

ONE

A Theoretical Framework

INTRODUCTION

Beginning with the ancient Greeks, as evident in the writings of Plato and even in the case of such pre-Socratic thinkers as Heraclitus and Parmenides, vision has been provided an extraordinary status in Western philosophy, culture, and religion. Hannah Arendt has observed that “from the very outset, in formal philosophy, thinking has been thought of in terms of seeing,¹ to the extent that seeing has become the taken for granted of thought. Ocular epistemology has not only been present in the discourses of the church—hence the image of a “beatific Vision” and its claim that only the spiritually pure will “see God”—but in the emerging sciences as well, a model of vision made possible the self-transparency of the object and the production of specific truth-effects. Indeed, from Aquinas to Descartes, this most noble of senses has been deeply implicated in a narcissistic will to power and has exerted a powerful hegemony in the West.

A number of thinkers have argued that modernity consists of the powerful privileging of vision and that it represents a distinctive ocular-centric paradigm, quite different from the organization of vision in previous epochs. For instance, Heidegger has spoken of the ocularcentrism of the modern age as driven by a nihilism that reduces every presence to images and representations.² Derrida likewise views the hegemony of modern vision as an attempt to establish a metaphysics of presence.³ And Nietzsche, in turn, critiqued the progressive endeavor to subjugate reality, to overcome otherness and difference, and to make everything present to the inspection of an imperial Gaze as resulting in the neces-

sary production of a seductive illusion.⁴ In response, Nietzsche proposed an alternative conception of multiplying perspectives, in which it is not the violence of light that dominates but an illuminating vision that flickers between presence and absence, concealment and disclosure.⁵

The question of a modern vision underscores the fact that concepts of seeing must be viewed as historically specific—not only embedded in particular ocular epistemologies organized by optical and discursive figures, but linked to specific discourses and forms of social power, and consequently a particular matrix for organizing the relations between observer and observed, the visible and the invisible. Modern perception must be viewed as a consequence of transformations in discursive and nondiscursive practices that reflect the changing structures, conventions, and field of possibilities within which an observer will operate.⁶ The invention of photography is a crucial moment in the development of a modern structure of vision and is both constitutive of and constituted by a modern ocular paradigm; its operations are dependent on the larger ocular and cultural formation within which it is deployed, its investment-effect constituted by a particular ensemble of discourses and practices, and specific forms of subject-object relations. In fact, in legitimizing specific forms of subject-object relations, technologies of vision like photography, embedded within particular discursive and cultural formations, organize specific relations between knowledge, power, and the body.⁷ Vision is irrevocably tied to domains of knowledge, arrangements in social space, lines of force and visibility, and a particular organization of bodies.

In order to understand photography's relation with the body in the nineteenth century,⁸ we must not only examine the discourses and practices within which photography operated at different levels of the social formation to produce specific bodies, but the ocular epistemology within which these practices are constituted, shaped, and given meaning. In the nineteenth century, a powerful ocular epistemology that organized photography's functioning at critical sites of the social formation was Cartesian perspectivalism;⁹ it was a visual order comprised of Cartesian discourses of rationality and such precursors to the camera as the technical figures of linear perspective and the camera obscura. An ocular paradigm with its particular delineation of the relation of perceiving subject to external world which helped establish a realist fiction

and a monadic viewpoint, it was crucial to photography's functioning within disciplinary institutions in the nineteenth century. Hence this model of vision, by determining the deployment of photographic practices, assisted in materially investing the body in power relations. Given the importance of this paradigm of vision in organizing and constituting photographic practices and producing specific effects of power, it is imperative that we explore the epistemological nature and field of its operations.¹⁰

AN EPISTEMOLOGICAL PROFILE OF THE CAMERA

Artificial Perspective

The modern scopic regime was ushered in with the invention of linear perspective in the Italian Quattrocento. If we are to specify the moment of its genesis, it would be the day in Florence in 1425 when Filippo Brunelleschi conducted his Baptistery-view experiments, thus introducing the Western world to the perceptual significance of the "vanishing point."¹¹ The experiment that is relevant to our present purposes was conducted in the following manner. On a small "half-braccio"¹² square panel, Brunelleschi painted the Baptistery, the piazza in front of it and familiar landmarks on either side, from a point within the central portal of the cathedral opposite the Baptistery. The painting itself, as Edgerton points out, would have been copied from a reflection on a mirror positioned in the very same place.¹³ The mirror, serving as a base to Brunelleschi's "visual pyramid," would show all the lines of the piazza converging onto points identical with his optical plane, thus enabling him to establish the vanishing point which he then transferred in the form of a dot to the same location in the square panel. Once the painting was completed, Brunelleschi drilled a small hole through the back of the painted panel in the same position as the centric point. We may then assume that he asked a volunteer to stand in the same position, within the central portal of the cathedral opposite the Baptistery, and instructed the volunteer to hold the painted panel in one hand, and peer in a monocular manner through the back of the panel at a mirror held in the other hand directly in front of the panel which reflected the painting.¹⁴ One may imagine that the mirror was to be lifted up or dropped down, at one moment revealing the Baptistery, and at another moment the reflection, thus rendering the illusion significant, consistent, and

complete.¹⁵ The illusion was especially significant, because the experiment not only pointed to the existence of a single, unifying vanishing point (the viewer observing the mirror would notice the lines converging to a point identical with his visual axis) but to a new geometric construction that made possible the duplication of a familiar landmark from a fixed viewpoint.

