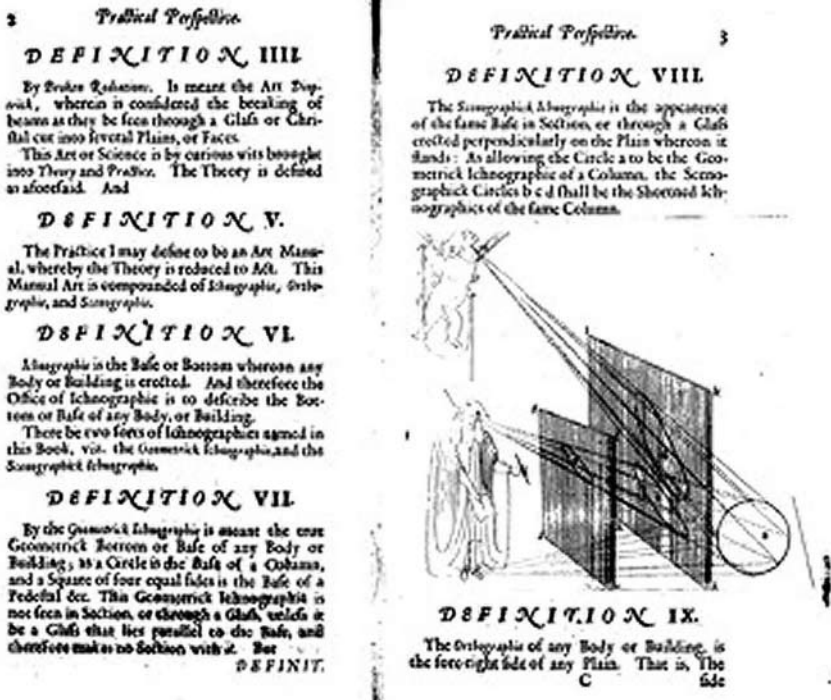


Fig. I.4 “Diversity of Horizons,” Joseph Moxon’s *Practical Perspective* (1689).  
Courtesy of Smithsonian Institution Libraries, Washington, DC.

its own right. That is, the charge to “always historicize” is a call to action for those wishing to write certain bodies out of history, as well as those who would rediscover those bodies, objects and desires hidden from history.<sup>15</sup> Rohy points alternatively to a “double temporality” as a mode of reading that would attend to “the relation between the writing of history as prediction and as retrospection.” Not surprisingly, she draws on anamorphosis as a figure for as much. In this sense, anamorphosis is an event that turns on the procedures of “turning around as you leave” to see the skull for what it is, to see the “trauma” of what symbolization and representation covers over. This backward glance is less about recovering a truth than it is glimpsing a ghost: to encounter over and again “the non-contemporaneity of present time with itself ... to think the ghost.”<sup>16</sup> This leads to a (future) promise of doing something else with history; of pursuing a “phantasmic historiography” that would do something else with the past in the present. Such creative, transversal

<sup>15</sup> Valerie Rohy, “Ahistorical,” *GLQ: A Journal of Lesbian and Gay Studies*, 12/1 (2006): pp. 61–83.

<sup>16</sup> Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International*, trans. Peggy Kamuf (New York, 1994) as quoted in Rohy, p. 77.

