

VISUALITY BEFORE AND BEYOND THE RENAISSANCE

Seeing as Others Saw

Edited by

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INTRODUCTION

DESCARTES'S COW AND OTHER DOMESTICATIONS OF THE VISUAL

ROBERT S. NELSON

Could a greater miracle take place than for us to look through each other's eyes for an instant? We should live in all the ages of the world in an hour; ay, in all the worlds of the ages. History, Poetry, Mythology! – I know of no reading of another's experience so startling and informing as this would be.

Henry David Thoreau, *Walden*¹

Michael Baxandall has summarized the basic physics and physiology of vision with admirable conciseness:

An object reflects a pattern of light on to the eye. The light enters the eye through the pupil, is gathered by the lens, and thrown on the screen at the back of the eye, the retina. On the retina is a network of nerve fibers which pass the light through a system of cells to several millions of receptors, the cones. The cones are sensitive both to light and to colour, and they respond by carrying information about light and colour to the brain.²

This is our understanding of vision, where “our” refers to people with a basic scientific education of the late twentieth century. We accept these principles as true and assume that every person sees and saw this way. Differences in what two people see are thus credited to a differing interpretation in the brain and/or deficiencies in visual physiology. When defective vision is discovered in our world, as, for example, upon taking a test for a driving license, it is promptly corrected, in this case to a standard mandated by the state. And any parent, being informed that his or her child did not see “correctly” would have glasses ordered immediately.

Yet even our society, controlling as it is of the senses, makes little attempt, or is not able, to regulate other aspects of vision, for example, color perception. In other places and times, there was little agreement over what constituted normal vision, much less on the concept of normative vision, the basic mechanics of seeing, or even the notion that vision might be mechanical. Vision or its lack might instead be

an ethical, a moral, theological, and even political issue. For example, in Byzantium, but not Russia, blinding was the punishment for failed usurpers, as well as thieves, heretics, and magicians. Losing one's sight for these reasons was a visible expression of lowered or negative social status, and conversely, regaining sight, as in the case of the representation of Christ's healing of the blind, could signify the transition to the light of faith.³ In this case, we have quickly entered the complex, untidy world of actual people and societies and have moved far from that proper, logical, possibly comfortable, ostensibly stable and orderly, and, of course, unambiguously correct vision described by Michael Baxandall. In the periods covered in our volume, vision often implies visionary experiences and the problem of seeing God,⁴ but whereas religion plays a prominent role here, we are more interested in the actual phenomenology of seeing in religious, as well as other, contexts.

Perhaps by analogy with the distinction between sex and sexuality, scholars have lately distinguished a visual that is natural from that which is social. They call the former vision and the latter *visuality*. And although the concepts are not without problems of their own, not the least of which is the impossibility of accounting for human visual experience by only two categories, they are useful nonetheless. As Hal Foster put it nicely, "[T]he difference between [vision and *visuality*] signals a difference within the visual – between the mechanism of sight and its historical techniques, between the datum of vision and its discursive determinations – a difference, many differences, among how we see, how we are able, allowed or made to see, and how we see this seeing or the unseen therein."⁵

A more parochial way of recognizing this difference is that vision is primarily the domain of science and the history of science, whereas *visuality* belongs to the humanities or social sciences because its effects, contexts, values, and intentions are socially constructed. These are to be found in diverse sources: literary, religious, political, philosophical, and, it should be emphasized, artistic. A generation ago, the distinction between the humanities and science, C. P. Snow's "two cultures," was thought to be great and growing, but today that divide shows signs of weakening, although hardly disappearing, to judge from the volume compiled by Caroline A. Jones and Peter Galison about art and science.⁶ The current interest in *visuality* is another sign of the same phenomenon.

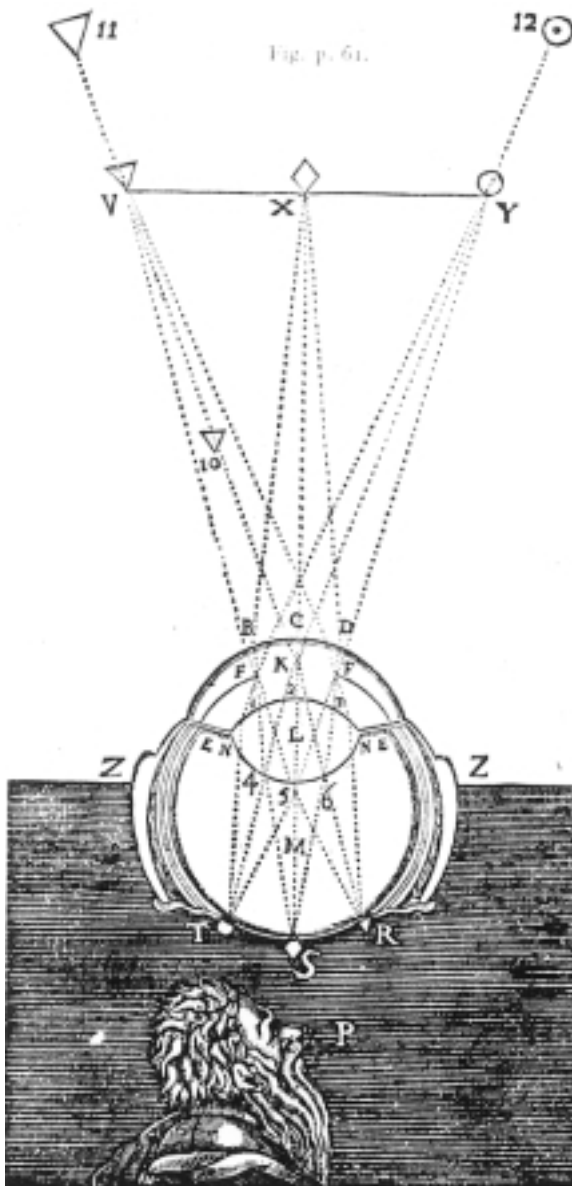
Attending to *visuality* helps avoid judgments that are essentializing and narrowly disciplinary and encourages the blurring of current intellectual boundaries. When we encounter visual practices and theories of vision different from ours, we may at first regard them as simply wrong, or we may write them into our histories of science as primitive or as a sign of an earlier stage in the progressive evolution to the orthodoxy of the present.⁷ The projection of unexamined assumptions of normality or universality can flatten, obscure, and even destroy delicate vestiges of prior practices. The past thereby becomes a mirror of the present. Both the history of science and the history of art are prone to teleology and presentism.⁸

Visuality also mitigates another potential problem. We might be tempted to take as our ideal the suspension of our sensory preconceptions and the adoption of a past

visuality, a quest suggested by the subtitle of our book and a dream announced by Thoreau in the epigraph. That dream is impossible, of course, even if it forever fuels the entertainment industry. Our knowledge of the Other is always mediated by many factors, not the least the conceptual language we use and apply to other cultures. However, this does not imply that partial knowledge of the perceptions of others cannot be gained. Hermeneutics as a practice and anthropology as a discipline are predicated on this possibility.⁹ By negotiating between present and past, us and them, we can better understand both. Our brush with alterity may inform or even transform us, and, as Foucault put it, it may be a necessary condition for work at all.¹⁰

Thoreau's romantic dream of seeing through the eyes of others, one hallmark of a certain modern visuality, had actually been attempted about two centuries earlier by René Descartes. This period, the Renaissance broadly conceived or the early modern era, forms a cultural, historical, and conceptual limit to our studies, which fall either before or outside the scientific revolution. Declaring a precise border or division to a phenomenon like visuality, however, is fraught with difficulties, since its history in the West from antiquity to the present is characterized more by continuity than discontinuity. To describe that "longue durée" properly, one would have to construct an intricate web of plots and subplots.¹¹ Nevertheless, if one has pondered vision in antiquity or the Middle Ages for some time, reading Descartes's optical treatise, *La Dioptrique*, of 1637 puts one in a different world. No artist, poet, philosopher, or theologian of previous epochs would have thought it relevant, as Descartes did, to look through the eye of a dead cow, nor would those prior sages have considered it proper to write about the experience in a formal treatise. For Descartes, the discussion of a cow's eye is a means of demonstrating retinal images. This phenomenon he explained by means of the *camera obscura*, which was to remain the principal model and metaphor for vision until the late eighteenth century.¹² To use such a mechanism, the observer stood in a dark room – the *camera* – in which a single hole, covered by a lens, emitted daylight. The resulting image was captured on a white sheet placed at the appropriate distance from the aperture.