Even as Brunelleschi established the fundamental rules of linear perspective, his intent was not to explain or systematize; instead he viewed his experiments as technological feats.¹⁶ It was Alberti, a decade later, utilizing his knowledge of medieval optics and Euclidean geometry, who grounded the experiments in a theoretical discourse known as *De Pictura*—a treatise on painting. Alberti's theory of optics, which was fundamental to his theoretical explication of linear perspective, drew on the work of three English monks: Robert Grosseteste (1168–1253), Roger Bacon (1270–92) and John Pecham (1235–92). The three monks, in turn, had drawn inspiration for their treatises on optics from the seminal contributions of such Arab scholars as the ninth-century writer Alkindi and the eleventh-century scientist Alhazen.¹⁷ Arab scholarship had, in fact, translated and absorbed the classical Greek thinking on optics, represented by the work of such luminaries as Euclid, Galen, and Ptolemy. The circuitous nature of these influences is made clear in Alberti's opening description of the visual pyramid, which is pure Euclidean in form.¹⁸

It is usually said that sight operates by means of a triangle whose base is the quantity seen, and whose sides are those same rays which extend to the eye from the extreme points of that quantity. It is perfectly true that no quantity can be seen without such a triangle. In this triangle two of the angles are at the two ends of the quantity; the third is the one which lies within the eye and opposite the base.¹⁹

In keeping with this geometrized model of sight, a painting then becomes “the intersection of a visual pyramid at a given distance, with a fixed center and certain position of lights, represented artistically with lines and colors on a given surface.”²⁰ Essentially, the canvas becomes a window or flat mirror between two symmetrical visual pyramids or cones with one of the apexes representing the vanishing point of the

painting and the other the eye of the beholder. The concept of “proportioné,” in which the painting becomes proportional to the scene to be depicted, is clearly a product of Euclid’s Theorem Twenty-one from the *Optica*: “if a straight line intersects two sides of a triangle, and this intersecting line, which forms a new triangle, is equidistant from one of the sides of the first triangle, then the greater triangle will be proportional to the lesser.”²¹ Thus, did this new Quattrocento mode of representation usher in a rationalization of space, insofar as it took as its basic assumption the view that visual space was *a priori*, an ordered, uniform system of linear coordinates.

In this understanding of space, the painter’s canvas becomes a mirror to a reticulated, geometrized surface. Significantly, since artists relate to the objectified field from a single vantage point, their representation of the scene is such that viewers can apprehend the scene as if they were standing in the same spot. Thus perspective provides for a modernist vision in which the object is rendered inert and the subject transcendental and eternalized:

the gaze of the painter arrests the flux of phenomena, contemplates the visual field from a vantage-point outside the mobility of duration, in an eternal moment of disclosed presence; while in the moment of viewing, the viewing subject unites his gaze with the Founding Perception, in a moment of perfect recreation of that first epiphany.²²

This abstracted gaze of the new visual order which confronts a systematic space, infinite, homogeneous, and isotropic, signaled a radical shift from the medieval paradigm. In contrast to the Renaissance painter’s devotion to perspective, the medieval artist had provided a deeply subjective vision, each element viewed separately and with little regard to a uniform and systematic representation of space: “He [the medieval painter] was absorbed within the visual world he was representing rather than, as with the perspective painter, standing without it, observing from a single, removed viewpoint.”²³ Medieval vision was an incarnated vision, not the privileging of vantage points and the capture and arrest of single-point views, but rather of a vision that was tactile and kinesthetic. Furthermore, the medieval artist sought to convince the viewer of the validity of the artist’s experience and the legitimacy of the representation by projecting a multileveled and multisensuous rendi-

tion of the world.²⁴ Renaissance perspective, on the other hand, sought to convince the viewer by means of a polarization of subject and object, and by the corresponding creation of a transcendental subject. Its particular claim, as Gombrich has argued so strenuously, is that the only real space is a space uniformly abstracted by sight.²⁵ In speaking of the perspectival gaze, Martin Jay observes: “The moment of erotic projection in vision—what St. Augustine had anxiously condemned as ‘ocular desire’—was lost as the bodies of the painter and viewer were forgotten in the name of an allegedly disincarnated absolute eye.”²⁶

However, the absolute nature of this disincarnate eye became the means of legislating a new rational order, wherein the observer, delineated within a fixed set of relations, could claim the veridicality of his or her impressions. In this regard, Marshall McLuhan has disparagingly observed, that the perspectival artist’s use of a reticulated screen or geometric grid to ensure the certainty of the mirroring process, is “a kind of single vision” thoroughfare to conventionalized rationality:

The artist fixes himself in a position, allowing neither himself nor his model to move. He then proceeds to match dots on the picture plane with corresponding dots on the visual image, a rather bizarre anticipation of the head clamps of Daguerre. This is the kind of “single vision” that William Blake later deprecated as “single vision and Newton’s sleep.” It consists basically in a process of matching outer and inner representation. That which was faithfully represented or repeated has ever since been held to be the very criterion of rationality and reality.²⁷

That linear perspective or artificial perspective is a conventional symbolic ordering of space, operating within a cultural discourse of what constitutes the real, is supported by a number of observers. For instance, several anthropologists and social psychologists have promulgated the view that perspective is not innate but a culturally learned phenomenon. In fact, Deregowski, Herskovits, and others have shown that reverse perspective, where three-dimensional objects are split and pressed apart, may be, if anything, more biologically innate than linear perspective.²⁸ Also, Strauss has argued in his *Psychopathology and Education of the Brain-Injured Child*, that “there is nothing innate in the human nervous system which gives us direct information concerning space. Projections of images into a space world are the result of

careful focalization of certain rather subtle cues and, as such, is a learned phenomenon.”²⁹ As McLuhan in quoting Eric Ben Hey notes: “Perception is riveted to need.”³⁰ Similarly, Gombrich has argued “that perspective creates its most compelling illusion where it can rely on certain ingrained (cultural) expectations.”³¹

The reason perspective was embraced by painters was because it underscored in their view the divine authority and moral harmony of a geometrically transcribed and ordered universe. Absorbed into the ideological discourse of the church through the metaphysical fascination with light as divine “lux” rather than perceived “lumen,” perspective transformed space into a harmonic and unified expression of mathematical order and divine will. In Roger Bacon’s *Opus Majus of Roger Bacon*, the transcendental is clarified as a result of geometry.

