4 Alberti and Perspective Construction

1

The previous chapter tried to show that reflection on perspective leads quite naturally to the vision of an infinite universe that knows neither center nor circumference. The challenge to the hierarchical conception of the cosmos that had ruled medieval thought mounted by such reflection should also have become evident: no longer is there any reason to divide the cosmos into a sublunar sphere that knows death and decay and a superlunar realm that knows only the perfection of untiring circular motion. One difficulty posed by the cardinal's transformed vision of the cosmos was this incompatibility with Aristotelian physics, which had furnished the Middle Ages with the outlines of its science of nature.[1]

Aristotle himself saw the incompatibility between his physics and such an infinite world quite clearly, it was one reason he felt he had to reject the latter:

> All movement is either compulsory or according to nature, and if there is compulsory movement there must also be natural . . . ; but how can there be *natural* move-ment if there is no difference throughout the void or the infinite? For in so far as it is infinite, there will be no up or down or middle, and in so far as it is a void, up dif-fers no whit from down; for as there is no difference in what is nothing, there is none in the void . . . ; but natural locomotion seems to be differentiated, so that the things

that exist by nature must be differentiated. Either, then, nothing has a natural locomotion, or else there is no void. . . .

Further, no one could say why a thing once set in motion should stop anywhere; for why should it stop *here* rather than *here*? So that a thing will either be at rest or must be moved *ad infinitum*, unless something more powerful gets in its way.[2]

Aristotle here seems to be entertaining the Galilean thought of inertia, only to reject it.[3] But if one were to break with the idea of natural movement so evident to Aristotle then Newton's first law of motion—which states that—if a body is at rest or moving at a constant speed in a straight line, it will re-main in that condition unless acted on by some force—would seem almost inescapable. Aristotle to be sure would have rejected any such suggestion as a fantastic hypothesis. His whole theory of motion presupposes that we can make sense of up and down, thus presupposes what Cusanus would consider no more than part of the natural illusion that lets us earth dwellers place our-selves near the center of the cosmos. But Aristotle is convinced that the space of geometry may not be confused with the space of physics, convinced that if we are to make sense of the world around us we have to recognize that there is such a thing as natural place. The four elements therefore each have their proper place in the sphere below the moon. It is natural for earth to seek to come down, for fire to rise; water and air have their places in be-tween. Depending on how a body is constituted out of these elements, it will seek its proper place.

We may wonder why, given this model, motion in the sublunar realm would not have come to an end long ago, when every element had finally found its proper place. What is the motor that enables continuing change? Aristotle's answer is that under the influence of the sun, the elements will transform themselves endlessly. Think of ice, which when heated turns into water; heated further, water evaporates and turns into air; while air, in turn, when cooled, condenses and falls down as water, which when cooled still further turns back into solid ice. And does not this cycle give us a first clue to the endless cycling of nature? When the sun, during the day and in sum-mer, warms the earth there will be a greater upward tendency; when, at night and in winter, it turns away from the earth we meet with the reverse. The revolutions of the heavenly spheres are thus responsible for the different

times of day and the changing seasons, for growth followed by decline and death. The sun is the prime motor of the sublunar realm.

The above is just a sketch, far too simple to do justice to Aristotle's science of nature, but it should suffice to show that the vision of an infinite cosmos en-tertained by Cusanus is incompatible not only with Aristotle's astronomy but more generally with his science of nature, which depends on a hierarchically ordered cosmos, on the distinction between a superlunar realm and a sub-lunar realm in which the four elements have their proper places. All of these are denied by Cusanus's vision of the cosmos, which thus makes it impossible to accept Aristotelian science. Aristotle thinks the space of natural science in terms of place. That people have even entertained the idea of an infinite cos-mos rests, according to Aristotle, on a confusion of the space of geometry with real space, the space of the world we actually live in. The space of geometry is the result of a flight of thought that loses touch with reality. When thinking real space, we have to think space in terms of place, where "place" means something like a container. Deny this view, Aristotle insists, and you will no longer be able to make sense of rest and motion and of their difference.

Someone might cite Cusanus's monstrous doctrine of the coincidence of opposites, which invites us to think the coincidence of rest and motion, as support for the soundness of Aristotle's position. Cusanus, to be sure, could invoke the authority of Plato among others to counter him, insisting that it is precisely the flight of thought beyond common sense that frees us from the illusions that rule ordinary experience. Rest and motion are for him rel-ative concepts. There is no absolute motion. Space comes to be thought of as an infinite field that human beings attempt to master by projecting onto or into it poles and lines of their own construction.

2

It is the conception of space as infinite field that underlies Leon Battista Alberti's perspective construction. Addressed primarily to painters and those interested in understanding the craft of painting, his theory of per-spective teaches us to create convincing representations of what we see, as it appears. What paintings represent then are not the objects themselves but their inevitably subjective appearances. Implicit in all such appearances is a particular point of view. All appearance is relative to the subject seeing.

Such insistence on the relativity of appearance is as characteristic of Alberti as it is of Cusanus. The following passage from *On Painting* reads almost as if it could have been written by Cusanus:

> It would be well to add to the above statements the opinion of philosophers who af-firm that if the sky, the stars, the sea, mountains and all bodies should become—should God so will—reduced by half, nothing would appear to be diminished in any part to us. All knowledge of large, small; long, short; high, low; broad, narrow; clear, dark; light and shadow and every similar attribute is obtained by comparison.[4]

We cannot know the absolute size of things. Indeed, we do not even know what such absolute size might mean. Our understanding of the size of some object is relative through and through. Alberti goes on to give a number of examples, such as the height of Aeneas, who stands head and shoulders above other men but seems like a dwarf next to Polyphemus. "Thus all things are known by comparison, for comparison contains within itself a power which immediately demonstrates in objects, which is more, less or equal. From which it is said that a thing is large when it is greater than some-thing small and largest when it is greater than something large" (A55).

Is there then a natural measure that we can use to escape from such relativity? Alberti suggests that there is, although "natural" should not be confused here with "absolute." The natural measuring rod is the human body: thus we measure length by arms (*braccia*), ells, and feet. "Since man is the thing best known to man, perhaps Protagoras, by saying that man is the mode and measure of all things, meant that all the accidents of things are known through comparison to the accidents of man" (A55). Our accidental size provides us with the measure of all things. That our measures are in this sense accidental in no ways robs them of their usefulness, or propositions based on them of their truth. Protagoras may have recognized something of the sort.

I find this rehabilitation of the sophist Protagoras, so sharply criticized by both Plato and Aristotle, at just this particular time remarkable and shall re-turn to it in a later chapter.[5] That Alberti welcomed the rhetorical force of this challenge is suggested by the fact that a similar reference is found in his *Libri della famiglia*, dating from roughly the same time. And thought-provoking, too, is the same rehabilitation of Protagoras found later in

De Beryllo, which appeared in 1458, explicitly defends the sophist against the critique of Aristotle. Did Cusanus here borrow from the younger Alberti? It would seem likely. I suspect indeed that Cusanus would have been aware of *On Painting* even when working on *On Learned Ignorance*.[6]

While I am not aware of any direct evidence that the two ever met, the circumstantial evidence suggests strongly that they must have known each other.[7] Consider their biographies. Alberti was born in 1404, in Genoa. At an early age, when he was only ten or eleven, he went to Padua to attend the school of the humanist Barzizza. Cusanus came to Padua in 1416; and though there is no reason to assume that he would have met the young Alberti at that time, the possibility cannot be ruled out altogether: people matured early in those days—recall that Cusanus was only fifteen when he enrolled in the University of Heidelberg. In 1421 Alberti enrolled in canon and civil law at the University of Bologna. In 1431 he obtained a minor po-sition at the papal curia. Like Cusanus, he took holy orders, though there is little about his subsequent career that reminds us of this (not because of any scandal—he appears to have lived an exemplary life). He died in Rome in 1472, having established himself as a theorist of art and architecture and as an ethical thinker who emphasized not contemplation but striving, labor-ing, producing. He himself was active as an architect and an urban planner.