Following the lead of the astronomer Johannes Kepler, Descartes argued that images were formed in the same manner at the back of the human eye. Proof would be forthcoming, he suggested, if one replaced the lens of the camera obscura with "the eye of a newly dead person (or failing that, the eye of an ox or some other large animal)." The latter eye was to be prepared by cutting away its backside and replacing it with "some white body thin enough to let light pass through (e.g. a piece of paper or an egg-shell)." Then the lens of the camera obscura is replaced with this specially prepared eye, thereby enabling the observer to see through the organic lens, as illustrated in Descartes's treatise (Fig. 1). "Now, when you have seen this picture in the eye of a dead animal, and considered its causes, you cannot doubt that a quite similar picture is formed in the eye of a living person." From the retina, the pictures are said to pass onto the brain. Thus it is the brain and the soul, not the eye, that produce cognition.¹³



1. The retinal image, from Descartes, *La Dioptrique*.

In Descartes's experiment, the eye that secures the proof of theory, whether human or bovine, is dead. The observer's eye is similarly disembodied, for Descartes treats the eye as an unfeeling machine, a viewing apparatus. In general, early modern and modern descriptions of vision lack human agency. Consequently, the rhetoric of such texts favors the passive voice, and this is what Descartes shares with Baxandall and with the rhetoric of science more broadly. In contrast, ancient and medieval writing about vision is more active, for seeing itself was performative. Seeing was doing, and hence the fear that someone could bewitch by a glance and the transformative effects upon a pilgrim of viewing a holy site or person and a believer of praying to an icon by voice and sight. In the eleventh century, the Byzantine polymath Michael Psellos put it very simply: "Man both experiences and produces many effects through his eyes."¹⁴ For viewers of religious images in the Middle Ages and before, seeing was connective and embodied.¹⁵ At different points

and places in the early modern period, the eye shifted from being a gateway to the soul to being an instrument like the camera obscura or Descartes's experimental apparatus.¹⁶

By one school of ancient and medieval thought, vision was the result of something leaving the eye and traveling to the thing seen and back to the eye, the theory of extramission. The opposite was intromission by which the visual rays pass from the object seen to the eyes. These theories have implications for the relation of the

observer to the observed. Extramission implies that vision is active and motivated and that it causes subject and object to have direct physical contact. Intromission is more passive, but all vision in antiquity and the Middle Ages was comparatively active. For example, although Aristotle argued for something like intromission, the orthodoxy of our day, he was not a modern scientist. Aristotle was only interested in the eye as a living being and as integral with the body and soul. A painted eye was an eye in name only, because vision was absent.¹⁷ Or again, “if [an eye] is without bodily power, it shares only the name, like a dead man or a stone figure of a man.”¹⁸ The contrast with Descartes’s interest in the eyes of dead cows and people is telling.

From the time of ancient Greek philosophers and well into the Middle Ages, both intromission and extramission had their supporters. Extramission, for example, was endorsed by no less than Euclid and Plato.¹⁹ The first decisive arguments against extramission and in favor of intromission came from the Arab writer Ibn al-Haytham (965–1039), who has been described as “the most significant figure in the history of optics between antiquity and the seventeenth century.”²⁰ In the late twelfth or early thirteenth century, his work was translated into Latin under the name Alhazen and extended, popularized, and synthesized with other treatises by Roger Bacon, John Pecham, and Witelo later in the thirteenth century.²¹ From this period, consequently, intromission begins to prevail in the learned discourses about vision in western Europe, which is to say, some, but not all, discussions of seeing. As I discuss in my essay in this book, Byzantium remained outside these developments. There, both theories were operative in technical discourses, although extramission appears to have been more favored generally. The situation in China needs much further investigation, but from an early date, intromission apparently was the norm.²²

During the Renaissance, systems of visions that were either chronologically prior or geographically distant from us were rendered forever foreign by new knowledge about optics and anatomy. First came the widespread adoption of perspective, a technique popularized by Leon-Battista Alberti in his *De pictura* of 1435. In this system of graphic representation, the picture was understood to be a plane between the observer and the observed. Pictorial space lay behind this plane, as if seen through a window. Perspective, which we associate with fifteenth-century Italy, actually relied upon the work of Ibn al-Haytham and his medieval Latin followers. For historians of optics, therefore, the perspective studies of Alberti and his contemporaries are late and derivative,²³ but for art history and for the creation and sustenance of a characteristically European visuality, they are seminal, in part because more is involved here than optics.²⁴

One consequence of the gradual adoption of perspective as a means and metaphor for vision was a distancing of the viewer from the viewed, and hence subjects from objects. But Alberti himself did not decisively reject medieval senses of vision. For him, visual rays, “ministers of vision,” extend between the eye and the object and “move rapidly with great power and remarkable subtlety, penetrating the rare and

transparent bodies until they encounter something dense or opaque where their points strike and instantly stick.” Properly acknowledging his reading, Alberti notes that “among the ancients there was considerable dispute as to whether these rays emerge from the surface or from the eye,” a debate he considers irrelevant. What looks to the past, not the future, is his notion of the tangibility of these rays. They are “like extended very fine threads gathered tightly in a bunch at one end, going back together inside the eye where lies the sense of sight.”²⁵ This is the language of contact, because the observer’s eye is still intimately connected with the world.

For scientific discourses, what severed this liaison – dangerous, erotic, spiritual, or otherwise – was the work of first Kepler and then Descartes. Although Kepler was well read among the Latin perspectivists, he did more than perpetuate tradition. A mathematician, rather than an anatomist, Kepler clarified the mechanism of the eye’s lens and explained the convergence of the image, upside down, on the retina. This discovery, endorsed by Descartes a few decades later, has been termed the “first thorough and successful solution of an important physiological problem to be made in modern times,” and comparable to Harvey’s subsequent discovery of the circulation of the blood.²⁶ This claim, of course, depends upon the definition of modernity, but one relevant aspect ought surely to be the distinction that grows in the seventeenth century between nature and culture or society.²⁷ In Kepler’s case, what his work did was to sever the physiological from the psychological aspects of seeing. Regarding the eye as merely a visual apparatus, he left it to the “natural philosophers” to explore what happened to the retinal image afterward in the brain or soul.²⁸