For in Aaron’s vestments were described the world and the great deeds of the father. . . . But no one would be able to plan and arrange a representation of bodies of this kind, unless he were well acquainted with the books of the *Elements* of Euclid . . . and of other geometricians. . . . Oh, how the ineffable beauty of the divine wisdom would shine and the infinite benefit would overflow, if these matters relating to geometry, which are contained in Scripture, should be placed before our eyes in their physical forms!³²

Should we be surprised that in a discourse in which the visual is privileged over the aural, the literal invested with geometric regularity should become a naturalized and rational transcription of God’s truth? Seeing then takes on the magnitude of knowing: “And for the sake of all things in general, let us recall to mind that nothing can be known concerning the things of this world without the power of geometry.”³³ In Dante’s *Convivio*, we discover a belief common among the artists of the Quattrocento: that the “axis visualis” or the centric ray, being the shortest distance between two points, was the most Christian of rays.³⁴ It is no different in Alberti’s *De Pictura*, for here, too, geometry is provided a theological valuation and painting functions to provide the moral order with rational coherence. “The perspectival setting itself was to act as a kind of visual metaphor to this superior existence. . . . Its major function was didactic: the improvement of society by placing before the

viewer a compelling model based on classical ideas and geometric harmony.”³⁵ In a space that functioned according to the immutable laws of God, precise frontal views rather than oblique views began to dominate painting. Figures were drawn gracefully occupying a moral tableau in harmonious proportion and gesture, all of them positioned in relation to the moral imprimatur, that “prince of rays,” the centric ray, which ironically, is the vanishing point too. In this edification, the moral order is also a class order.

Europeans came more and more to believe that things planned or seen from a central viewpoint had greater monumentality and moral authority than those which were not. . . . About 1455, the humanist Gianazzo Manetti, in his description of Pope Nicholas V’s aborted plan for the Borgo Leonino, mentioned that a wide, straight avenue was to connect the Castle Sant’ Angelo with St. Peter’s, and that this street was to be reserved for the rich, while angular side streets were to be used by the lower classes.³⁶

The invention of perspective was also in keeping with the general ocular concern for accuracy, evinced by a rising bourgeois merchant class. Banking and commerce were increasingly becoming sophisticated operations, especially with the invention of double-entry book-keeping during this period,³⁷ and Florentine businessmen were in all likelihood “disposed to a visual order that would accord with the tidy principles of mathematical order that they applied to their bank ledgers.”³⁸ Even as the spatial values of painting underwent a change, so did the temporal values attendant on its location in the social world. For, as John Berger points out, the invention of perspective coincided with the transformation of a painting into a commodity and its entry into the exchange relations of a burgeoning market system. In disclaiming the appropriateness of Alberti’s metaphoric reference to a perspective painting as a window on the world, Berger responds that “its model is not so much a framed window open on to the world as a safe let into a wall, a safe in which the visible has been deposited.”³⁹ Thus the visual representation, abstracted, and geometrically codified, simultaneously makes itself available as a commodity.

The disembodied monocular model of perspectival vision progressed in time, from an exegetical, two-dimensional, geometrical reading of the world as divine text, to a purely empirical explication of

the natural world, fundamental to the advancement of the descriptive sciences. As Mitchell incisively observes:

Aided by the political and economic ascendance of Western Europe, artificial perspective conquered the world of representation under the banner of reason, science, and objectivity. No amount of counterdemonstration from artists that there are other ways of picturing what “we really see” has been able to shake the conviction that these pictures have a kind of identity with natural human vision and objective external space.⁴⁰

By the nineteenth century, a mechanized expression of the monocular model of vision had come into existence in the form of the daguerreotype camera. “The invention of (this) machine built to produce this sort of image, (perspectival image) . . . ironically only reinforced the conviction that (perspective) is the natural mode of representation.”⁴¹ However, a precursor to the camera, albeit a very primitive one, the camera obscura, had been in existence since Alberti’s formulation and systematization of artificial perspective (Fig. 1). In fact, it is claimed that Alberti utilized the “camera obscura” in some of his experiments.⁴² The “camera obscura” though initially utilized as a mechanical aid in the solution of perspective problems,⁴³ soon came to be used by scientists and artists as “a device for aiding graphical representation and a means for ascertaining basic truths about nature.”⁴⁴ According to Arthur Goldsmith, from the viewpoint of artists, “the camera obscura filled a labor-saving need. With the aid of its projected image plus mirrors and graphs, the blocking in of complex scenes was greatly facilitated.”⁴⁵

The Camera Obscura

The “camera obscura,” literally “a dark room,” or inner chamber, was a function of light entering a minuscule hole in the wall of a darkened room, so that an inverted image was cast, on the opposite wall, in its natural colors (Fig. 2). Initially a room, the camera obscura soon contracted in size and even became portable (Fig. 3). Human knowing, which had become predicated on an epistemology secured by ocular vision, at the same time, as a result of perspectival principles, described and delineated the status of the observer and what constituted proper and categorical inferences about the world. But the paradigmatic model