The suggestion that Cusanus must have met the somewhat younger Alberti is supported by the overlap in their circles of friends. Most important perhaps, they were both close to the great mathematician, geographer, astronomer, and doctor Paolo Toscanelli (1397–1482), who, a friend also of Brunelleschi, shared their interest in perspective. Toscanelli is known to have brought to Florence a copy of Biagio Pelicani's then much-discussed *Quaestiones Perspectivae* (ca. 1390), a theory of optics and vision that followed the teachings of John Peck-ham.[8] Both Brunelleschi and Alberti seem to have studied that text. And Toscanelli is now believed to have been the author of a treatise *Della prospettiva* (in the Ricciardi library) that had been included among Alberti's works, "cast as a summary, in 'vulgar' Italian, of the key concepts of medieval optics" and written presumably earlier than *De Pictura*.[9] Toscanelli was among those responsible for the revival of interest in geography, more especially in produc-ing more accurate maps, an interest that both Cusanus and Alberti shared—indeed Toscanelli is rumored to have been the author of the chart that first

encouraged Columbus to seek the East by going west,[10] a reorientation that anticipates the spirit of Copernican revolutions. We know that Alberti joined Toscanelli in making certain astronomical observations.

That Alberti and Cusanus dedicated works to Toscanelli—Alberti the *Intercoenales* (1429), Cusanus his first two geometrical treatises, *De Transmuta-tionibus Geometricis* and *De Arithmeticis Complementis* (both 1450)—shows the high esteem in which they both held the Florentine polymath. Cusanus had first met Toscanelli in Padua, at the lectures of Beldomandi, the newly appointed professor of music and astrology. They remained friends and Toscanelli was the doctor at his bedside when Cusanus died in Todi. We have Toscanelli's critique of one of Cusanus's mathematical writings and also a little dialogue by Cusanus, *Dialogus de Circuli Quadratura*, which would seem to be based on a discussion between the two that took place in Brixen in 1457. Joan Gadol observes that "In the late 1450's Cusa's home in Rome was a gathering place for men of science like Peurbach, Regiomon-tanus, and Toscanelli; Alberti must have been a member of this group."[11]

What explains this relationship between mathematicians and painters? The answer is obvious in Alberti's case. His interest in mathematics is tied to the help it can give the painter in his attempt to master illusion, where the word "mastery" is meant to suggest two things: both to be able to produce convincing representations of the world as we see it but also to have under-stood the logic of these illusions. The theory of perspective teaches us about the logic of appearance, of phenomena. In this sense the theory of perspec-tive is phenomenology. So understood, phenomenology lets us understand why things present themselves to us as they do. This is indeed how Kant's contemporary Johann Heinrich Lambert, to whom we owe the term, understood it. Phenomenology meant to him a "transcendent optics," the theory of perspective in the widest sense.[12]

There is something magical about the illusions that mastery of perspective was able to produce, so much more lifelike than the kind of representations one had grown accustomed to; and it seems only fitting that Brunelleschi, on whom Alberti depends, was considered by his contemporaries to have been a magician in the tradition of Daedalus: his epitaph in Florence Cathedral celebrates the architect for having "excelled in the Daedalian art," mentioning as proof not only "this celebrated temple with

its marvellous shell but also the many machines his divine genius invented."[13] His systematization of perspective was just another of these inventions, devised not by a painter but by an architect who began his career as a goldsmith, trained to take care with his measurements. The theory of perspective was thus brought to painting by a comparative outsider.

Alberti dedicates the Italian version of *On Painting* to Brunelleschi, who is mentioned, along with Donatello, Ghiberti, Luca della Robbia, and Masaccio, as proof that nature was still capable of producing those "geniuses or giants which in her more youthful and more glorious days she had pro-duced so marvellously and abundantly" (A39). There can be little doubt that he deserves most of the credit for working out the theory of perspective as it concerned painters and other craftsmen.[14] Here is Manetti's account of Brunelleschi's original breakthrough:

> He first demonstrated his system of perspective on a small panel about half a *braccio* square. He made a representation of San Giovanni in Florence, encompassing as much of that temple as can be seen at a glance from the outside. In order to paint it it seems that he stationed himself some three *braccia* inside the central portal of Santa Maria dei Fiore. . . .
> [A description of what is on the panel and of the excellent workmanship follows.]
> And he placed burnished silver where the sky had to be represented, so that the real air and atmosphere were reflected it.

Brunelleschi then drilled a hole in the center of the panel through which the observer was to look at the work with the help of a mirror.[15]

The point of this exercise was to demonstrate to an amazed public the power of the newly discovered system of perspective: the world seemed to have been created over again. The artist appears here as a second god, and so Alberti calls him.

3

Alberti begins book 1 of *On Painting* with a statement clarifying the relationship of his theory of perspective to mathematics. "I will take first from the mathematicians those things with which my subject is concerned" (A43). What he takes from the mathematicians is sufficient to allow him to

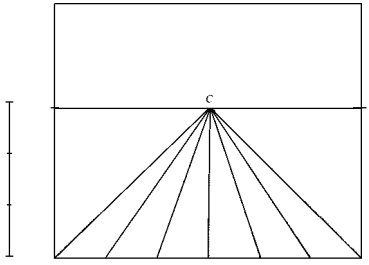
develop a mathematical symbolism that establishes an exact correspondence between the shapes of things located in space and their pictorial representations.[16] A language had been created that allowed for an easy passage from objects in space to their pictorial representation, given a particular point of view, and conversely from the perspectival appearance of objects to the objects themselves, the objects that are the concern of science. Alberti, to be sure, begs the reader to think of him not as a mathematician "but as a painter writing of these things. Mathematicians measure with their minds alone the forms of things separated from all matter. Since we wish the object to be seen, we will use a more sensate wisdom" (A43). We could trace here the dependence of Alberti on the medieval science of *perspectiva*,[17] a science of vision concerned with the nature of light, vision, and the eye that relied on ancient, Arab, and medieval optics (pseudo-Euclidean optics, Alhazen, Vitellio)—a science no doubt mediated to him by Toscanelli. What matters more, however, is Alberti's promise of "a more sensate wisdom" than that taught at the universities. Practice here turns to theory not for the sake of insight into the true nature of things, but for the sake of mastery. As Descartes later was to oppose his practical philosophy to the speculative philosophy of the Schools, so Alberti already teaches a practical science that brackets philosophical questions when these have no bearing on the craft that concerns him, taking from the mathematicians only "those things with which my subject is concerned" (A43). In this respect *On Painting* belongs to a by then well-established tradition. J. V. Field explains, "At least from the late thirteenth century onwards such mathematical skills were recognized as useful in wider contexts and were increasingly taught in abacus schools specially set up for the purpose. These abacus schools did their teaching in the vernacular. . . . In Florence, one of the best abacus schools, in the late fourteenth century, was that run by the Goldsmiths' Guild."[18] Brunelleschi belonged to that guild.

Having delimited his concerns, Alberti proceeds to draw a distinction between those qualities of a space that are changed by a change of place and light and those that are not (A44). Perhaps we can say that he is drawing a distinction between the real and the apparent properties of a thing. The painter is concerned primarily with the latter. But appearance is ruled by its own logic. This allows us to have a science of its representation. Alberti goes

on to introduce the idea of the pyramid of sight—its base whatever is being observed, its apex the observer's eye (see fig. 7). Once again we should note his unwillingness to get bogged down in unnecessary theoretical problems: "Among the ancients there was no little dispute whether these rays came from the eye or the plane. This dispute is very difficult and is quite useless to us. It will not be considered" (A46).[19] Alberti's practical science goes only as far as it needs to go to accomplish its aims.