At this stage, the act of seeing, as least in scientific circles, is on the way to becoming neutral, abstract, and positivistic.²⁹ It has become part of a fundamental shift toward quantification in European culture,³⁰ and perspective joins vision and light in being linked with knowledge and truth.³¹ Kepler considered that vision “follows the action of illumination in manner and proportion.” This sensation (*passio*) is the opposite and the result of action (*actio*).³² Some scholastics had earlier argued that the sensation was passive,³³ but Kepler’s discovery of the retinal image and the concomitant removal of the eye from any role in judgment or discernment was decisive. This bifurcation into physiology or psychology begins a process that leads to our modern understanding of seeing. Both Kepler and Descartes regarded the eye as a machine, and their work was predicated on previous investigations of the camera obscura and lenses. Concurrent with his work on vision, Kepler wrote the following about astronomy: “My aim in this is to show that the celestial machine is to be likened not to a kind of divine living being but rather to a clock-work.”³⁴ The analogy, of course, depends upon the by-then widespread use of clocks that had affected many aspect of European culture.³⁵ Kepler’s understanding of the eye as similarly dead and mechanical may be contrasted with the aforementioned position of Aristotle and with the visualities described in our book. What is at issue here are notions of subject/object and mind/body that are fundamentally different from those in the Middle Ages.³⁶

For Descartes, “[I]t is the soul that sees, and not the eye; and it does not see directly, but only by means of the brain.”³⁷ Although Descartes was surely interested in vision – he wrote a whole book on the subject – Merleau-Ponty and others have justly argued that in the last analysis, Descartes undermined vision in his other philosophical writings. By transferring, to the brain, properties heretofore accorded to the eye and vision, Descartes broadened the breach between the mind and the body.³⁸ He considered that intelligence was to the senses as a good artist was to a bad, or a master painter to an apprentice, whose initial design was deeply flawed.³⁹ This denigration of vision in France is such a powerful theme in the history of ideas that its explication requires the massive book of Martin Jay.⁴⁰ Descartes’s concern here and elsewhere with problems of representation may be understood as an example of what Michel Foucault regarded as an epistemic rupture, the change from medieval resemblance to early modern representation.⁴¹

Cartesianism engendered and participated in that process of abstraction and purification described by the recent study of Bruno Latour. For him, modernity is the birth of the human, but also the nonhuman, in the sense of a nature objectified and devoid of humanity, even though it is humans that view it, study, and live in it. The dichotomy is illusory. According to Latour, today we are paradoxically entering a nonmodern world, which we never really left.⁴² For her part, Teresa Brennan is reminded of extramission by those modern visualities that are strongly motivated.⁴³ Cartesian vision and cognition and their consequences for subjectivity and objectivity have led to sustained critiques by modern philosophers, the topic of a book by Richard Rorty.⁴⁴ In rejecting the metaphors and mechanics of early modern visuality, what Rorty seeks instead are different notions of subject/object and a philosophy that “edifies.”

Others have explored further consequences of early modern and modern visuality. Svetlana Alpers has called attention to the deanthropomorphization and passivity of this visuality and its effect on seventeenth-century art.⁴⁵ Thomas Kaufmann has studied the *Kunstkammer* and the impact of the telescope at the court of Rudolf II in Prague,⁴⁶ and Regina Stefaniak has pondered feminine subjectivity and visuality in Renaissance Italy.⁴⁷ The effects of imagining theories and techniques on the understanding of the body are among the many subjects of Barbara Stafford’s book about the Enlightenment,⁴⁸ and for literature, Jean Starobinski’s study of Rousseau introduces the power and consequence of the gaze of the period.⁴⁹ Joel Snyder has considered what it means for vision to be understood as pictorial, another hallmark of modernity, and something else not to be assumed for earlier centuries.⁵⁰ The technologies of vision from the early production of lenses to the more complex apparatuses of later centuries have long been a subject of scholarly inquiry, although what is relevant here are those discussions that relate this history to a modern subjectivity.⁵¹

Recent volumes of essays, edited by Beate Allert and by Teresa Brennan and Martin Jay, contain a number of papers relevant to a history of modern visuality.⁵² Here, many of the most challenging issues derive from the work of the French psychoanalyst Jacques Lacan and have resulted in a bewildering array of distinctions

about seeing itself – the gaze, the glance, the look, the eye, and so on – that respond to and are created by new technologies of the visual. For Lacan, seeing and being seen are means of engaging the world, constituting the self, and fulfilling desires. His work belongs to a rich nexus of theories that binds together Freud, the Surrealists, Merleau-Ponty, and Sartre, which have had a significant impact on psychology, literature, and film studies. These studies have much to contribute to the understanding of our world, and Jay is correct in declaring that ours is a “visuality after Lacan.”⁵³ In our volume, proof is to be found in the number of times the word *gaze* is used, a term that has come to have a broader meaning in art history.⁵⁴ Yet, at the same time, Lacan’s relevance for past and distant cultures is far from clear. In part, Lacan – and psychoanalysis more generally – rely upon culturally specific notions of the self and subjectivity that are modern and Euro-American and which were being formed during the same early modern period that is crucial for the genesis of modern vision and science.⁵⁵ As Latour put it, the Renaissance was a period in which the scientific representation supplanted medieval re-presentation, thereby turning the heavens into the sky.⁵⁶

Because of the evident power – conceptual, social, and economic – of what Martin Jay calls the “ancien scopic régime” of “Cartesian perspectivalism,”⁵⁷ it and its larger contexts have attracted numerous critiques. For Merleau-Ponty, science in general succeeds only by its reductionism. It “manipulates things and gives up living in them.”⁵⁸ In general, he wants to reconsider the old Cartesian formulation of subject/object: “[T]he relation between what I see and who I see is not one of immediate or frontal contradiction; the things attract my look, my gaze caresses the things, it espouses their contours and their reliefs, between it and them we catch sight of complexity.”⁵⁹ At first, vision is simple, something all sighted persons experience daily. “But . . . if we ask ourselves what is this *we*, what *seeing* is, and what *thing* or *world* is [and if we ponder what it means to ask ourselves something], we enter into a labyrinth of difficulties and contradictions.”⁶⁰ We also enter a world that is far from value free, especially in regard to the technologies of vision, as Laura Mulvey’s famous article has argued so forcefully.⁶¹ Susan Bordo even contends that Cartesianism itself is fundamentally masculine.⁶² Others have stressed the moral and ethical aspects of vision.⁶³

Modern writers have, therefore, attacked the isolation and objectivity of vision from the camp of visuality itself, a process similar to those wars, cultured or otherwise, that beset the contemporary academy. But the problem with such formulations of the matter is that they replicate the old dyad of nature/culture or body/mind. That distinction is not easily maintained logically, the brain being part of the body, or in the presence of other studies, such as James Elkins’s imaginative book, *The Object Stares Back*.⁶⁴ With lightness of touch and reference to a wide range of evidence and scholarship, Elkins explains that seeing is motivated by both the seer and the seen and at times directed by needs beyond the conscious awareness of the subject. Still, every viewer belongs to a society and subscribes in varying degrees to the bodily conventions and practices of that society. In this sense, visual-

ity is similar to sexuality. Both pertain to natural and universal human acts, but both are also learned, socially controlled, and organized, and therefore domesticated. Like art, religion, or common sense, visuality is what Geertz terms a “cultural system,” and thus capable of analysis locally and with whatever degree of “thick description” the evidence permits.⁶⁵

In sum, what I have suggested in this rapid, reductive “overview” of Western visuality is that major changes occur in the Renaissance that lead to the possibility of modernity and to modernity’s ability to create the “omniscient” (from Latin, all-knowing) “panorama” (eighteenth-century neologism of Greek, view of all) offered by the preceding “survey” (from the French, “to look over”). All of this we today contest, beginning, most emphatically, with the word *omniscient*. My goal here is neither to pronounce upon nor to define something so problematic as “Western vision.” Rather, as a medievalist, I have sought to call attention to certain aspects of modern seeing, so as to set off what I take to be the differing systems of societies that are prior to and/or distant from early modern Europe. Yet as I present the past as Other, I also want to argue the opposite, namely that these other systems do have correspondences in our world, but only in the cracks and at the margins of “Cartesian perspectivalism” and the concomitant mechanistic understanding of the human body. The visualities that my colleagues describe on the following pages are and are not strange and different from us. Of course, people in those societies, whether Buddhist monks or early Christian pilgrims, did not understand light waves or retinal images, and they did not share the empirical epistemology of Descartes and Kepler.⁶⁶ But they also grappled with the issues of power and ethics, including the consequences of gendered vision.⁶⁷