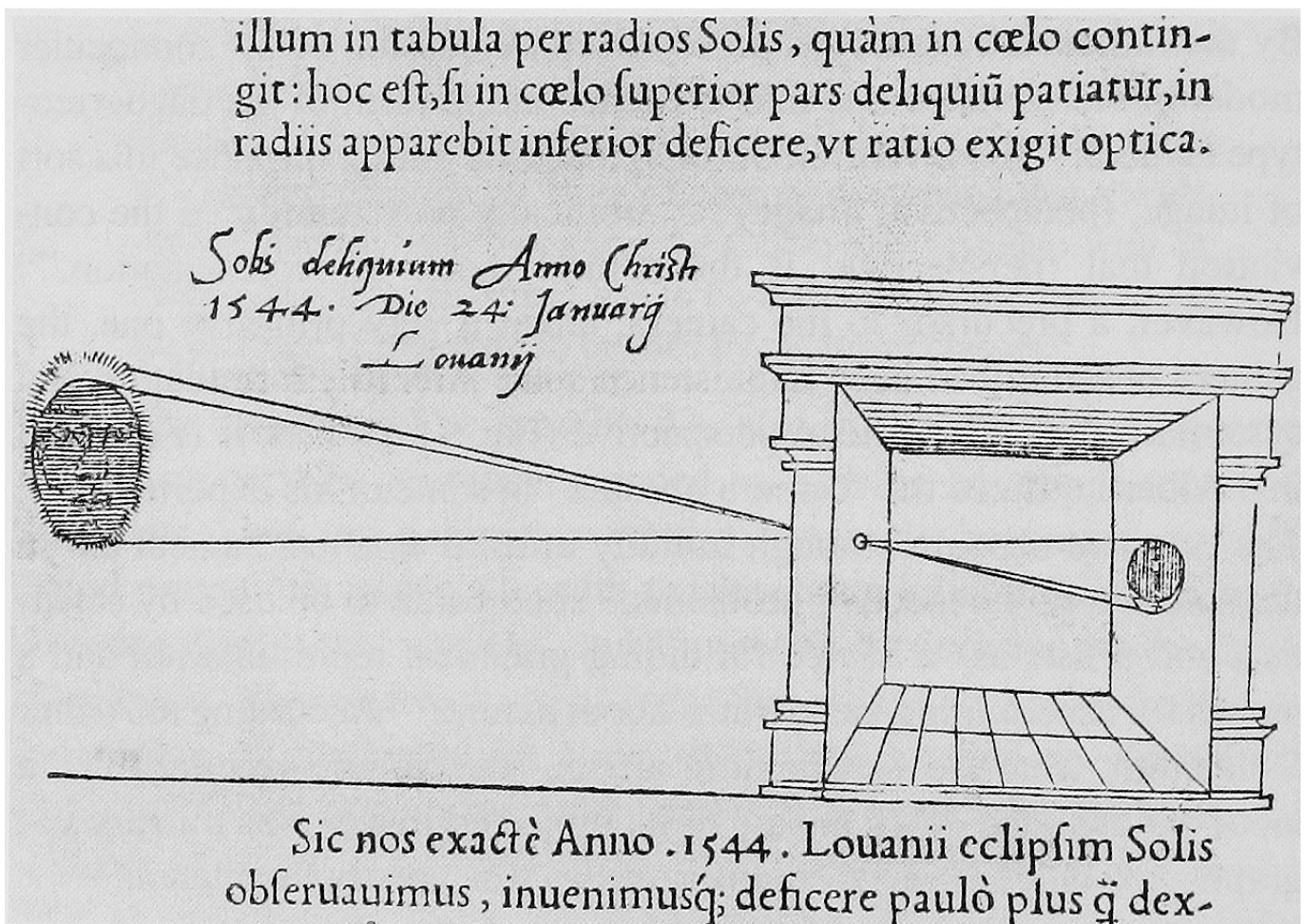


Figure 1. Camera obscura. Observing a solar eclipse in January 1544 at Louvain.