Alberti likens the rays that connect plane and eye to hairs or a bundle and the eye to a bud, distinguishing between extrinsic rays, defining the outline; median rays, which fill in the area, and the centric ray, which is perpendicular to the plane. The more acute the angle in the eye, the smaller the object will appear. The greater the distance of some given object, the smaller the angle. He adds a note on aerial perspective, suggesting that the humidity of the air tires the rays, so that we see things as in a haze. Alberti goes on to suggest that the picture plane be considered as if it were made of transparent glass, a window through which we look at what appears to lie beyond. From this conception follows the crucial rule from which much of the following can be deduced: "Let us add the axiom of the mathematicians where it is proved that if a straight line cuts two sides of a triangle, and if this line which forms a triangle is parallel to a side of the first and greater triangle, certainly this lesser triangle will be proportional to the greater" (A52).

But let us turn to the construction itself (fig. 4):



. . .

figure 4

Perspective construction.

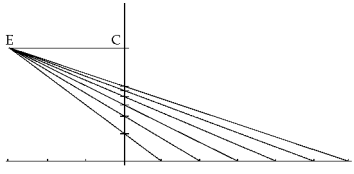
Drawing by author.

First of all about where I draw. I inscribe a quadrangle of right angles, as large as I wish, which is to be considered an open window through which I see what I want to paint. Here I determine as it pleases me the size of the man in my picture. I divide the length of this man in three parts. These parts to me are proportional to that measurement called a *braccio*, for, in measuring the average man, it is seen that he is about three *braccia*. With these *braccia* I divide the base line of the rectangle into as many parts as it will receive. To me this base line of the quadrangle is proportional to the nearest and equidistant quantity seen on the pavement. Then, within this quadrangle, where it seems best to me, I make a point which occupies the place where the central ray strikes [C]. For this is called the centric point. This point is properly placed when it is no higher from the base line of the quadrangle than the height of the man that I have to paint there.

The centric point being located as I said, I draw straight lines from it to each division placed on the base line of the quadrangle. These drawn lines, [extended] as if to infinity, demonstrate to me how each transverse quantity is altered visually. (A56)

Alberti then discusses briefly a false construction apparently common in his day: a second parallel (b) is drawn to a line a, the distance divided into thirds, a third parallel (c), ⅔ of the distance between *a* and *b* above *b;* and so on. More important to us than this false construction is Alberti's gloss: "Know that a painted thing can never appear truthful where there is not a definite distance for seeing it" (A57). We should note that what the artist should strive for is not so much the truth as the appearance of truth.

But to return to the construction: how does Alberti draw his transverse lines (fig. 5)?



. . .

figure 5

Perspective construction.

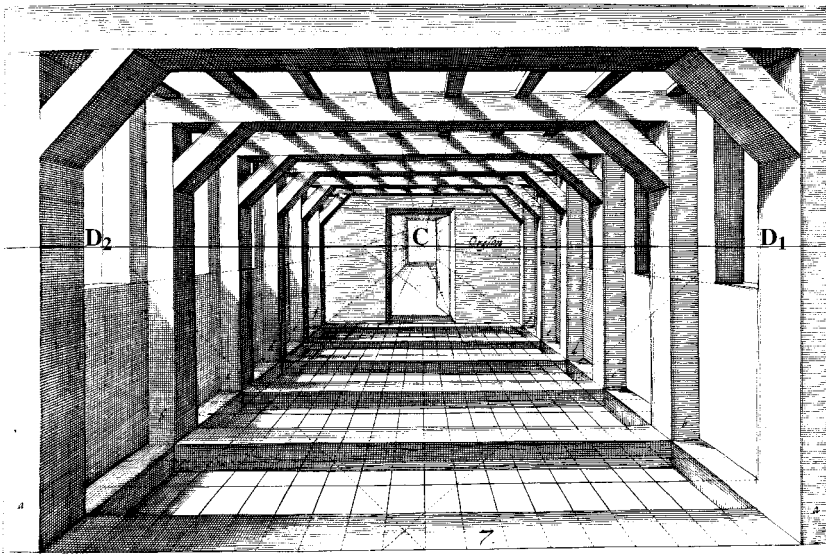
Drawing by author.

I take a small space in which I draw a straight line and this I divide into parts similar to those in which I divided the base line of the quadrangle. Then, placing a point [E] at a height equal to that of the centric point from the base line, I draw lines from this point to each division scribed on the first line. Then I establish, as I wish, the distance from the eye to the picture [*E–C*]. Here I draw, as the mathematicians say, a perpendicular cutting whatever lines it finds. . . . The intersection of this perpendicular line with the others gives me the succession of transverse quantities. In this fashion I find described all the parallels, that is the square[d] *braccia* of the pavement in the painting. (A57)

Although I find what Alberti here has to tell us clear enough, many of my students have found this part of the construction difficult to follow. They find it hard to accept that Alberti means what he says when he writes: "I establish, as I wish, the distance from the eye to the picture." The procedure seems to them arbitrary. But Alberti does mean just what he says. *E–C* does not just represent but is equal to the distance of the ideal eye to the picture. And that distance the painter establishes as he sees fit, given, to be sure, his understanding of the painting's anticipated placement and use.

To check whether the construction has been done correctly there is an easy test: "If one straight line contains the diagonal of several quadrangles described in the picture, it is an indication to me whether they are drawn correctly or not" (A57; fig. 6). This test provides an alternative method of construction.[20] Once again "I establish, as I wish, the distance of the eye from the picture"; plot this distance on the horizon line from the centric point [*C–D*], where *D* (D_1 or D_2, depending on whether I move to the right or the left) will often fall outside the picture to be painted; and connect *D* to the division points on the base line of my quadrangle. All the diagonals of a properly drawn pavement meet in *D* (D_1 or D_2). But the distance of the eye from the picture has to be equal to *C–D.* Every painting with a pavement painted in accord with Alberti's construction gives us thus an easy recipe for determining the ideal point of view.

Alberti's construction provides the painter with a matrix in which the objects he chooses to represent can then be located. This space, too, is essentially homogeneous, though it does have its center in the perceiving eye; it



. . .

figure 6

Jan Vredemann de Vries,

perspective construction, *Perspective*,

(Leiden: Henricus Hondius, 1604).

is indeed the subjective appearance of the objective space of the new science. Note the arbitrariness of the adopted point of view! The body, to be sure, provides Alberti with something like a natural measure—recall once more his reference to Protagoras. The perspective construction of Alberti is essentially anthropocentric in more than one sense in that the human body provides both ruler and point of view and human reason provides the framework. This anthropocentrism is subject to criticism by those who demand a theocentric art, just as the anthropocentrism of the new science will be criticized by those who demand a theocentric understanding of reality. I shall return to this point in the next chapter.

. . .

figure 7

Albrecht Dürer,

Artist Drawing a Nude in

***Perspective* (1527).**

Credit: Foto Marburg/Art Resource, N.Y.

4

I would like to underscore the artificiality of Alberti's construction.[21] That his representation of space does violence to the way we actually experience things was noted already by Leonardo da Vinci. In Leonardo's *Treatise on Painting*, Hugo Damisch finds "the premonitory symptoms of a critical trope that has scarcely changed since that time, one that holds that *costruzione legittima* reduces the viewing subject to a kind of cyclops, and obliges the eye to remain at one fixed, indivisible point—in other words, obliges it to adopt a stance that has nothing in common with the effective conditions of perception, any more than it does with the goals of painting, as properly understood."[22] In Dürer's *Artist Drawing a Nude in Perspective* (fig. 7) the violation of both perceiver and perceived becomes image. Dürer does not just present here "the apparatus to which the painter should turn to facilitate rational construction,"[23] but accompanies such presentation with a critical commentary: note the different languages spoken by the two halves of the image—the contrast between the way the window on the left opens us to the promise of the bright world beyond, while in the window on

the right a scraggly potted bush, threatening to burst the prison of its container, blocks our vision. Dürer knew very well that first of all and most of the time we experience space with our moving body and with all our senses; he knew also that desire is part of such experience.