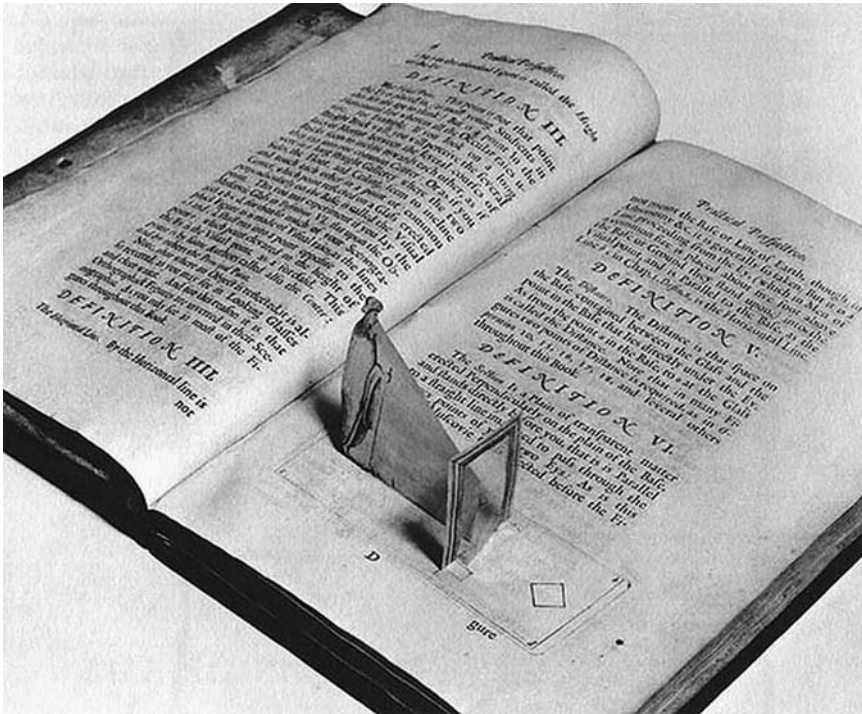


Fig. I.5 “Pop-up” demonstration of perspective, Joseph Moxon’s *Practical Perspective* (1670). Courtesy of Smithsonian Institution Libraries, Washington, DC.

“temporal violation” engages “the alterity of not only history but also of our own desire” as scholars, artists, producers, and mediators in the present.<sup>17</sup>

This appeal to an anamorphic history, then, brings forward the competing emphasis in this project on new media studies. To this end, I look to early modern anamorphosis as way of thinking with other possible present-futures in our mediated moment. Yet, this is not a nostalgic look back that looks to find that we have always been cyber/hybrid/image-mediated, and to declare simply that early-modern technomediation was all along other to itself. Rather, it is my hope that this phantasmic anamorphic historiography points to other ways of thinking about and with mediated embodiment in time. The “turning” as you leave required by anamorphosis is a double to Samuel Weber’s “passing glance” that informs his revisions to a mediated temporality that has become central to the emplacement of the subject in Western thought.<sup>18</sup> Weber elicits the etymologies of mediation

<sup>17</sup> Rohy, p. 77.

<sup>18</sup> Samuel Weber, *Mass Mediauras: Form, Technics, Media* (Stanford, 1996); and *Theatricality as Medium* (New York, 2004).

as uncanny turns, returns, and repetitions. The “emplacement” of the subject in philosophy, Weber shows, is a function of how we engage with the unfolding of image-objects. Re-visiting the Hegelian concept of mediation, Weber asks us to look for mediations that are not repetitions offering the illusion of change, of new futures, that simply return us safely (often tragically) to the same place.

Is there a sense, then, as we confront (again) a newly-mediated world, that we could imagine something other than reproducibility of the same: that we might think with the ghostly bodies of anamorphosis, and amid temporalities that are transversal to the past, present, future as we have come to imagine and embody them? I find in anamorphosis a competing genealogy to the development of perceptual technics. The prevalence of experimentation with anamorphics in the early-modern period in literature, landscape design and public art, as well as political and natural philosophy, reveals a contact between perception and mediation that faces rather than erases alterity. Such encounters produce askew temporal registers that call forth a somatic memory based in the experience of difference—deferral in time, and its openings and possibilities—as a kind of autonomic responsibility.

The period under study here, roughly from the execution of Charles I to the opening of the eighteenth century, is significant precisely because it signals a dramatic shift in perceptions surrounding temporality and subjectivity. This is true both in terms of the articulations of this crisis that we find in the texts and images of the period, but also in the ways in which the period is read retroactively as a crucial site for the emergence of the juridical, scientific, and political structures of western modernity. Principal to the experimental flux of anamorphosis is a kind of feedback loop between the spatial and temporal aspects of the image, and the affective intensities associated with such interactions. Such interactions not only point to the co-evolution of conceptual structures and mediating technologies, but to the “co-existence of contraries” within structures of feeling that anticipate, revive, or evade conceptual meaning.<sup>19</sup> To this end, mediated perception becomes a crucial site for sensations and experiences that are outside of, prior to, or in anticipation of what Davide Panagia has referred to as aesthetic and political “narratocracy.”<sup>20</sup> That is anamorphic sensation and perception are events of aesthetic and political sense-making that exceed conventional modes of analysis and the more visible conceptual machinery. In this sense, anamorphic mediation is a double take on larger theological and political questions of embodiment, temporality, and representation in the period, especially with respect to the increasing importance of image transmission amid the new science and new modes and forums for media within the civil polity.