Moreover, it should not be assumed for past or present that the history of optics or the prevailing scientific consensus is identical to, or can take the place of, the visual mentalities of larger populations. Indeed, Gerald Winer, a professor of psychology at Ohio State, and his colleagues have lately demonstrated that a significant proportion of educated Americans believe in extramission,⁶⁸ the very theory that Kepler, Descartes and a host of scientists supposedly demolished centuries ago. But this is not altogether surprising because older paradigms of vision often linger or are invented anew long after scholarly attention has shifted elsewhere. For example, in a study of the public viewing of the Shroud of Turin during the seventeenth century, John Beldon Scott demonstrated the continuation of Scholastic theories of vision.⁶⁹ Even among scientists of the Enlightenment, vestiges of extramission still remained, especially in regard to belief in hypnotism or mesmerism (after F. A. Mesmer, d. 1815).⁷⁰ Moreover, the worldwide acknowledgment of the powers of the Evil Eye,⁷¹ a common belief in antiquity and the Middle Ages, is yet another indication that neither modernity nor its gaze are as hegemonic as sometimes assumed.

The ancient, medieval, Asian, and African visualities that we discuss have the virtue of being removed from the discoveries, inferences, and claims that characterize the modern Western tradition, which many seek to change, supplant, or leave. Norman Bryson has called for a gaze in an “expanded field,”⁷² and John Onians

aspires to a global history of seeing.⁷³ In terms of chronology and geography, our book is as expansive as we could make it. In the best of all possible worlds, we would have chapters on pre-Columbian America, India, medieval Islam, the many tribal societies of the world, and the emerging discourse of the anthropology of the senses.⁷⁴ But we do offer accounts that range temporally from the third millennium B.C. to the fifteenth century A.D. in Europe or to the present day in Africa, and geographically from China to England. Missing is any discussion of color, but that topic is well served by the broad study of John Gage.⁷⁵

In general, our concern is more with seeing as social formative and productive, and thus with *visuality* more than *vision*, but these terms, born of modernity, are less useful for other cultures. Several chapters delve into ancient and medieval science; others make no mention of science. Their combination here raises questions, and it is to be hoped that they will inspire answers and more questions. Because our primary interest is process, not product, our contributions are not necessarily congruent with art history, even if many of us are art historians and we think that our chapters inform that discourse. Consequently, this book and its authors might be considered as yet another example of those hybrids that Latour describes as the product of the gradual demise of modernity's separation of nature and culture⁷⁶ and of the disciplinary apparatus that has been erected to control the visual.

Starting at a time and place foreign to many readers, ancient Mesopotamia, Irene Winter ("The Eyes Have It: Votive Statuary, Gilgamesh's Axe, and Cathected Viewing in the Ancient Near East") explores the emotional, spiritual, and political implications of seeing, especially a type of enhanced seeing or admiration. The key Sumerian term has the components of eye and house, implying that domestication (from the Latin *domus*, house) of the visual has a long history. In this culture, as in many that follow in our book, vision is the "primary path to both religious and aesthetic experience," anticipating the centrality of seeing that has been considered a hallmark of western culture and that anthropologists now wish to problematize.⁷⁷ The staring statues in Chapter 1 are so arresting (see Fig. 4), because bodily form – their great eyes – enable these figures to communicate directly with us across great temporal distance. However, they were made to convey the earnest messages of their donors to the gods before which they once stood and to register physically the greater reciprocal power of the divine gaze upon them.

Working from descriptions of ancient works of art, a popular approach,⁷⁸ Jaś Elsner ("Between Mimesis and Divine Power: Visuality in the Greco-Roman World") considers two types of ancient visualities, one naturalist and the other "ritual-centered." The former, better known because of its later life in the Renaissance, promotes the viewer's identification with, and even erotic desire for, the depicted. The latter, more religious, leads to the Middle Ages. In some temples, like those of Winter's Mesopotamia, what counted most was the coming before the direct frontal gaze of the deity. Ritual preparation enabled the worshiper to merge his/her subjectivity with that of the god. This was not the *visuality* of naturalism by which the viewer, as voyeur, gazed from afar, and hence it was less a *visuality* of *seeing* and more of *being seen* by the cult image, a distinction that again reminds one of Winter's thesis.

Elsner's two visualities are taken up in the next chapters. The erotic is an important aspect in that of Shadi Bartsch ("The Philosopher as Narcissus: Vision, Sexuality, and Self-Knowledge in Classical Antiquity"). She considers a constellation of topics that are not obviously related. Although the association of "reflection" with thought is well known to us today, the ancient assumption that vision was tactile suggests that this relationship is not as familiar as we might think. Using Ovid's story of Narcissus as her point of departure, Bartsch introduces Greek notions of the erotic vision between the person loving and loved and explores their Roman transformation in Ovid and Seneca. A different social grounding for male–male sexual relationships in Rome necessitated a philosophical reorientation of the dynamics of vision, eros, and philosophy. But vision for the Stoics remained a moral and ethical matter and continued to be linked with knowledge.

Georgia Frank's chapter ("The Pilgrim's Gaze in the Age before Icons") returns to religious vision, but on the other side of the supposedly great divide between antiquity and the Middle Ages or what for the latter was paganism and Christianity. Seen from a later vantage point, what she studies are the precursors to Byzantine iconoclasm, a topic that has concerned historians and especially art historians for decades. Prominent in its lineage is the article by Ernst Kitzinger, "The Cult of Images in the Age before Iconoclasm."⁷⁹ As was standard for his day, Kitzinger concentrated on objects and devotional practices and paid little attention to the act of seeing itself. By studying pilgrimages to the Holy Land, Frank, a historian of early Christianity, discovers a visuality that is antecedent to the later icon veneration. For believers, seeing was tactile and a means of participating in what had once taken place at the holy event. As she shows, the distinction between a visual and a tactile piety belongs to modern visuality, not early Christian practice.

Pilgrims walked to the holy places, and in his chapter on Buddhist China, Eugene Wang ("Watching the Steps: Peripatetic Vision in Medieval China") takes seriously this peripatetic vision. There, two modes of meditative visualization prevailed. One involved siting and gazing afar and mentally walking about a landscape of the mind. These practices find their traces in Chinese painting and poetry. By visually "stepping into the shoes of the [represented] other," the Chinese beholder affects the subject/object distinction. In the second process, the monk's act of walking according to ritualized constraints led to visionary experiences and to the collapsing of time and space. The decorated pagoda, especially its gateway, facilitated these meditations, and Wang concludes, "Seeing is believing only when one *is there* to see." Both Frank and Wang deal with the emplacement of vision and the power of place/space, issues for recent authors, who call for a more embodied and localized sense of culture.⁸⁰ Visuality in medieval China is and is not distinct from that in contemporary Europe, a thesis that Craig Clunas has lately developed for the early modern period,⁸¹ and in another important study of East Asian visuality, Timon Screech has explored the consequences of the introduction of Western vision to Japan.⁸²

Like Elsner's chapter, mine ("To Say and to See: Ekphrasis and Vision in Byzantium") works with formal rhetorical texts, known as ekphraseis, and finds examples, direct and indirect, of the continuation of ancient notions of extramission in

medieval Byzantium. There, to judge from the sermon of Patriarch Photios that is my central concern, vision was direct, steady, penetrating, and haptic. If the legitimacy of that culture's codes of viewing can be granted, then its texts and the objects they describe begin to make "sense." Moreover, a resolution can be found to a supposed contradiction that scholars have found in Byzantine reactions to images, when that scholarly "perspective" is also contextualized. What separates the visualities of medieval and modern viewers of Byzantine art, at the most reductive level, is the divide that I have been describing as well as the distinction between resemblance and representation (Foucault) or re-presentation and representation (Latour).⁸³ Byzantine visuality, not surprisingly, resembles what Winter, Elsner, and Frank have described for the visual relationships between deity and beholder in earlier cultures.