Concerned as he is with painting, Alberti considers only the eye. And even here, to make his construction manageable, he assumes monocular vision and a flat earth. The violence his construction does to the way we actually see is evident: normally we see with two, constantly shifting eyes. Consider the way you look at some tall object, say a tree; you won't keep your head still but will tilt it backward as you try to get a better view of the top, thus shifting what Alberti calls the centric point of each eye. Alberti assumes one stationary eye. In his account of Brunelleschi's first demonstration of the power of perspective, Manetti thus calls our attention to the way that Brunelleschi ensures that vision is monocular by drilling a peep-hole into the center of his panel; important, too, is Manetti's remark that Brunelleschi decided to paint only what could be seen "at a glance." Ideally such a painting freezes time. The consequence of this decision for perspectival representation becomes clear when you want to represent a very tall building, say the Tower of Babel. Alberti's construction demands that all the different stories, assuming equal height, would also have to be given the same size in our painting, although this is of course not how we would ordinarily see them. And yet, assuming a stationary eye and a centric line parallel to the assumed ground plane, it is easy to come up with a proof of the correctness of Alberti's construction. But this problem only reminds us that everyday experience involves a lot of motion of eyes, head, and body, and every such movement means a shift of the centric point. For the sake of achieving his mastery of appearances the painter reduces experience to momentary, monocular vision and places us on a flat earth. The perspectival art of Alberti subjects what it presents to a human measure that has itself been subjected to the demand for ease of representation.

But in this respect perspectival art is not too different from the new science, which also has its center and measure in the perceiving subject. Alberti's understanding of the art of perspective thus offers itself as a figure of Cartesian method, perspectival painting as a figure of the scientific representation of nature. In this sense Aberti's *On Painting* may be said to help usher in what Heidegger called "The Age of the World Picture."[24]

5 Curious Perspectives

1

Alberti's perspective construction offers the painter a spatial matrix in which whatever objects he chooses to represent can be located. That matrix offers the perspectival projection of Euclidean space, which is also the infinite space of the new science. It, too, thus knows of no absolute centers or measures, though as we have seen, the human body (and specifically the position of the eye) does provide something like a natural measure, center, and point of view and enables the painter to escape from arbitrariness.

An Aristotelian would have us wonder how well this representation of space captures the space we actually experience and live in. I myself concluded the previous chapter by pointing to the artificiality of Alberti's rationalization of the natural perspective of our visual experience. Such artificiality is explicitly acknowledged by the title of the first printed treatise on perspective, published in 1505: Viator's *De Artificiali Perspectiva*.[1] The author first of all assumes monocular vision; second, a stationary eye; and third, a flat earth. That this rationalized artificial perspective does violence to the natural perspective that rules our visual experience is a fact of which a Leonardo or a Kepler was well aware. But such violence was a price gladly paid for greater mathematical control. An appeal to realism thus does not quite explain the triumph of the new perspective. What mattered more was that the painter was given an easy-to-use method to discipline his pictorial

representations and fictions. The almost magical illusions the new method was capable of producing spoke for themselves, and soon *costruzione legittima* came to be pretty much taken for granted as a tool a painter was expected to have mastered—even if, more often than not, he bent it to his own purposes. But we should not lose sight of the doubly problematic status of an art willing to sacrifice reality to its rationalized representation, a sacrifice that anticipates the replacement, demanded by the science to come of the life-world with *its* rationalized representation.

Something of the questionable character of an art that replaces reality with simulacra is suggested at the beginning of book 2 of *On Painting*.[2] Alberti here praises the painter and the art of painting, which is said to contain "a divine force which not only makes absent men present, as friendship is said to do, but moreover makes the dead seem almost alive." A painting can offer a substitute for the absent or even dead friend: "Thus the face of a man who is already dead certainly lives a long life through painting" (A63). Painting grants life beyond death, although this victory over destructive time relies on the power of illusion. Alberti goes on to point out that painting has helped shape religious sentiments: "Some think that painting shaped the gods who were adored by the nations. It certainly was their greatest gift to mortals, for painting is most useful to that piety which joins us to the gods and keeps our souls full of religion" (A63). Later he quotes Hermes Trismegistus: "mankind portrays the gods in his own image from his memories of nature and his own origins" (A65). The reference is to the *Asclepius*,[3] an important source of medieval Hermetism, dating probably from the second or third century C.E., but then thought to go back to the ancient Egyptians, perhaps even to the time of Moses. The quotations from that text included by St. Augustine in his critique of magic in book 8 of the *City of God* had helped publicize its seductive if impious message.

Alberti, although eager to use the Hermetic text to rhetorically embellish his treatise, seems to have been unwilling to follow its lead and actually tie the art of painting to magic, as the *Asclepius* from which he cites so clearly does: "Do you mean the statues, O Trismegistus?" Asclepius continues.

> Yes the statues, Asclepius. They are animated statues full of *sensus* and *spiritus* who can accomplish many things, foretelling the future, giving ills to men and curing them. . . .

These terrestrial or man-made gods result from a composition of herbs, stones, and aromatics which contain in themselves an occult virtue of divine efficacy. And if one tries to please them with numerous sacrifices, hymns, songs of praise, sweet concerts which recall the harmony of heaven, this is in order that the celestial rites may joyously support its long dwelling among men. This is how one makes gods.[4]

Had not Augustine called this art of making gods in the *City of God*, where Alberti is likely to have found the passage he cites, a "detestable art, which is opposed to divine religion" and which therefore "should be taken away by that religion"? Not that Augustine denies that there may well be such an art that, evoking the souls of demons or angels, "united them with these holy images and divine mysteries, in order that through these souls the images might have the power to do good or harm to men."[5] But had not Hermes Trismegistus himself recognized the incompatibility of such an art with true religion? Augustine, at any rate, leaves no doubt that such an art can only be born of error and incredulity. Alberti apparently would have agreed with this condemnation, though he could have welcomed the first part of the quotation, inviting us to understand works of art as "full of *sensus* and *spiritus*." But "spirit" here would have to mean the human spirit, not that of demons or angels. Art had replaced magic, and perhaps it was precisely to hint at this replacement that Alberti cited the archmagician Hermes Trismegistus. Be that as it may, the association of painting with magic, which must have suggested itself to any reader familiar with the *City of God*, shadows Alberti's treatise.

Even apart from the shadow cast on this passage by Hermetic magic, many an orthodox reader must have found Alberti's proto-Nietzschean praise of painting difficult to accept. There is the irreligious suggestion that painting may actually have shaped the gods, that pagan religion at least (Alberti speaks in the past tense and of gods) is a product of art. But what of the religion in Alberti's day? Did it not also rely on images? Think of devotional images of martyrs, the Virgin, or Christ. Augustine himself had found it necessary to conclude his critique of Hermes Trismegistus by contrasting the way the Egyptians worshiped their gods with the way Christians honor their martyrs. If art does indeed substantially strengthen religion, as Alberti asserts, must we not take care lest the piety it fosters be a false piety that sac-

rifices the transcendent content of religion, its real substance, to superficial appearance? Religion has thus often shown hostility to painting and sculpture, hostility that again and again erupted into iconoclastic furor. How did Christians of Alberti's day respond to the following proud claim: "Therefore, painting contains within itself this virtue that any master painter who sees his work adored will feel himself considered another god" (A64)? As a second creator the artist here threatens to usurp the place of God. The questionable character of this understanding of painting is underscored by the end of the paragraph, addressed not to the vulgar crowd but to those about to be initiated into the mysteries of the art: "For this reason, I say among my friends that Narcissus who was changed into a flower, according to the poets, was the inventor of painting. Since painting is already the flower of every art, the story of Narcissus is most to the point. What else can you call painting, but a similar embracing with art of what is presented on the surface of the water in the fountain?" (A64). Once again the *Asclepius* comes to mind, for it begins with Hermes Trismegistus, Asclepius, Tat, and Hammon meeting in secret in an Egyptian temple: divine wisdom is not for the masses. Something of this aura of secrecy is evoked by Alberti's suggestion that what he has to tell us is meant only for a small circle of friends. These friends, however, seem no longer to need magic, for which Alberti substitutes an art based only on reason and nature, a substitution that foreshadows Descartes's substitution of a science based only on reason and nature for the magical science of the Renaissance with its invocations of occult powers.