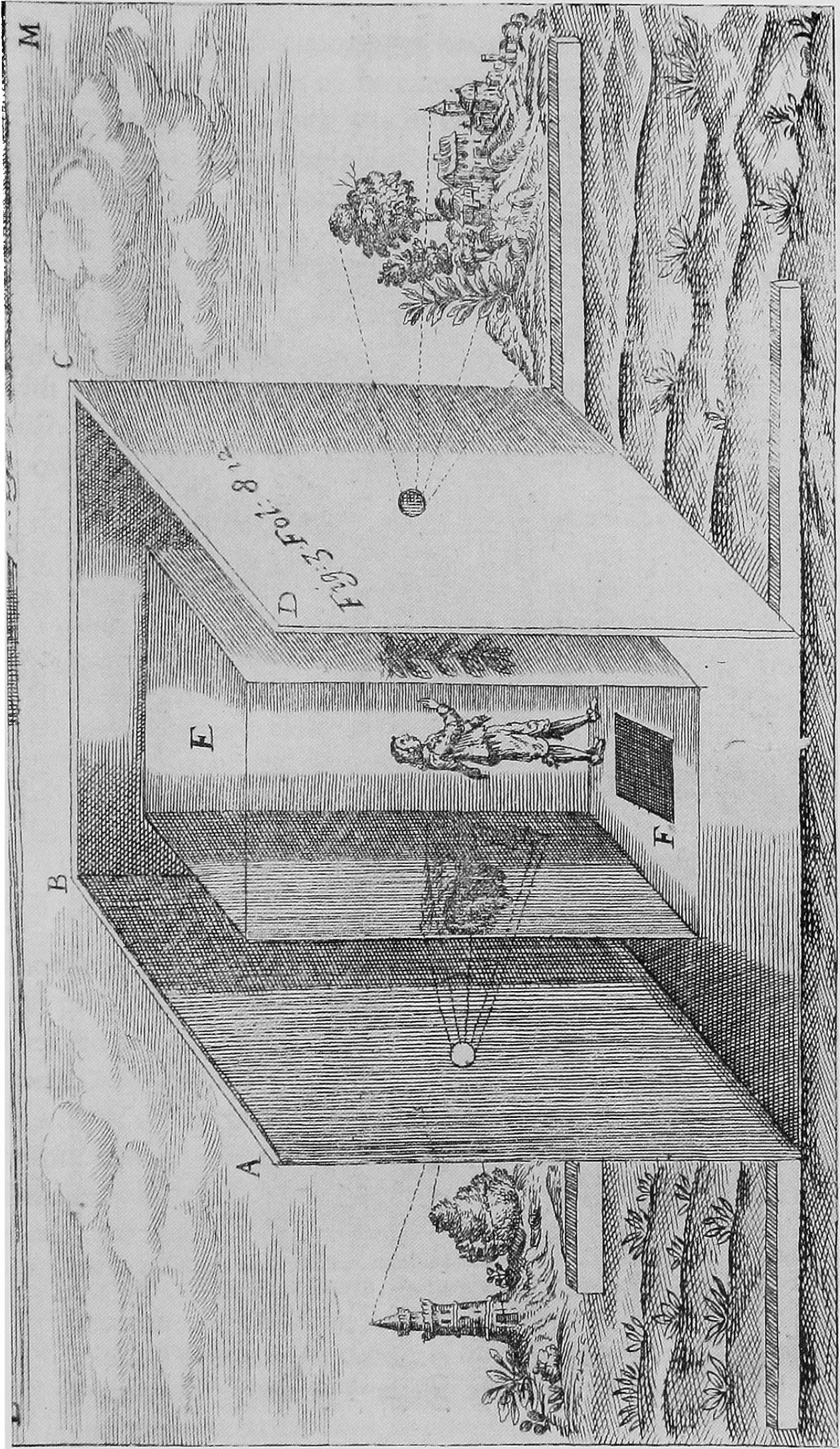


Figure 2. Engraving of a large camera obscura. Courtesy of the George Eastman House.

Tab. II.