The story in Chapter 1 begins with a genealogy of material ghosts: the extensive archive of perspective and mathematical “recreations” manuals from

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<sup>19</sup> Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton, (New York, 1994), p. 141.

<sup>20</sup> Davide Panagia, *The Political Life of Sensation* (Durham, 2009).

the mid-1600s to the mid-1700s. Initially cultivated in England and France as an “interactive” genre (appearing as textbooks on the artistic and engineering practices of projective and vanishing point perspective that included tubes, machines, and displays for modeling purposes), the production of perspective manuals triples in the seventeenth century. While these texts are slowly re-translated as demonstrations of English superiority in the fields of optics and empirical technoscience, throughout the early modern period and beyond they carry with them traces of earlier influences, including the rhizomatic theories and structures of earlier eastern studies of cognition and optics, as well as the practices and poetics of Epicurean philosophy. The fascination with Epicurean embodiment and perception in the mid-1600s in England, a philosophical poetics that refused the regulation of the boundaries between subjects and objects and the fixity of identity, exemplified how creative play with the idea of the *simulacra*—perceptual “skins” and screens that move, transform, and affect bodily composition and response—offer alternatives for thinking through mediation and alterity. Epicurean perception haunts the Enlightenment and its afterlives: Henri Bergson, Gilles Deleuze, and Karl Marx are all conjurers of Epicureanism. I end this section with a look at how anamorphosis appears as a troubling ghost to Thomas Hobbes’ idea of the mediated embodiment of the sovereign, and how the virtuality of “double perception” haunts collective and individual will within the civil polity of the Commonwealth.

W.J.T. Mitchell highlights the complex negotiations over the image in early modern England when he argues that it is only “a slight exaggeration to say that the English Civil War was fought over the question of images.”<sup>21</sup> The iconoclastic arguments in the mid-seventeenth century were central to debates over embodied representation and theo-political power (the persona and figure of the king, as well as the immersive power of theological icons and images). Iconoclasm and iconophilia are at base invested in the confluence of mediation, proximity, and the image’s impact on embodied perception. Thus, image technologies that incur new openings and possibilities for perceptual and sensorial experience become crucial sites for investigating how the “idea of God” becomes incorporated in new ways with the technologically-mediated image. Anamorphic perspective figures prominently in Milton’s Restoration-era epic, *Paradise Lost*. The importance of anamorphosis in Milton’s text, I argue in Chapter 2, lies in the ethical dimensions of mediated images that produce modes of affect via embodied experience, but which also result in an open-ended unfolding of sense and meaning. Milton draws on the embodied and interactive performances of anamorphosis to explore theological affect, the “felt” experience of the divine as an embodied phenomenon. These mediated phenomena create bodily and mental confusion about the veracity of perception. Such affects offer up the experience of autonomic alterity—spatial and temporal “difference”—as embodied events.

<sup>21</sup> W.J.T. Mitchell, “What is an Image?” *New Literary History*, 15/3 (1984): pp. 503–37.

The merging of political life and natural life through biopolitics, understood as the mediation of politics through modes of biomedial and *in potentia* life forms, has become a central concern of contemporary critical and political theory. This nexus is at the heart of some of the earliest ruminations on modern political representation, and as I pursue in Chapter 3, is imbued early on with the imaginary and real-time experiences of mediated embodiment. In the philosophical thought of Leibniz, for example, the very concept of the social body of the city is explored through the figures of perspective monads. These geometrical yet animate monads thrive at the threshold of corporeality and imaginary social space. This chapter finds earlier remnants of these figures in Margaret Cavendish's utopian science fiction romance and her work on experimental philosophy. Cavendish engages with many of the same concerns found in Leibniz's philosophy and mathematics, but extends these ideas to consider gender, desire, embodiment, and mediated knowledge. In summary, Cavendish envisions an alternative to the empirical technoscience flourishing at her moment through her creative imaginings of "corporeal figurative motions." These corporeal figurations are grafted in Cavendish's utopian romance with the mathematics of the "cabala," a system that brings together projective geometries, queer passion, and theories of mediation. This system is expressed as a form of allegorical hermaphroditism. Cavendish's writings anticipate a political and technological shift in Western philosophy toward biopolitics, a system that refigures the separation between projected imaginary spaces and the mediation of corporeality and affect.