Perhaps more important, Alberti's understanding of painting here recalls book 10 of Plato's *Republic*, which had already likened the painter to a godlike magician:

> And there is another artist,—I should like to know what you would say of him?
>
> Who is he?
>
> One who is the maker of all the works of all other workmen.
>
> What an extraordinary man!
>
> Wait a little, and there shall be more reason for your saying so. For this is he who is able to make not only vessels of every kind, but plants and animals, himself and all other things—the earth and heaven, and the things which are in heaven or under the earth; he makes the gods also.

He must be a wizard and no mistake.

Oh! you are incredulous, are you? Do you mean that there is no such maker or creator, or that in one sense there might be a maker of all these things but in another not? Do you see that there is a way in which you could make them all yourself?

What way?

An easy way enough; or rather, there are many ways in which the act might be quickly and easily accomplished, none quicker than that of turning a mirror round and round—you would soon enough make the sun and the heavens, and the earth and yourself, and other animals and plants, and all the other things of which we were just now speaking, in the mirror.[6]

For the real world, Plato's Socrates charges, the painter substitutes a world of subjective appearances. We can return to Alberti's invocation of the story of Narcissus: with his art the painter embraces mirror images, endowing them with a death-defying stability. In the myth, of course, what Narcissus tries vainly to embrace, having spurned the love of the nymph Echo and of Ameinias, is a reflection of his own beauty. To call Narcissus the founder of painting is to suggest that art has its origin in a self-love that, with its representations, wants to embrace its own reflection. There is, however, a sense in which the artist succeeds where Narcissus failed: the painter's attempt to embrace himself gives birth not to a child but to a work of art, understood here as a mirroring of self in nature.

Plato criticizes the imitative arts because they imitate only the appearances of objects that are themselves but imitations of the Forms. The artist is thus thrice removed from reality. It is a weighty charge: How can we take seriously art's claim to serve the truth? And was such service not central to the medieval understanding of art? We can understand why the philosopher Jacques Maritain should have mourned the rise of Renaissance art based on the newly gained mastery of perspective:

When on visiting an art gallery one passes from the rooms of the primitives to those in which the glories of oil painting and of a much more considerable material science are displayed, the foot takes a step on the floor, but the soul takes a deep fall. It had been taking the air of the everlasting hills—it now finds itself on the floor of a theater—a magnificent theater. With the sixteenth century the lie installed itself in

painting, which began to love science for its own sake, endeavoring to give the *illusion* of nature and to make us believe that in the presence of a painting we are in the presence of the same as the subject painted, not in the presence of the painting.[7]

Maritain is quite willing to grant that great artists have always been able to overcome this danger and lie. But he also invites us to consider the mastery of perspective, which a Vasari could take for granted as an evident artistic advance, as a liability. For it is primarily the triumph of perspective that Maritain has in mind when he speaks of the theater. He is thinking of artful pictorial illusions that invite us to mistake them for reality, letting us forget their merely artificial being and at the time the reality of the work of art as a material object in the world. The artist here usurps the place of God, substituting for God's creation his or her own. Human artifice substitutes simulacra for reality. With the turn to perspective, art threatens to obscure reality.

Having its measure in the beholder, artificial perspective has to mean a secularization of the visible. Thus it provides an obstacle to attempts to place the visual arts in the service of divine transcendence. This is the problem faced by the religious art of Renaissance and Baroque: cut off from transcendence by its subservience to perspective, it yet seeks to use that same perspective to incarnate transcendence. But is the power of such incarnation given to the artist? If so, the painter would draw close to the Hermetic magician. But can art offer more than an illusionistic theater (fig. 8)?[8]

2

Maritain would have us consider the single step that carries us from the rooms of the primitives to those holding the masters of the Renaissance as a crossing of the threshold that separates anthropocentric modernity from the theocentric Middle Ages. That Alberti has already crossed this threshold is shown by his rejection of the use of gold in painting. Soon the gold backgrounds of medieval art were indeed to disappear, as demanded by Alberti's understanding of proper representation: "There are some who use much gold in their *istoria*. They think it gives majesty. I do not praise it. Even though one should paint Virgil's Dido whose quiver was of gold, her golden hair knotted with gold, and her purple robe girdled with pure gold, the reins of the horse and everything of gold, I should not wish gold to be used, for

. . .

figure 8

Andrea Pozzo,

The Transmission of the Divine Spirit

(1688–1694). S. Ignazio, Rome, Italy.

Credit: Alinari/Art Resource, N.Y.

there is more admiration and praise for the painter who imitates the rays of gold with colors" (A85). Illusion is preferred over reality. In the frame or in an altar's architecture Alberti allows the use of gold, but it is excluded from the picture, where it would insert a dissonant element and disrupt the pictorial illusion. "Again we see in a plane panel with a gold ground that some planes shine where they ought to be dark and are dark where they ought to be light. I say, I would not censure the other curved ornaments joined to the painting such as columns, carved bases, capitals and frontispieces even if they were of the most pure and massy gold. Even more, a well perfected *istoria* deserves ornaments of the most precious gems" (A85).

To understand what is at issue here we must keep in mind the significance of the gold background that was introduced into Western painting just before 1000—perhaps the only artistic innovation of comparable importance was the stained-glass window. Together they furnished medieval art with two critical metaphors—critical in the sense that they allow us to approach the essence of this art. Consider the double picture here reproduced, showing the *Holy Women at the Sepulchre Confronted by the Angel of the Resurrection* from *King Henry II's Book of Pericopes* (fig. 9; plate 1): women and angel belong to a realm that knows nothing of time. The gold background here has metaphorical power, hinting at eternal blessedness as it helps establish the timeless significance of representations drawn from the mundane. It invites us to look at what we see from a "spiritual perspective." I am using this expression, which I take from Friedrich Ohly's investigations into "the spiritual significance of the word in the Middle Ages,"[9] deliberately: Alberti's perspective invites us to look through the material painting as if it were transparent, a window through which we can see what the painter has chosen to represent. But this is very much a human perspective, which has its center in the observer: what we see is appearance for us. The spiritual perspective of medieval art would have us look through the painting in a very different sense: through the material to its spiritual significance. The mundane is transformed into a divine sign. Alberti's art is incompatible with this spiritual perspective. A God-centered art gives way to a human-centered art.

The tension between these two approaches is characteristic of the art of the later Middle Ages, occupying as it does the threshold that separates and joins modernity and the Middle Ages. As an interest in three-dimensionality

. . .

figure 9

***Holy Women at the Sepulchre Confronted by the Angel of the Resurrection.* From *King Henry II's Book of Pericopes* (1002–1014).**

Credit: Bayerische Staatsbibliothek.

and perspective begins to assert itself, the use of gold has to become ever more problematic. Compare the three-dimensional solidity of both the angel and Mary in Ambrogio Lorenzetti's *Annunciation* (1344; fig. 10; plate 2) with the flatness of the figures, enlivened by the gestures of wings, garments, and hands, in the Ottonian miniature: a divine wind seems to blow through these spiritualized images. Lorenzetti's angel possesses a very different solidity; firmly he has taken his place before the Virgin, his placement underscored by the way the orthogonals of the checkered floor seem to converge in a single point, creating an illusion of depth.