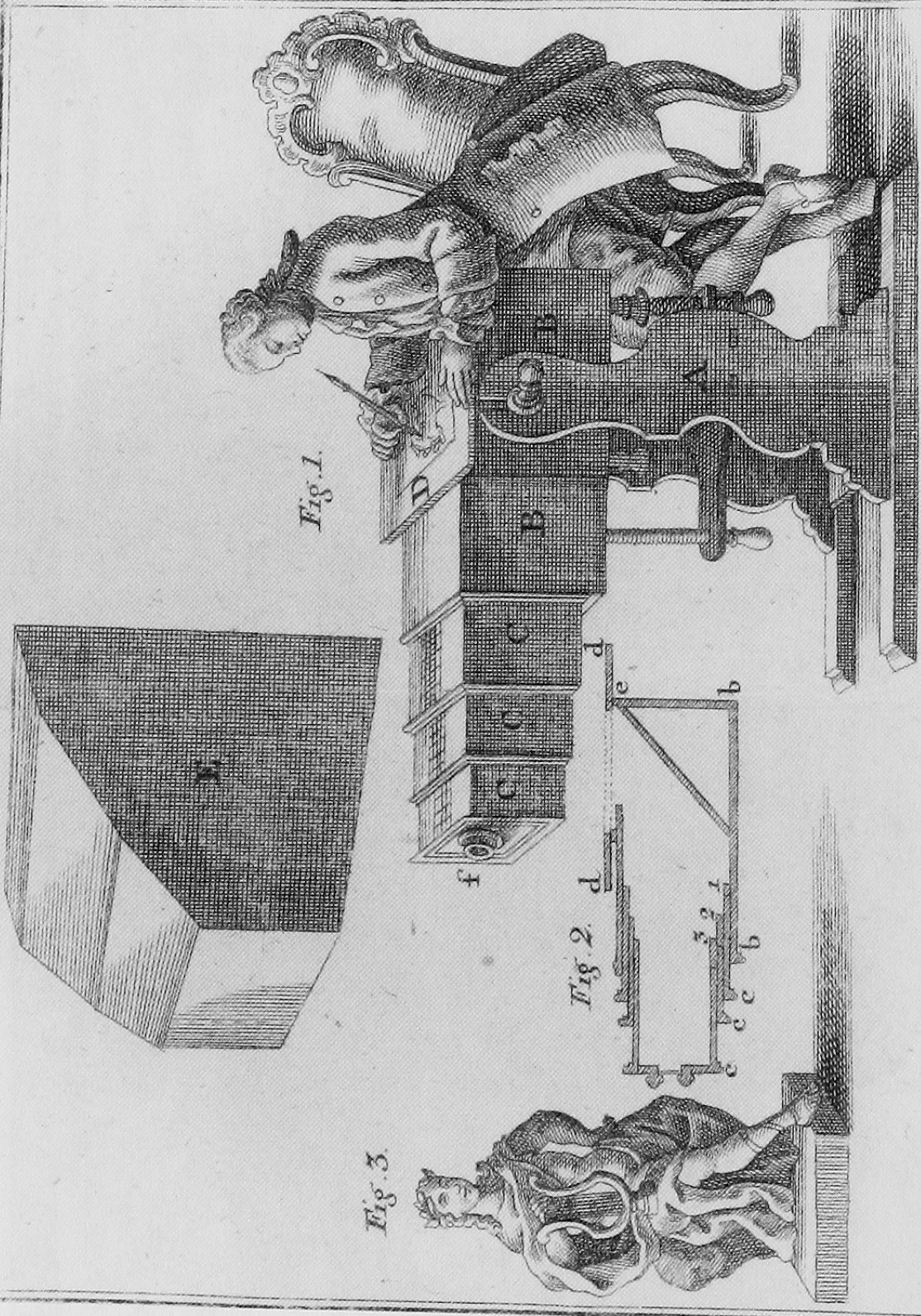


Figure 3. Table camera obscura, 1769

on which this visual analogue of knowing was based, was the optical and structural principles of the camera obscura.

The camera obscura was of central epistemological significance in a discursive order that included the works of Descartes, Locke, and Leibniz and the experiments of Kepler and Newton: “As a complex technique of power, it was a means of legislating for an observer what constituted perceptual ‘truth,’ and it delineated a fixed set of relations to which an observer was made subject.”⁴⁶ According to W.J.T. Mitchell, “the camera obscura had been synonymous with empiricism, with rational observation, and with a direct reproduction of natural vision ever since Locke employed it as a metaphor”⁴⁷ for “discerning” knowledge as direct impressions of sensory experience.

I pretend not to teach but to inquire; and therefore cannot but confess here again, that external and internal sensation are the only passages that I can find of knowledge to the understanding. These alone, as far as I can discover, are the windows by which light is let into this dark room. For methinks the understanding is not much unlike a closet wholly shut from light, with only some little opening left to let in external visible resemblances or ideas of things 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 in reference to all objects of sight, and the ideas of them.⁴⁸

However, as Merleau-Ponty observes, Locke’s conception of knowledge had been derived from Descartes. Unlike the Greeks, who had provided for an identity of the subject with the object insofar as they did not view knowledge as the possession of accurate representations, Descartes had been the first to view the mind as an inner chamber, in which “clear and distinct ideas (as representations) passed in review before a single Inner Eye.”⁴⁹ It is in this inner space of the mind, which Descartes in fact compared to a camera obscura, that “in the Cartesian model, the intellect inspects entities modeled on retinal images.”⁵⁰

For Descartes, the camera obscura was a demonstration of how an observer can know the world “uniquely by perception of the mind.” The secure positioning of the self within this empty interior space was a precondition for knowing the outer world. Its enclosedness, its darkness, its categorical separation from an exterior incarnates Descartes’s announcement in the Third Meditation,

“I will now shut my eyes, I shall stop my ears, I shall disregard my senses.”⁵¹

Hence the camera obscura appeared to provide for an escape from the vagaries of human sensation and locate the observer at a privileged vantage point of objectivity. Its mode of operation based on geometrical optics and its aperture providing a fixed point of view appeared to be the embodiment of how the mind should objectively represent the world.⁵² What is significant, as Jonathan Crary points out, is that binocular disparity common to the natural functions of the eye was ignored in favor of a monocular model that artificial perspective had already underwritten into the culture of seeing, and which operated conventionally to provision a space “homogenous, unified and legible,” hence bereft of “any inconsistencies and irregularities.”⁵³ Furthermore, even though monocularly seemingly provided for a transcendental viewpoint, that is, identical for an individual occupying the same point in time and place, it could also be construed as contingent on the “individual vision of distinct beholders with their own, concrete relations to the scene in front of them.”⁵⁴ Nietzsche, aware of the latter possibility, concluded ironically that “If everyone had his or her own camera obscura with a distinctly different peephole . . . then no transcendental world view was possible.”⁵⁵

However, the important element to be underscored here is that the camera obscura assisted in legislating into place what Crary has referred to as “a metaphysics of interiority.” For what the camera obscura represents is the obtaining of the world visually by a sovereign subject, who, enclosed and isolated in an observation space separate from the exterior world, simultaneously becomes a privatized subject. “The monadic viewpoint of the individual is legitimized by the camera obscura, but his or her sensory experience is subordinated to an external and pre-given world of objective truth.”⁵⁶

The Camera

In the summer of 1827, Joseph Nicéphore Niépce of Chalon-sur-Saône, France, succeeded in developing a primitive form of the photographic process by exposing a bitumen-coated pewter plate in the “camera obscura” to direct sunlight.⁵⁷ After eight hours the plate recorded an image of a dovecote on his estate. Louis Mandé Daguerre, a

one-time painter of stage sets and owner of the Diorama⁵⁸—a popular visual entertainment in Paris which capitalized on the general appetite of the middle class for panoramic views—formed a partnership with Niépce and together they worked to improve the process. However, with Niépce's death in 1833, Daguerre continued to work alone and in 1835 he discovered the latent process by which exposure times were reduced radically by treating the bitumen-coated plates with mercury vapor. In 1837, he finally was able to arrest the action of light on the silver halides (Daguerre had discarded bitumen-coated plates for iodized silver plates) by inserting the plates into a bath of silver chloride. Subsequently, with the discovery of hyposulfite (currently referred to as sodium thiosulfate) by the English scientist John Herschel, Daguerre used the hyposulfite rather than silver chloride to effectively fix the image on the plate.⁵⁹ By 1 September 1839, Daguerre had succeeded in reducing exposure times to six minutes.⁶⁰ That it would be Daguerre who would receive entire credit for the invention of photography and that Niépce would be overshadowed and relegated to the margins of history—as has been the case (some scholars have attempted to redress the problem and rehabilitate the latter's role)⁶¹—was already foreshadowed in the presentation made by the Minister of Interior to France's Chamber of Deputies in June 1839:

It is quite by a different course, and by completely laying aside the traditions of Mr. Niépce, that Mr. Daguerre has attained the admirable results which we now behold, that is to say the extreme promptitude of the operations and the reproduction of aerial perspective, together with the full effects of shades and lights. The method of Mr. Daguerre is of his own invention and is distinct from that of his predecessor, in its course as well as in its effects.⁶²

The daguerreotype, as Daguerre called his invention—a delicate, unique image, not reproducible—rapidly achieved recognition, and on 19 August 1839, the French government, having acquired the invention, presented the details of the technique to the Academy of Sciences.⁶³ The rapid acceptance of the daguerreotype is not surprising, given both the nature of a public imbued with a fascination for the pleasures of the visual and a period in history fundamentally characterized by a liberal faith in the idea of progress. The French physicist Gay-Lussac's own presentation in support of Daguerre's invention made to

the Chamber of Peers during that period is typical of the liberal sentiment of the times. “Everything that leads to the progress of civilization, to the physical and moral well-being of man, ought to be the continuing goal of enlightened government.”⁶⁴

However, it was François Arago, one of the more popular French politicians of the period, who became one of the leading patrons of Daguerre’s invention and it was he who made the presentation to the Academy of Sciences. His speech is interesting, insofar as it provides a view of how photography’s function and role were construed in those early days of its inception. The speech, which began with the details of the technique, became a laudatory evocation of the scientific uses of photography. For instance, Arago notes with enthusiasm,

How archeology is going to benefit from this new process! It would require twenty years and legions of draftsmen to copy the millions and millions of hieroglyphics covering just the outside of the great monuments of Thebes, Memphis, Karnak, etcetera. A single man can accomplish this same enormous task with the daguerreotype.⁶⁵

As regards its uses for astronomy, he observed: “We can hope to make photographic maps of our satellite. In a few moments of time one can achieve the longest and most difficult projects in astronomy.”⁶⁶ But according to Arago, it was not only science that would benefit, for art would be democratized too. Having encompassed the basic themes of the liberal canon—democratization through technological and scientific progress—he concluded with a prophetic remark which, in retrospect, in its general foreshadowing of events to come, may be characterized as ominous.

When experimenters use a new tool in the study of nature, their initial expectations always fall short of the series of discoveries that eventually issue from it. With this invention, one must particularly emphasize the unforeseen possibilities.⁶⁷

A Clustering of Discourses. It is worthwhile noting that August Comte had published his *Cours de la Philosophie Positive* in 1830. His focus on the laws of phenomenal relatedness, the study of behavior rather than origins, as well as his general demand for scientific exactitude were beginning to have a considerable influence on how the material world was to be perceived. Positivism inculcated a new

consciousness of the real and a need to objectify the real, and for many the daguerreotype provided the means for doing just that. In newspaper accounts of the time, the camera's empirical gaze is touted:

[T]hese are the triumphs of the apparatus which Mr. Daguerre wants to call after his own name, the Daguerreotype. A dead spider has such fine detail . . . that you could study its anatomy with or without a magnifying glass, as in nature; not a filament, not a duct, as tenuous as might be, that you cannot follow and examine.⁶⁸

The material world suddenly made available in potentially new ways, is brought within focus, delineated, described, displayed, and, as yet in a limited way, disseminated. Thus it appears a new model of perceptual truth is in the process of being instituted. Even the *British Literary Gazette* in its 13 July 1839 edition, reporting on Daguerre's first exhibition before the Chamber of Deputies, provides a celebratory evocation of the new sensibility.

The extraordinary miniatures of such multiplied details as was shown in the street views, particularly in that of the Pont Marie, was much admired. The slightest accidental effects of the sun, or boats, the merchandise on the banks of the river, the most delicate objects, the small pebbles under the water, and the different degrees of transparency which they imparted to it—everything was reproduced with incredible exactness.⁶⁹

What Heidegger has called a technological transforming of nature into a “standing reserve,” appears to resonate in this early description of the practices of photography, and its predatory gaze is no less an “enframing.”⁷⁰ Enframing requires total visibility and surveillance, and the introduction of photography as a central epistemological model for knowing operating within particular discursive orders in the nineteenth century, made possible and legitimated such a requirement. Ptolemy's intention, to have “the whole three-dimensional earth to be posited frontally before the eyes in the conventional manner of looking at a picture,”⁷¹ seemed now more than ever a possibility to be realized.

Another newspaper *La Gazette de France* published a report on the daguerreotype on 16 January 1839, a day prior to Arago's presentation to the Academy of Sciences, noting that:

M. Daguerre has found the way to fix the images which paint themselves within a camera obscura, so that these images are no longer transient reflections of objects, but their fixed and everlasting impress which, like a painting or engraving, *can be taken away from the presence of the objects*.⁷²

The account itself, which defines photography as an act that counters transitoriness by extracting from the presence of an object a particular permanence, points significantly to a perceptual mode which Walter Benjamin, writing almost a hundred years later, described in the following manner: “To pry an object from its shell, to destroy its aura, is the mark of a perception whose sense of the universal equality of things has increased to such a degree that it extracts it even from a unique object by means of reproduction.”⁷³ The extensive reproducibility and wide dissemination of the image had to await further technological developments, but the seed for such a “democratization of vision” had already been planted. In 1833, at about the same time as Daguerre’s announcement, Henry Fox Talbot had conceived of a process of making permanent images, which he called a calotype and which enabled multiple prints to be produced. By the 1850s, the infrastructure enabling a democratization of vision, or what is inversely the spectacular consumption of images, would be in place.