In western Europe of the early and high Middle Ages, Cynthia Hahn ("Visio Dei: Changes in Medieval Visuality") finds religious visuality to be more momentary and glancing, even though extramission prevailed, thanks to the writings of St. Augustine. By the late Middle Ages, she argues, this glance is replaced by a sustaining gaze that lingers on the image, in a way that recalls Byzantine believers or Merleau-Ponty's gaze that "caresses." But like worshipers as far back as ancient Mesopotamia, medieval viewers could also be stunned by the sight of a cross or icon. In a recent essay, she has continued to explore religious viewing.⁸⁴

Michael Camille ("Before the Gaze: The Internal Senses and Late-Medieval Practices of Seeing") considers visuality at the end of the Middle Ages and works between the discourses of art history and the history of science. At that time, the shift to Aristotelian intromission and the incorporation of Arab optics results in the greater importance of the image than the eye. This development Camille connects with the rise of naturalism in Gothic art. In later centuries, it contributes to the varieties of Renaissance painting and the rise of aesthetics, developments explored in detail by David Summers⁸⁵; to disembodied eyes, picturing vision, objectivity, and representation with which I began; and ultimately to a certain marginalization of the visual that is only beginning to be corrected in our world. But in the thirteenth and fourteenth century, that was in the distant future, and late-medieval vision was still fundamental to science, cognition, philosophy, theology, semantics, and epistemology.⁸⁶

The final chapter in our volume, by Allen and Mary Nooter Roberts ("Displaying Secrets: Visual Piety in Senegal"), may seem strange, distant, unconnected with what has come before. However, those first impressions are worth scrutiny themselves, for in part they are the consequence of deeply ingrained patterns of construing global history and art. The result is marginalization of Asia and Africa. In such histories, Asia begins the grand Western narrative, or is inserted into breaks or pauses in that history, for example, the division between antiquity and the Middle Ages. But Asia never comes at the end, because the culmination of history, the goal of its development, the telos, is always the West, whether Europe or America.⁸⁷ The nine chapters of our volume might have been grouped differently, but strict chronology creates interesting juxtapositions and dictates that our book begin in western Asia, consider Chinese Buddhism after early Christianity, and end not where it begins in this introduction with the Renaissance, but in modern Africa.

To the envy of those of us who work on comparatively inaccessible past cultures, the Robertses are able to engage actual, living people and through fieldwork to describe a modern religious visuality that exists within the venerable tradition of Islam and Sufi mysticism. But visuality in modern Senegal is hardly timeless or culturally pure, the usual traits of marginalization. The community in question constitutes itself around the memory and messages of the modern Sufi mystic Amadu Bamba, and it relies upon painted images of him that were based upon a single old photograph of poor quality. But as the Robertses explain, that image now circulates within a religious visuality that interprets it in ways far different from the ubiquitous photographs of our lives. Visuality supplants vision. In Senegal, the vital, active seeing of believers penetrates visual surfaces and reveals inner secrets. Arabic letters are read in faces and images, long a feature of Sufi belief and the basis of a semiology that reappears in a postmodern novel of the Turkish author Orhan Pamuk.⁸⁸ Islam in Africa absorbed elements of local beliefs, a process hardly confined to Islam or Africa. As a result, the Robertses are able to use their Senegalese case study to introduce the issue of secrecy – not seeing but also not saying – and briefly to remark on its importance elsewhere in Africa. That this issue, which has parallels in medieval Christianity and before, deserves further work is shown by the exhibition that recently toured brightly lit American museums at the initiative of Susan Vogel⁸⁹ and by an earlier show, organized by Mary Nooter Roberts.⁹⁰

Unfortunately not present in our book are the visual traditions of South Asia, a loss, because for Hindus, *darśan*, the “seeing” of the divine image, is particularly important. As Diana Eck has explained in her useful introduction to Indian visual culture, “we” go to church to worship, whereas Hindus go to temple to see the image of the deity. In that sacred space, eyes are the means of access to the blessings of the deity, which it “gives” and the people “take.” The worshiper sees the deity, but the deity also sees the worshiper, a practice that has parallels in ancient Mesopotamia, Greece, or Byzantium. Vision is the means of contact.⁹¹ The dissertation of Woodman Taylor provides access to the devotions of a particular Hindu community.⁹² For that group, religious seeing was thoroughly embodied, tactile, gustatory, sexual, and – for all of the above – religious. This is hardly the perspectivalism, mechanization, or objectivity of the elite culture of early modern Europe.

In sum, our volume’s “focus” on and “fascination” with the visual is culturally bound. Indeed, these very words derive from either side of the epistemological divide of what might, after Latour, be called the modern and nonmodern, rather than the premodern. “Focus” is Latin, but its modern meanings derive from Renaissance Latin and early modern optics and are credited to Kepler and the very period I have discussed.⁹³ “Fascination,” on the other hand, is etymologically ancient, from the Latin *fasinare*, “to enchant . . . by the eyes or the tongue,”⁹⁴ and presumes extramission. That today we use both words innocently is yet another indication of the intricate temporality of our lives⁹⁵ and of our multilayered and not always consistent discourse about the visual.

In our book, we have focused on the visual, but the anthropological study of other cultures raises the question of whether our isolation of the visual from the

other senses, its “focus,” may not be a consequence of the Western systems of classification and processes of abstraction that we have attempted to bracket and move beyond. But the issues probably run much deeper than the epistemic break of the Renaissance. Stephen Tyler has documented something that has scarcely gone unnoticed,⁹⁶ namely the fundamental equation of seeing with knowing in Indo-European languages, so that it is almost impossible to write a piece like this without constant recourse to terms and metaphors of visuality, for example, idea, theory, but also concept, notion, abstraction, appearance, and so on.⁹⁷ A related phenomenon is the predominance of words dealing with things in European languages. But the hegemony of objects and vision – things seen – to connote knowing is not universal, and Tyler calls attention to the structure of the Dravidian languages of south India. There, verbs of saying or telling more commonly express the notion of thinking instead of, for example, our concept of reflection. Consequently, thoughts in these languages are not nouns. Tyler puts it this way, both explaining and consciously or unconsciously demonstrating the difference from the West: “[S]aying and doing – words and deeds – are far more important than thinking, and this is *reflected* [emphasis mine] in their linguistic habits.”⁹⁸

Similar issues can be explored by means of an article by Jean-François Billeter about philosophical thought in China. Inspired by Rorty’s critique of visual metaphors in Western philosophy, Billeter notes that in China, expressions of action are the principal way of speaking philosophically. Thus, practice is preferred to reflection, and the Chinese sense of reality involves actions more than it does things or objects.⁹⁹ This “position” (thus a Western manner of describing) recalls Tyler’s conclusions, as well as details of the Buddhist practices described in Wang’s chapter.