Hugo Damisch points to the evident tension in the picture:

But the point toward which its orthogonals converge doesn't appear as such; it is dissimulated, or, to be more precise, obliterated, obstructed by a column in low relief

. . .

figure 10

Ambrogio Lorenzetti,

***Annunciation* (1344). Pinacoteca**

Nazionale, Siena.

Credit: Scala/Art Resource, N.Y.

that corresponds exactly with the panel's axis of symmetry and that, although an extension of the gilded frame, is nonetheless firmly planted within the painting, in the foreground, on its lower edge. In its spatial ambiguity, functioning as it does as a kind of mask or screen, this architectonic element is the lynchpin of an eminently contradictory structure in which the paving's recession is in open conflict with the flattening effect created by the gold ground—within which the vanishing point is geometrically situated.[10]

Alberti would no doubt have criticized such contradiction, as he would have pointed out the incorrect placement of the transversals.

The tension between the old and the new approach is even more striking in a *Conversion of St. Hubert* painted more than a century later by a follower

. . .

figure 11

Workshop of the Master of the Life of the Virgin, *Conversion of St. Hubert* (ca. 1480–1485). National Gallery, London.

Credit: National Gallery, London.

of the Master of the Life of the Virgin (fig. 11; plate 3). The rendering of the deep landscape with its aerial perspective demands an atmospheric sky. Here the gold background seems primarily a concession to a convention that by then had outlived itself. A need to justify the retention of a cherished tradition in terms acceptable to the new art is suggested by the many reinterpretations of the traditional gold background as a curtain made of some golden fabric. Related to this effort are attempts to represent halos as disks

. . .

figure 12

Rogier van der Weyden,

***St. Luke Sketching the Virgin* (1435).**

Credit: Museum of Fine Arts, Boston.

in space, a strange kind of golden headdress worn by saints, which the painter should take care to present in proper perspective.

In the work of the painter Cusanus admired most, Rogier van der Weyden, the new sense of space has pretty much triumphed, although awareness of point of view here does not mean subjection of space to the rigid scaffolding of Alberti's *costruzione legittima* (fig. 12; plate 4). In a painting such as *St. Luke Sketching the Virgin* the gold background has disappeared; so have the halos. St. Luke was the patron saint of painters: in representing the saint, van der Weyden was thereby also addressing the nature of his art. Of special

interest here is the contrast between the saint, who lived in the presence of the Virgin, actually saw her, and the observer and the painter, who possess only a mediated access to the sacred event. The saint's line of vision is thus placed at right angles to our own, reminding us that we are no longer as favorably positioned as he was. Ours is a different, and less privileged point of view; his was a more spiritual perspective. How would he have represented the Virgin? The sheet in his hands holds no answer, but when in imagination we put ourselves in his position, we "see" the Virgin before the golden background of the fabric of her throne. A concern for different points of view offers a key to the organization of this painting: compare the saint's and the observer's points of view with that of the couple looking out into the landscape beyond. With their backs to the sacred event, outside the room that shelters the Virgin and to which we, too, as observers half belong, their attention is turned to the world with its infinite variety. They and the saint belong to different realms.

I called the gold background a metaphorical device meant to carry us beyond the familiar sensible world. It thus functions somewhat like the words "absolute," "perfect," or "infinite" added to predicates taken from the sensible world in order to make them more adequate to God. Such strategies make sense only as long as there is an assumption of some continuity between the mundane and the divine, or at least some commensurability. As a new subjectivism began to assert itself in the concern with perspective that Alberti systematized, the use of gold backgrounds had to appear an increasingly hollow convention. And something similar holds for the presupposed analogy of being.

This new anthropocentric art had to raise once again the old Platonic question: Given the self-consciousness that finds expression in the adoption of perspective and the transformation of the visible world into subjective appearance, how could art still claim to serve divine reality? Is art not tied by its very essence to appearance? And the fault would seem to lie not just with one-point perspective, but with the visible as such. We stand on the threshold of a conception of art that no longer places the work of art in the service of truth, but reduces it to a kind of entertainment. Similarly, we stand on the threshold of a conception of science that no longer demands of itself adequacy to the things themselves, but is content with a mastery of representations.

The Renaissance preoccupation with magic, seen in the appeal of texts like the *Asclepius*, may be understood as a refusal to settle for an art and a science cut off from reality, as an attempt to find in the Hermetic tradition an alternative both to the disintegrating medieval worldview that had come to be associated above all with Aristotle and to the soulless science that was to find its most thoughtful defender in Descartes.

3

Must an art that submits to the rule of perspective also cut itself off from reality? This is not a problem for the artist alone: if our experience, too, is ruled by perspective—that is to say, is an experience of mere appearances having their center in the subject—how do we get beyond appearances to reality itself? The self-understanding that expresses itself in the preoccupation with perspective is intimately linked to skepticism. Skepticism is, as I suggested earlier, the philosophical expression of the threshold of modernity; we can hardly be surprised that at the time, Cusanus's doctrine of learned ignorance was widely considered just another skeptical position.[11] The rival claims of Catholic, Protestant, and Reformed Christians had reinforced skeptical reflections, and this splintering of the old faith had its counterpart in the disintegration of Aristotelian science. How was it possible to distinguish among all the different claimants to the truth? This is not the place to review the skeptical literature of the age, but we should turn at least briefly to what is perhaps its most famous example, Montaigne's "Apology for Raymond Sebond" (1580).

According to Montaigne, there is a sad disproportion between the demand for truth, for real insight into what is, and the human condition. What the human being wants he cannot get:

> The wretch has no stomach for effectively climbing over them [the barriers imposed on him by his nature]; he is trussed up and bound, subject to the same restraints as the other creatures of his natural order. His condition is a very modest one. As for his essential being, he has no true privilege or pre-eminence: what he thinks or fancies he has, has no savour, no body to it. Granted that of all the animals, man alone has freedom to think and such unruly ways of doing so that he can imagine things which are and things which are not, imagine his wishes, or the false and the true: but

he has little cause to boast about it, since it is the chief source of the woes which beset him: sin, disease, irresolution, confusion, despair.[12]

The human being is indeed the *animal rationale*, the animal that has reason. But reason proves an ambiguous asset: as the rational animal, the human being is also the animal that is not at ease with itself and the world, the forever restless animal, subject to sin and despair. The disproportion between what we want and what we can get is particularly evident in the realm of knowledge. As Nietzsche was to say much later, we demand to know, but have no organ for the truth. Here is how Montaigne, whom Nietzsche admired, put this point: "Now, since our state makes things correspond to itself and transforms them in conformity with itself, we can no longer claim to know what anything truly is." This is but another variation on the principle of perspective. Things appear to us the way they do because we have subjected them to our merely human measure. That insight is expressed in the Protagorean "man is the measure of all things," invoked by Alberti. But to continue with Montaigne:

nothing comes to us except as altered and falsified by our senses. When the compasses, the set-square, and the ruler are askew, all the calculations made with them and all structures raised according to their measurements, are necessarily out of true and ready to collapse.

The unreliability of our senses renders unreliable everything which they put forward. And meanwhile who will be a proper judge of such difference? . . . if the judge is old, he cannot judge the sense impressions of old age, since he is party to the dispute; so too if he is young; so too if he is well; so too if he is unwell, asleep, or awake. We would need a man exempt from all these qualities, so that, without preconception, he could judge these propositions as indifferent to him.