In John Fowles’ *The Collector*, Miranda Gray, one of the central characters of the book, notes that “when you draw something it lives and when you photograph it, it dies.”⁷⁴ *The Edinburgh Review* of January, 1843, observed this in its panegyric on the new invention:

But it is not only the rigid forms of art and of external nature—the mere outlines and subdivisions of space—that are thus fixed and recorded. The self-delineated landscape is seized at one epoch of time and is *embalmed* amid all the co-existing events of the social and physical world.⁷⁵

Here, to use Benjamin’s concept, the mimetic faculty is transformed into a nonsensuous similarity⁷⁶ of the self-evident facticity of the material world. And to use the regressive expression of Benjamin’s double articulation of the collector’s experience, we may surmise that the imaginative space alluded to by *The Edinburgh Review* is a modern space, characterized as it is by the notion of embalming, which is intrinsic to collecting and a fetishizing of the real—“the sex-appeal of the

inorganic”⁷⁷ (as Benjamin called it)—and typifies the “domesticating passions” of a monadic subject who, operating within the “cult of the individual,” inhabits the “phantasmagorias of the interior.”⁷⁸ For, as Benjamin noted, with the increasing division of life into private and public spheres—“the living-space becomes distinguished from the place of work”⁷⁹—there is a corresponding psychic division, wherein “the private citizen who in the office took reality into account, required of the interior that it should support him in his illusions.”⁸⁰ Thus photography underwrites the “interior,” providing sustenance through a consumption of the real.⁸¹ And what in its individuating expression is the collector’s experience in the private sphere, becomes the collective experience of the archive.

However this cataloguing of the real is also premised on an interior-exterior of another kind: the mind-body dualism that is inherent within a privileging of the real solely by sight. Thus if the camera obscura functioned as a model on which the visual analogue for knowing was based and legitimized a disembodied gaze and a transcendental subjectivity which ignores the constituted embeddedness of our experience, the camera expanded and legislated that fact into everyday seeing. This is not to invoke an essence that eludes the body and which in the absence of such technologies as photography we may recover, but instead reflects the need to provide for such spaces, as may not only affirm the body as a worthwhile project but assist us in the possibility of reconstructing a different economy of bodies.

A GENEALOGICAL DISCOURSE ON THE BODY

The history of the body’s constructions is a history riven with the pathological determinations of binary structurations: dualisms of hierarchical disposition which, in their demand for certainty and a metaphysics of presence, have weakened the possibility of constructing different, local, and multiple bodies in the context of a rich polysemic exploration of experiences and desires. In recognizing the hegemonic and binary rule of Cartesian ocularcentrism and its discourses, which have constituted and organized technologies of sight such as the camera, it is crucial to understand the extent to which our bodies have been subverted, made submissive, and forced to bear signs that erase the possibilities of other forms of matter, identity, and social cohesion.⁸² This

requires that we rethink the body by comprehending its constitution, its operations as signifying material, and its limit within the intersections of cultural and historical production, so that we may discover alternative ways of constructing our relation to it. In phenomenology, for instance, the rejection of Cartesian ocularcentrism and the centrality of the body, are in themselves critical components for understanding the nature of social existence. As Martin Jay has pointed out, in the case of both “Merleau-Ponty and Ludwig Binswanger the problematic distinction between consciousness and body was closely linked to the elevation of perspectival union with its single point of view.” In *The Question Concerning Technology*, Heidegger as well had attributed the “Age of the World View” to scientific perspectivalism.⁸³

Husserl for instance, despite the problems that plagued his intersubjective model, which both Merleau-Ponty and Sartre have made quite explicit,⁸⁴ developed a critique of Descartes’ ocularcentric, egological gaze in which he sought to provide a place to think the “other’s body” as lived experience.⁸⁵ Sartre, in turn, emphasized the incarnate nature of human existence and the body as constitutive of contingent presence in the world, especially in his description of the intersubjective dynamic between “being-in-itself” and “being-for-itself.”⁸⁶ Merleau-Ponty, who had critiqued the spectatorial fissure between subject and object, referring to it as a “panoramic consciousness,” drew on Paul Valéry’s use of the term “chiasme” to describe the relations of the viewer and viewed⁸⁷ and provide a view of the subject as incarnated consciousness. In arguing against Descartes’ view (in the *Dioptric*) of the mind as an inner chamber where sense impressions received from the outer world are subjected to the cogitations of a Cyclopean eye seeking certainty from differences, Merleau-Ponty called for the seer to abandon the inner chamber and enter into the “flesh” of the world. Accordingly, Merleau-Ponty has argued, that unlike the reflective subject who attempts to close in on itself by incorporating every other and assimilating all difference, the living body must resist closure and necessarily remains open to what is other than, and different from, itself.⁸⁸ Thus, in what Marc Richir has referred to as Merleau-Ponty’s “defenestration of the cogito,”⁸⁹ the living body itself becomes the *milieu* or *chiasme* of intersecting opposites, such as interiority and exteriority, and is neither subject nor object, neither *res extensa* nor *res cogitans*. Correspondingly, embodied vision becomes the “reversible, chiasmic inter-