Thus, one means of achieving a “vision in an expanded field” is to problematize not only “vision” but also what, according to Chinese thought, might be the spatially limited and statically conceived “field.” At this “point,” having tried to render the words I use less “transparent,” I will stop and allow my colleagues their turns. But after each has concluded, I trust that they will permit me to suggest that our book ends without closure and with an unfulfilled desire on the part of its authors – and, we hope, our readers – to learn more about visualities and the subjectivities and societies that support them. The more we have learned, the more we have discovered our ignorance. The process has seemed a bit like that old story, a visual one, of the blind “man” and the elephant. We, of course, might reassure ourselves that we can see and know what an elephant looks like. But do we?

* * *

Our project began with a conference at the University of California in Los Angeles in the spring of 1995. That event was supported by the Department of Art History and its Arts Council chair, which I was honored to hold for a term. Ours was a small working group that included five of the authors here (Camille, Frank, Hahn, Nelson, and Wang), as well as two unfortunately not present, Woodman Taylor,

who spoke about India, and Irene Bierman, about Fatimid Egypt. Mary Carruthers, who has written a fundamental book on the related and relevant topic of memory in the Middle Ages,¹⁰⁰ offered a stimulating commentary, as did others present, including Robert Brown, Donald McCallum, Donald Preziosi, and Claudia Rapp of UCLA and Paula Sanders of Rice University. Since that event, Shadi Bartsch, Jaś Elsner, Allen and Mary Nooter Roberts, and Irene Winter have joined the project and extended its “scope.”

Several people have helped in the production of our book. Ann Maire Yasin of the University of Chicago read each essay carefully and did not withhold criticisms of any of us, including her teacher. Cecily Hilsdale also of the University prepared our index. Norman Bryson’s “gaze” from distant Cambridge, Mass., was beneficial to the book and mediated its acceptance into the Cambridge Studies in New Art History and Criticism. Beatrice Rehl further guided it through the Press. Two readers for the Press offered commentary and appreciation, and another, also anonymous, wrote a long, detailed, and useful response for the University of Chicago Press, whose art editor, Susan Bielstein offered wise counsel. Lastly, I want to acknowledge the patience and forbearance of my colleagues in this project. Several wrote and rewrote their chapters some time ago. I am grateful that they have remained committed to the volume and appreciative of how much I have learned from them.

NOTES

- 1 Henry D. Thoreau, *Walden* (Princeton, N.J.: Princeton University Press, 1989), 10, cited by David Michael Levin, ed., *Modernity and the Hegemony of Vision* (Berkeley, Calif.: University of California Press, 1993), 12.
- 2 Michael Baxandall, *Painting and Experience in Fifteenth Century Italy: A Primer in the Social History of Pictorial Style* (New York: Oxford University Press, 1972), 29. To this last section on the retina should be added mention of the rods, which are sensitive to size, shape, and brightness and are employed in night vision. The book of Richard Gregory, et al., *The Artful Eye* (Oxford: Oxford University Press, 1995), introduces the psychology, physiology, and aesthetics of vision as it is understood today.
- 3 See entries by Alexander Kazhdan and Annemarie Weyl Carr in *The Oxford Dictionary of Byzantium*, vol. 1 (Oxford: Oxford University Press, 1991), 297–8.
- 4 Elliot R. Wolfson, *Through a Speculum That Shines: Vision and Imagination in Medieval Jewish Mysticism* (Princeton, N.J.: Princeton University Press, 1994).
- 5 Hal Foster, ed., *Vision and Visuality* (Seattle, Wash.: Bay Press, 1988), ix. As the following explains, this formulation is itself a consequence of a modern visuality, one that will never match precisely that of other cultures. Any act of engagement necessitates an awareness of alterity and of the categories into which it is fitted in the act of interpretation and translation.
- 6 Caroline A. Jones and Peter Galison, *Picturing Science Producing Art* (New York: Routledge, 1998). The many essays in this important book have appeared too late to be considered in our study.
- 7 For example, Samuel Y. Edgerton, Jr., terms the spatial illusion of Byzantine painting an

- example of “reverse perspective,” even though this art came before the Renaissance perspective that concerns him. He then notes that reverse perspective has “been related to the phenomenon of split representation, observed by anthropologists and social psychologists among so-called primitive peoples, and especially among children.” See his *The Renaissance Rediscovery of Linear Perspective* (New York: Harper & Row, 1976), 13–14.
- 8 On the history of science being particularly susceptible to what is also known as Whiggish history, see Willem van Hoorn, *As Images Unwind: Ancient and Modern Theories of Visual Perception* (Amsterdam: University Press Amsterdam, 1972), 23–31. I thank Shadi Bartsch for this reference.
- 9 One defense of the procedure can be found in Clifford Geertz, “‘From the Native’s Point of View’: On the Nature of Anthropological Understanding,” in his *Local Knowledge: Further Essays in Interpretative Anthropology* (New York: Basic Books, 1983), 55–70. Geertz might, however, have chosen a better title if he had been aware of the rich literature on perspectival metaphors, such as “point of view,” in Western culture. Thanks to that “perspective,” a “native’s point of view” is a contradiction in terms. On perspective, its meanings, uses, and metaphors, see Claudio Guillén, “On the Concept and Metaphor of Perspective,” in his *Literature as System: Essays toward the Theory of Literary History* (Princeton, N.J.: Princeton University Press, 1971), 283–371; James Elkins, *The Poetics of Perspective* (Ithaca, N.Y.: Cornell University Press, 1994).
- 10 “After all, what would be the value of the passion for knowledge if it resulted only in a certain amount of knowledgeable and not, in one way or another and to the extent possible, in the knower’s straying afield of himself? There are times in life when the question of knowing if one can think differently than one thinks, and perceive differently than one sees, is absolutely necessary if one is to go on looking and reflecting at all.” Michel Foucault, *The Use of Pleasure* (New York: Vintage Books, 1985), 8. This passage has impressed others also. It is quoted in Peter Brown’s introduction to his *The Body and Society: Men, Women and Sexual Renunciation in Early Christianity* (New York: Columbia University Press, 1988), xviii, and used as epigraph to Levin, *Hegemony*.
- 11 More intricate than the linear history given in the nevertheless useful and very learned essay of Ivan Illich, “Guarding the Eye in the Age of Show,” *Res* 28 (1995): 47–61.
- 12 Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, Mass.: MIT Press, 1990), 27. On the *camera obscura*, see Joel Snyder, “Picturing Vision,” *Critical Inquiry* 6 (1980): 499–526.
- 13 John Cottingham, Robert Stoothoff, and Dugald Murdoch, *Descartes: Selected Philosophical Writings* (Cambridge: Cambridge University Press, 1988), 63–4; Charles Adam and Paul Tannery, eds., *Oeuvres de Descartes*, vol. 6 (Paris: Librairie Philosophique J. Vrin, 1965), 115, 124.
- 14 *De Omnifaria doctrina*, ed. L. G. Westerink (Utrecht, 1948), 60, no. 109.
- 15 Norman Bryson in his *Vision and Painting: The Logic of the Gaze* (New Haven, Conn.: Yale University Press, 1983), 98, put it this way: “So far from being a spatial or temporal point, the viewer of the ecclesiastical image is an embodied presence in motion through a circular temporality of text and a choreographic (in the full sense) space of vision. *The body does not see itself*; the gaze under which it moves is not yet the introjected gaze of the Other, but of God.”
- 16 Illich, “Guarding the Eye,” 51.
- 17 *De anima*, II, 1, 412b.
- 18 *Meteorologica*, IV, 12, 390a.
- 19 David C. Lindberg, *Theories of Vision from Al-Kindi to Kepler* (Chicago: University of Chicago Press, 1976), 1–17. Another very useful treatment of the same topic is A. C.