On this reckoning we would need a judge such as never was.[13]

Montaigne goes on to suggest that since sense cannot decide the dispute, reason must do so. But where does reason take its reasons? Does it not have to rely on sense impressions? He concludes: "We have no communication with Being; as human nature is wholly situated, forever between birth and death, it shows itself only as a dark shadowy appearance, an unstable weak opinion."[14] Nothing is left of Plato's belief that human reason had access to the realm of

true being, that it was therefore not victim to the deceptive senses, to the rule of time, and to the limits they imposed. Montaigne insists on these limits.

4

I began this chapter with painting and a question: how can an art ruled by perspective claim to reveal what is; how can it claim to represent reality? That this is also a problem for anyone who claims to know reality as it is, is shown by Montaigne. What renders both the new art and the new science profoundly questionable is hinted at by two paintings of the sixteenth century: Hans Holbein's *Ambassadors* (1533) and Pieter Brueghel's *Fall of Icarus* (1558). Holbein's splendid double portrait (fig. 13; plate 5) shows the French ambassador Jean de Dinteville and his intimate friend Bishop Georges de Selve, French envoys to the court of Henry VIII.[15] I shall not consider here the objects on the two shelves that speak of the cultural achievements of these two men and of the age—de Dinteville no doubt played a major part in deciding what was to appear in this painting, which was to hang in his palatial home in Polisy—but focus instead on the curiously elongated object in the foreground, which seems so obviously out of place, falls out of the picture as a dissonant "other." This enigmatic shape becomes legible when we assume a point of view to the left of the painting and slightly below: now it comes into focus as a skull. Here it is well to remember that the painter's name *Holbein* in German means "hollow bone," that is, skull, so that what we look at is no doubt also a witty way of signing the picture. But this explanation remains both obvious and superficial. Far more important is the way a change in the observer's position that leaves behind the generally taken-for-granted point of view (in front of the picture) reveals the real meaning behind the worldly pomp of the envoys and of the instruments with which they are associated: all this is only an appearance, a stage play. Death haunts this theater. The skull recalls us to what really matters.

This significance is underlined by other details. Quite theatrically the men pose before a green curtain, presenting themselves to us as actors on the stage of the world. The decorative pattern of the floor has been identified as that of the choir of Westminster Abbey. The worldly space of the theatrical setup is thus presented in a sacred space, though hinted at only by the pavement—and, if we look carefully, by the half-hidden crucifix, which we

. . .

figure 13

Hans Holbein the Younger,

The French Ambassadors of King Henri II

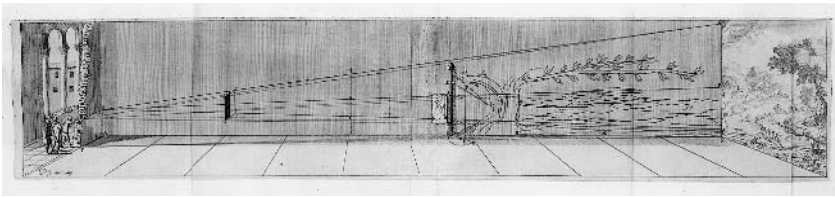
at the court of the English King Henry VIII

(1533). National Gallery, London.

Credit: Erich Lessing/Art Resource, N.Y.

barely glimpse in the painting's upper left-hand corner. The vanity of this life is thus revealed, as is its theatrical quality. Alberti's Narcissus, present here in the conceit of the signature, puts himself into question. By playing two perspectives off against each other, the artist lets us become aware of the illusory character not only of all perspectival representation, but also of our ordinary death-bound life.

Such confusing play with different perspectives helps define anamorphosis. As Shakespeare explains, "rightly gazed upon," such compositions "show nothing but confusion; eyed awry"—that is, looked at from the side—they "distinguish form" (Richard II, 2.2). A second, unexpected point



. . .

figure 14

Emmanuel Maignan,

design for fresco in SS. Trinità in Rome.

From *Perspectiva Horaria* (1648).

Credit: Beinecke Rare Book and Manuscript Library, Yale University.

of view reveals the hidden meaning. In Holbein's painting, to be sure, what we first see is not confusion but a splendid double-portrait, into which a dissonant, hard-to-read detail has been inserted. It is this detail that demands to be "eyed awry," confusing the apparently coherent picture. What is the significance of such games? The question becomes more interesting when we learn that the Paris monastery of the Minims, with which Descartes's friend Mersenne was associated and in which Descartes himself visited frequently before his departure for Holland, was soon to become a leading center of speculations concerning optics and perspective, with a striking emphasis on problems of anamorphic composition.[16] A number of large anamorphic frescoes were painted at the time. Niceron,[17] who like Mersenne was a Minim, painted two such frescoes in the cloister of the monastery of the Minims in Paris: one representing St. John the Evangelist, a repetition of a work he had done for the Minims in Rome two years before, the other a St. Magdalen, begun in 1645. Although these works have been lost, the St. John is illustrated and discussed in the *Thaumaturgus Opticus.* And one such fresco, dating from 1642 and by Emmanuel Maignan, has survived in the Minim Monastery of SS. Trinità in Rome (fig. 14).[18]

Why should such perspectival experiments or games be given room in a religious establishment? Is this interest in anamorphosis no more than a playful use of perspective? Facing such frescoes one sees very little: arabesques suggesting a landscape, but not coherent enough to be seen convincingly as such—riddles in search of an answer. That answer is given when the normal point of view is given up; a different point of view unexpectedly reveals the real significance of the work. Anamorphosis thus would seem to function as a metaphor for the world, which first presents itself to us as meaningless and confusing; only a change in point of view reveals its deeper order and meaning, in these cases very much a religious meaning. As we shall see in the following chapter, Descartes's method depends on a similar shift in point of view.

But a second point must be made: that such compositions call to our attention the power of perspective itself prevents us from trusting even the second point of view. It, too, is incapable of giving us more than appearance. What is therefore revealed is the deficiency of all perspectives. Anamorphic composition is art that by playing one perspective off against another, proclaims the insufficiency of the eye and thus of art. It resembles a theatrical performance in which the illusion is broken by an actor addressing us, reminding us that what we are watching is only theater; and yet that addresses, too, is part of the theatrical performance. Anamorphic painting should not be taken too seriously. It is born of a love of tricks and games. But it is precisely this lightness that gives it a particular adequacy in an age that had learned to distrust the eye and had despaired of the adequacy of the visible to the divine. Anamorphosis is closely linked to ornamental metamorphoses and to the rapidly changing images of the Baroque machine theater. All are metaphors for the labyrinthine character of the visible. By presenting the theater of the world as a labyrinth, such art gestures toward transcendence.

5

The labyrinth has of course a central place in the story of which "The Fall of Icarus" is but a chapter (fig. 15; plate 6). Auden has given us in "Musée des Beaux Arts" (1940) what has become the most familiar interpretation of Brueghel's painting:

. . .

figure 15

Pieter Brueghel the Elder,

***Landscape with the Fall of Icarus* (1558).**

Museum of Fine Arts, Brussels.

Credit: Scala /Art Resource, N.Y.

About suffering they were never wrong,
The Old Masters: how well they understood
Its human position; how it takes place
While someone else is eating or opening a window or just walking dully along;
How, when the aged are reverently, passionately waiting
For the miraculous birth, there always must be
Children who did not especially want it to happen, skating
On a pond at the edge of the wood
They never forgot
That even the dreadful martyrdom must run its course

Anyhow in a corner, some untidy spot
Where the dogs go on with their doggy life and the torturer's horse
Scratches its innocent behind on a tree.

In Brueghel's *Icarus*, for instance: how everything turns away
Quite leisurely from the disaster; the ploughman may
Have heard the splash, the forsaken cry,
But for him it was not an important failure; the sun shone
As it had to on the white legs disappearing into the green
Water; and the expensive delicate ship that must have seen
Something amazing, a boy falling out of the sky,
Had somewhere to get to and sailed calmly on.