I return to anamorphic structures in the thematic and structural senses in Milton's poetic figures in Chapter 4. *Paradise Lost* invites us to experience perspective as a virtual imaginary in early-modern England, as a geometrical, spatial and temporal media that informed and enacted new modes of perception and made possible new imaginaries of communication and social interaction. The chapter ends with a discussion of the influence of anamorphic technics on Milton's "askew" take on space and time via allegory. These temporal and spatial registers inform Milton's investment in a model of temporality that is at once political and historical: a mediated temporality that incorporates "passion" (autonomic suspension and immediacy) as a model of progression that, while not outside of history, thrives separately from the linear plotting of time.

Perspective *techne* moves with the times. In a little-known 1697 essay, Daniel Defoe refers to the spirit and action of his time as the "Projecting Age." Defoe makes clear that "projecting" is central to "matters of negotiation" and the methods of "civil polity, which we see this age arrived to." Defoe goes on to express his fears over the "inventions" of the projecting age, everything from "instruments for the art of war" to new "engines" that appear and then disappear like "abortions of the brain." The unsettling conjunction of metaphors of destruction and human reproduction in Defoe's description betrays a persistent genealogy to perceptual technologies. Chapter 5 explores the centrality of mediated perception and geometrical perspective to a theme that informs much of the scientific and philosophical work of the two centuries to follow, territorial reproduction. The

chapter explores a confounding tension that appears amid the capacity for new modes of mediated perspectival perception. Namely, the embrace of the promise of reproduction (social and corporeal) attendant upon mediated spaces (virtual and actual) struggling with the intense counter-desire for mapping, surveillance, and spatial definition. In Defoe's *Journal of the Plague Year* and *Robinson Crusoe* I trace these exchanges across image mediations, descriptions of embodied affect, and projective surveillance. Rather than a site where bodies are successfully surveilled and disciplined, Defoe's fiction points to the instabilities surrounding projective phantasies. I close this chapter with a reading of Defoe's ironic treatment of perspective and the virtual control of space as an anamorphic mapping.

In Chapter 6, I return to the figure of the ghost. Epicurean perception persists as a ghost to more conventional models of Cartesian perspective and perceptive capacities. Lucretius's image-ghosts haunt our past theories of mediated perception and the present-future of techno-perception. The ghostly traumas and "speaking sights" of Daniel Defoe's *Journal of the Plague Year* are examples of the technics and technologies of Lucretian perception, past and present. Recent neurocognitive research made possible by the image mapping of mirror neurons is just one example of a return to Lucretian perception. Mirror neurons, electro-chemical pulses in the brain that respond to witnessed acts and behaviors as if they were occurring internally, speak to the formation of consciousness as an emanation from the flows between the "states" of subjects and objects, and as events of becoming that operate, as Barbara Stafford has phrased it, as affective "echoes" rather than mimetic forms. This final chapter strives for a model of phantasmic perception.

Malcolm McCullough has argued that the interactive arts and sciences will become the principal liberal arts of the twenty-first century.<sup>22</sup> His assertion is based on an understanding of new media environments on the order of the impact of the printing press in the early Renaissance. Running parallel to all of the progressive potential of new media images and texts is the very real possibility that we will re-cast digital embodiment as a radical break with the past. This possibility is troubling for a couple reasons. First, in our attempts to celebrate the "new" in new media we may once again miss opportunities to re-read the significance of the histories and technologies that led up to this moment as events happening *through* our own moment. Second, and perhaps even more importantly, looking obliquely at our own highly-mediated moment may offer us some alternative vocabularies and approaches to new technologies and the virtual-digital as (differently) embodied aesthetic, cognitive, and political forces. We are becoming to our ghosts.

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<sup>22</sup> Malcolm McCullough, *Digital Ground: Architecture, Pervasive Computing, and Environmental Knowing*, (Cambridge, 2005).