- Crombie, "The Mechanistic Hypothesis and the Scientific Study of Vision: Some Optical Ideas as a Background to the Invention of the Microscope," *Historical Aspects of Microscopy*, ed. S. Bradbury and G. L'E. Turner (Cambridge: W. Heffer & Sons, 1967), 3–112.
- 20 Ibid., 58. His treatise is now available in the translation of A. I. Sabra, ed. *The Optics of Ibn al-Haytham* (London: Warburg Institute, 1989).
- 21 Lindberg, *Theories of Vision*, 104–21, 209–10.
- 22 Joseph Needham with Wang Ling and Kenneth Girdwood Robinson, "Physics," pt. 1 of *Physics and Physical Technology*, vol. 4 of *Science and Civilization in China* (Cambridge: Cambridge University Press, 1962), 86. As for the larger subject of visuality in China, there is the relevant material in the wide-ranging paper of Eugene Yuejin Wang, "Mirror, Death, and Rhetoric: Reading Later Han Chinese Bronze Artifacts," *The Art Bulletin* 76 (1994): 511–34, even if its concerns are more textual. Particularly suggestive for further inquiry is the fine essay of Anne Burkus-Chasson, "'Clouds and Mists That Emanate and Sink Away': Shitao's *Waterfall on Mount Lu* and Practices of Observation in the Seventeenth Century," *Art History* 19 (1996): 169–90. The recent book of Craig Clunas, *Pictures and Visuality in Early Modern China* (Princeton, N.J.: Princeton University Press, 1997), has a chapter on the "Practices of Vision," 102–33.
- 23 Lindberg, *Theories of Vision*, 147.
- 24 As Michael Ann Holly noted (*Past Looking: Historical Imagination and the Rhetoric of the Image* [Ithaca, N.Y.: Cornell University Press, 1996], 16), the print historian William Ivens went so far as to regard Alberti's work as more important than the fall of Constantinople, the invention of the printing press, and the discovery of America: William M. Ivens, Jr., *On the Rationalization of Sight: With an Examination of Three Renaissance Texts on Perspective* (New York: The Metropolitan Museum of Art, 1938), 7. An important recent study distinguishes Alberti from medieval visuality: Jack M. Greenstein, "On Alberti's 'Sign': Vision and Composition in Quattrocento Painting," *The Art Bulletin* 79 (1997): 669–98.
- 25 Cecil Grayson, ed. and trans., *Leon Battista Alberti, On Painting and On Sculpture* (London: Phaidon, 1972), 40–1.
- 26 Alistair C. Crombie, "Kepler: De Modo Visionis," *L'aventure de la science, Mélanges Alexandre Koyré*, vol. 1 (Paris: Hermann, 1964), 141.
- 27 Louis Dupré, *Passage to Modernity: An Essay in the Hermeneutics of Nature and Culture* (New Haven, Conn.: Yale University Press, 1993).
- 28 Crombie, "Kepler," 150.
- 29 Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* (New York: Random House, 1973), ix–xix.
- 30 Alfred W. Crosby, *The Measure of Reality: Quantification and Western Society, 1250–1600* (Cambridge: Cambridge University Press, 1997).
- 31 Hubert Damisch, *The Origin of Perspective*, trans. John Goodman (Cambridge, Mass.: MIT Press, 1994), 42–55; Hans Blumenberg, "Light as Metaphor for Truth: At the Preliminary Stage of Philosophical Concept Formation," in Levin, *Modernity*, 30–62.
- 32 Crombie, "De Modo Visionis," 142–3.
- 33 Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge: Cambridge University Press, 1997), 125–58.
- 34 Crombie, "Mechanistic Hypothesis," 54–5.
- 35 See, for example, Sherman Stuart, *Telling Time: Clocks, Diaries, and English Diurnal Form 1660–1785* (Chicago: University of Chicago Press, 1996).
- 36 Useful here is the book of Susan R. Bordo, *The Flight to Objectivity: Essays on Cartesian-*

- ism and Culture* (Albany: State University of New York Press, 1987), especially pp. 45–95. For a larger contextualization of visuality in the time of Descartes, see Françoise Siguret, *L'oeil surpris: Perception et représentation dans la première moitié du XVII^e siècle* (Paris: Klincksieck, 1993).
- 37 Cottingham, *Descartes*, 68.
- 38 Maurice Merleau-Ponty, “Eye and Mind,” in James M. Edie, ed. *The Primacy of Perception* (Evanston, Ill.: Northwestern University Press, 1964), 169; Dalia Judovitz, “Vision, Representation, and Technology in Descartes,” in Levin, *Modernity*, 63–86.
- 39 Judovitz, “Vision . . . in Descartes,” 81–2.
- 40 Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley, Calif.: University of California Press, 1993).
- 41 The point is Jay’s, *ibid.*, 79. On this matter, see Chapters 2–3 of Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Random House, 1973), 17–77.
- 42 Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass.: Harvard University Press, 1993).
- 43 See her concluding essay, “‘The Contexts of Vision’ from a Specific Standpoint,” in Teresa Brennan and Martin Jay, eds., *Vision in Context: Historical and Contemporary Perspectives on Sight* (New York: Routledge, 1996), 219–30.
- 44 Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton, N.J.: Princeton University Press, 1979).
- 45 Svetlana Alpers, *The Art of Describing: Dutch Art in the Seventeenth Century* (Chicago: University of Chicago Press, 1983), 26–71.
- 46 Thomas DaCosta Kaufmann, “From Mastery of the World to Mastery of Nature: The *Kunstammer*, Politics, and Science,” in his *The Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance* (Princeton, N.J.: Princeton University Press, 1993), 174–94.
- 47 Regina Stefaniak, “Correggio’s *Camera di San Paolo*: An Archaeology of the Gaze,” *Art History* 16 (1993): 203–38.
- 48 Barbara Maria Stafford, *Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine* (Cambridge, Mass.: MIT Press, 1991).
- 49 Jean Starobinski, “Jean-Jacques Rousseau and the Peril of Reflection,” in his *The Living Eye* (Cambridge, Mass.: Harvard University Press, 1989), 14–77.
- 50 Snyder, “Picturing Vision,” 499–526.
- 51 For example, recently, Crary, *Techniques of the Observer*; Barbara Maria Stafford, *Artful Science: Enlightenment Entertainment and the Eclipse of Visual Education* (Cambridge, Mass.: MIT Press, 1994); Tom Gunning, “An Aesthetic of Astonishment: Early Film and the (IN)Credulous Spectator,” *Art & Text* 34 (1989): 31–45; Scott Bukatman, “The Artificial Infinite,” in Lynne Cooke and Peter Wollen, *Visual Display: Culture Beyond Appearances* (Seattle, Wash.: Bay Press, 1995), 254–89.
- 52 Beate Allert, *Languages of Visuality: Crossings between Science, Art, Politics, and Literature* (Detroit, Mich.: Wayne State University Press, 1996); Brennan and Jay, *Vision in Context*.
- 53 Jay in Brennan and Jay, *Vision in Context*, 9. On Lacan, see Jay, *Downcast Eyes*, 338–70. Especially clear on Lacan is Norman Bryson, “The Gaze in the Expanded Field,” *Vision and Visuality*, ed. Hal Foster (Seattle, Wash.: Bay Press, 1988), 87–94. The discussion of the gaze is found in Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis* (New York: W. W. Norton & Co., 1981), 67–119.