But did the plowman turn away from the disaster? Did he even take note of it? To be sure, this painting is not an obvious example of anamorphosis, but it too makes a curious use of perspective. The scale jumps in ways Alberti would not have tolerated, the space falls apart as we explore the painting: its center will not hold. Try to fit the different scenes into one coherent perspective! We cannot easily get from one such scene to the next. Each individual seems caught up in his own private sphere. It is not, as Auden would have it, that they turn away from the disaster; they quite literally cannot see Icarus. They live in different private worlds, each governed by its own perspective and point of view. But note that the painter succeeds in revealing this imprisonment by his handling of perspective. This is a painting about many things, including perspective.

Why does the fall of Icarus in particular invite a meditation on perspective? Brueghel could find the story in Ovid's *Metamorphoses.* There we learn of Icarus, who together with his father Daedalus escaped from the island of Crete, home of the labyrinth, on wings Daedalus had made of wax. Human artifice was to carry them away from the isle of the labyrinth, which had come to be understood as a figure of this confusing world in which we have to make our way. By the time Brueghel painted this picture, Icarus had thus become a common symbol of knowledge that tries to raise itself beyond the lot of fallen humanity. In the famous emblem book of Alciatus, first pub-

lished in 1531 and one of the most often reprinted books of the Renaissance, we find an emblem of Icarus with the inscription *In Astrologos*, "Against the Astrologers," and an explanatory poem, warning that the astrologer should take care lest his attempt to raise himself with his knowledge above the stars lead to a fall (fig. 16). Icarus symbolizes prideful knowledge that must fall, "pride" being tied to the attempt to elevate oneself beyond the merely human perspectives illustrated in the Brueghel painting. The spectator, too, is invited by the painting to participate in an Icarus-like flight: the point of view is constantly raised as we move toward the slightly bent horizon. Alternatively, we can try to hold on to a single point of view, and then what we see becomes ever more toylike.

This painting especially invites us to place it in the context provided by the emblem books of the Renaissance. It is about the human condition, which, if we follow Montaigne, is one of imprisonment in a labyrinth of perspectives; and it is about the vanity of the attempt to escape from that labyrinth, as Icarus attempted to escape from Crete. Crete, the island of the labyrinth, figures the world in which fallen humanity finds itself, where the Fall is understood in terms of pride and thus of freedom, of the dislocating power of the imagination and intellect. The flight of Icarus compounds such pride and ends in death, though we should not forget Daedalus, who with his invention of wings "altered the laws of nature"[19] and who, by staying his course between heaven and earth, did escape.

But, as we are reminded by the partridge, visible on a branch just below the disappearing Icarus, the story does not begin here. As we learn from Ovid, it starts with a murder: in a jealous rage Daedalus had slain his supremely gifted nephew Perdix, who as a child had invented saw and compass and with whose education Daedalus's sister had entrusted him. But although Daedalus cast the boy "headlong down from Minerva's sacred citadel," the goddess, patron of human ingenuity, caught the falling boy and changed him into the low-flying partridge, which bears his name and is afraid of heights, replacing the "swiftness of intellect" with "swiftness of wing and foot."[20] The origin of the fall of Icarus lies thus in the fall of Perdix. The latter's fall, however, was born not of his pride but of Daedalus's unwillingness to tolerate a rival. Forced to flee Athens, Daedalus became both

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figure 16

Andreas Alciatus,

***In Astrologos (Icarus).* From**

***Emblematum Libellus* (1542).**

Credit: Beinecke Rare Book and Manuscript

Library, Yale University.

a builder and a rootless wanderer: the two belong together. I want to underscore the restlessness of Daedalus: Bacon sought the key to the transformation of the world into a labyrinth in the restlessness of the human understanding.

Daedalus is not to be found in Brueghel's picture. Ovid does indeed suggests that he did not witness his son's fall. Still, another version of the picture, presumably a copy, "corrects" this unexpected absence, as it corrects the position of the sun that in our version is shown setting:[21] was it not high in the sky when it melted the wax of Icarus's wings? How high Icarus must have flown to have been falling for such a long time! Now night is about to fall. And if this painting is haunted by the impending triumph of the night, there is also a sense in which it is haunted by murder: how else are we to understand the dagger lying below the horse at the edge of the plowed—I am tempted to say "slashed"—field.[22] A more careful look reveals the head of a corpse lying in the field beyond. As dagger and corpse frame the horse, it is difficult not to see this tiller of the ground in the image of Cain. But Cain resembles Daedalus: led by jealousy to murder, he too becomes a fugitive and a wanderer, also a builder. Does the skyward-looking shepherd, so different from the dark earthward-looking peasant, besides answering to Ovid's account, also represent Abel? The seemingly so pastoral scene of plowman and shepherd thus invites interpretation as a Christian figure of Perdix's murder.

The murderer found a first refuge with King Minos on Crete, where he built the labyrinth to house the Minotaur, the monstrous offspring of Queen Pasiphaë's unnatural love for a bull (that love itself a punishment by Poseidon for her husband's unwilliness to sacrifice that bull, as he had promised). To help the queen consummate her lust, Daedalus is said to have constructed an artificial cow into which she could crawl. The craftsman here, too, meddles with the order of nature. Artifice gives birth to a deadly monster that needs to be imprisoned by further artifice. The invention of wings belongs in this context of the subversion of the natural order by human artifice. In the picture its monstrous consequences are visible in the ship's cannons, in the angler's fishing rod, in the iron plowshare, and finally in the dagger. In the *Fall of Icarus* Brueghel links these violent fruits of artifice to

the setting of the sun. This land of the setting sun, illuminated by a pale light, is our *Abendland*, a land of evening on the threshold of the triumph of the forces of darkness. Death belongs with the labyrinth of perspectives.

6

As the story of Daedalus would teach us, the pride that leads us to refuse our place sets free something monstrous within us. Death, eroticism, and artificiality intertwine in stories of the labyrinth. For example, we hear of a dance, associated with both Ariadne and Aphrodite and said to have been invented by Daedalus, which imitated the windings of the labyrinth. The point of this dance, according to Virgil, was to lead men away from the regular; according to Ovid, it was linked to illusions that lead men stray. Masked balls come to mind, which similarly mingle eroticism and artificiality. Related to them is the widespread use of artful anamorphoses to conceal a pornographic content not considered a fit subject for pictorial representation. In such works it is the erotic, rather than death or the sacred, which is the "other" that anamorphosis is made to serve.

How are we to escape from the labyrinth, if indeed we want to escape and would not rather lose ourselves in Dionysian ecstasies? Three figures offer themselves as paradigms: Daedalus, Icarus, and Theseus. Theseus is able to leave the labyrinth because Ariadne gives him the thread that enables him to escape. The escape from the labyrinth here presupposes a gift. The cases of Icarus and Daedalus are different, for their escape is effected by artifice, by human ingenuity that would magically "alter the laws of nature." It is not at all surprising that in his *Rules* we find Descartes insisting that the method that he is advocating was given to him, as Theseus was given his thread. Descartes here is attempting to legitimate his theory by showing that it is not the product of a false pride. Similarly, in the famous dream in which the young Descartes tells how he came to arrive at his method, he declares that he received it as a gift. A gift from whom? Who is Descartes's Ariadne? We know that Descartes vowed in thanksgiving to make a pilgrimage to the Virgin of Loreto,[23] and we have good reason to believe that he fulfilled that vow. What speaks out of this vow is once again uneasiness about the legitimacy of theory and the new science that it was to found. The dream, as Descartes

tells it, helped assure him that the method was not a delusion born of human pride, perhaps sent by the devil, but of divine origin—that he is not Icarus, nor even Daedalus the magician, but Theseus. At issue is whether the new science Descartes promises his readers gives human beings what is rightfully theirs or whether they are usurping the place of God, trading reality for simulacra. At issue is the legitimacy or illegitimacy of theory, which means also the legitimacy or illegitimacy of modernity.