- 54 Margaret Olin, "Gaze," in Robert S. Nelson and Richard Shiff, eds., *Critical Terms for Art History* (Chicago: University of Chicago Press, 1996), 208–19.
- 55 This point was not lost on Lacan: "I dare to state as a truth that the Freudian field was possible only a certain time after the emergence of the Cartesian subject, insofar as modern science began only after Descartes made his inaugural step" (*Four Fundamental Concepts*, 47; see also p. 85). On the creation of early modern subjectivity, see Dupré, *Modernity*, 93–119.
- 56 Bruno Latour, "Opening One Eye While Closing the Other . . . A Note on Some Religious Paintings," in *Picturing Power: Visual Depiction and Social Relations*, ed. Gordon Fyfe and John Law (New York: Routledge, 1988), 15–38.
- 57 Jay, *Downcast Eyes*, 211.
- 58 Merleau-Ponty, "Eye and Mind," 159. In *The Visible and the Invisible*, ed. Claude Lefort (Evanston, Ill.: Northwestern University Press, 1968), 14–15. Merleau-Ponty writes further about science: "The true is the *objective*, is what I have succeeded in determining by measurement, or more generally by the *operations* that are authorized by the variables or by the entities I have defined relative to an order of facts. Such determinations owe nothing to our *contact* with the things: they express an effort of approximation that would have no meaning with regard to lived experience, since the lived is to be taken as such and cannot also be considered 'in itself.' Thus science began by excluding all the predicates that come to the things from our encounter with them."
- 59 Merleau-Ponty, *Visible*, 76.
- 60 *Ibid.*, 3.
- 61 "Visual Pleasure and Narrative Cinema," *Screen* 16, no. 3 (autumn 1975): 6–18.
- 62 *Flight*, 97–118. Other gender critiques, besides Mulvey (as in n. 61), include Luce Irigaray, *Speculum of the Other Woman* (Ithaca, N.Y.: Cornell University Press, 1985); Jacqueline Rose, *Sexuality in the Field of Vision* (London: Verso, 1986); Cathryn Vasselou, *Textures of Light: Vision and Touch in Irigaray, Levinas, and Merleau-Ponty* (New York: Routledge 1998).
- 63 Illich, "Guarding the Eye," 47–8; and Barbara Maria Stafford, *Good Looking: Essays on the Virtue of Images* (Cambridge, Mass.: MIT Press, 1996).
- 64 James Elkins, *The Object Stares Back: On the Nature of Seeing* (New York: Harcourt Brace & Company, 1996).
- 65 I refer to essays in his two books, *The Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973) and *Local Knowledge*.
- 66 Charles Larmore, "Descartes' Empirical Epistemology," *Descartes: Philosophy, Mathematics and Physics*, ed. Stephen Gaukroger (Totowa, N.J.: Barnes and Noble, 1980), 6–22.
- 67 See Blake Leyerle, "John Chrysostom on the Gaze," *Journal of Early Christian Studies* 1 (1993): 159–74.
- 68 Gerald A. Winer and Jane E. Cottrell, "Does Anything Leave the Eye When We See? Extra Mission Beliefs of Children and Adults," *Current Directions in Psychological Science* 5, no. 5 (October 1996): 137–42; Winer et al., "Conditions Affecting Beliefs about Visual Perception among Children and Adults," *Journal of Experimental Child Psychology* 61 (1996): 93–115; Jane E. Cottrell, Gerald A. Winer, and Mary C. Smith, "Beliefs of Children and Adults About Feeling Stares of Unseen Others," *Developmental Psychology* 32 (1996): 50–61.
- 69 John Beldon Scott, "Seeing the Shroud: Guarini's Reliquary Chapel in Turin and the Ostension of a Dynastic Relic," *The Art Bulletin* 77 (1995): 633–6.

- 70 *Stafford*, *Body Criticism*, 450–8.
- 71 Clarence Maloney, ed., *The Evil Eye* (New York: Columbia University Press, 1976).
- 72 In Foster, ed., *Vision and Visuality*, 87–113.
- 73 John Onians, “World Art Studies and the Need for a New Natural History of Art,” *The Art Bulletin* 78 (1996): 207. The quest for a history of seeing is actually as old as many approaches in art history, a young discipline. This is what Heinrich Wölfflin in 1915 thought he was writing in his *Principles of Art History: The Problem of the Development of Style in Later Art* (New York: Dover, n.d): “Vision has its history, and the revelation of these visual strata must be regarded as the primary task of art history [p. 11]. . . . But although men have at all times seen what they wanted to see, that does not exclude the possibility that a law remains operative throughout all change. To determine this law would be a central problem, the central problem of a history of art” [p. 17]. This formulation, however, seems distant and innocent on our side of Lacan, gender studies, or anthropology and after our retreat from idealism and positivism.
- 74 Anthony Forge, “Learning to See in New Guinea,” in Philip Mayer, ed., *Socialization: The Approach from Social Anthropology* (London: Tavistock, 1970), 269–91; David Howes, ed., *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses* (Toronto: University of Toronto Press, 1991).
- 75 John Gage, *Colour and Culture: Practice and Meaning from Antiquity to Abstraction* (London: Thames and Hudson, 1993). An anthropological perspective is provided by Marshall Sahlins, “Colors and Cultures,” *Semiotica* 16 (1976): 1–22.
- 76 Latour, *Modern*, 49–90.
- 77 For example, Howes, in *Varieties of Sensory Experience*, 3–21.
- 78 These and other sources are used by Simon Goldhill, “Refracting Classical Vision: Changing Cultures of Viewing,” in Brennan and Jay, *Vision in Context*, 15–28. See also his article (“The Naive and Knowing Eye: Ecphrasis and the culture of viewing in the Hellenistic World”) and that of Froma Zeitlin (“The Artful Eye: Vision, Ecphrasis and Spectacle in Euripidean Theater”), in Simon Goldhill and Robin Osborne, eds., *Art and Text in Ancient Greek Culture* (Cambridge: Cambridge University Press, 1994), 138–223.
- 79 *Dumbarton Oaks Papers* 8 (1954): 83–150.
- 80 Edward S. Casey, “How to Get from Space to Place in a Fairly Short Stretch of Time: Phenomenological Prolegomena,” in Steven Feld and Keith H. Basso, *Senses of Place* (Santa Fe, N.M.: School of American Research Press, 1996), 33–4.
- 81 Clunas, *Pictures and Visuality*.
- 82 Timon Screech, *The Western Scientific Gaze and Popular Imagery in Later Edo Japan* (Cambridge: Cambridge University Press, 1996).
- 83 Foucault, *Order of Things*, 17–77; Latour, “Opening One Eye.”
- 84 “Seeing and Believing: The Construction of Sanctity in Early-Medieval Saints’ Shrines,” *Speculum* 72 (1997): 1079–1106.
- 85 David Summers, *The Judgment of Sense: Renaissance Naturalism and the Rise of Aesthetics* (Cambridge: Cambridge University Press, 1987).
- 86 Katherine H. Tachau, *Vision and Certitude in the Age of Ockham: Optics, Epistemology and the Foundations of Semantics 1250–1345* (Leiden: E. J. Brill, 1988), xvi.
- 87 See my article, “The Map of Art History,” *The Art Bulletin* 79 (1997): 33–40; and especially Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object* (New York: Columbia University Press, 1983).
- 88 Annemarie Schimmel, “Letter Symbolism in Sufi Literature,” in her *Mystical Dimensions of Islam* (Chapel Hill, N.C.: University of North Carolina Press, 1975), 411–25