

Vredeman de Vries: Geometry and Freedom

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The architecture, crafts, and gardens of late-Renaissance Northern Europe owe a tremendous debt to the numerous publications of Hans Vredeman de Vries (1526–1609). Vredeman provided his era and subsequent generations with a large body of highly influential artistic representations, largely engravings and paintings. From Dutch town halls and gardens to English Victorian homes and German furniture, his imagination and deep concern for perspective would visibly alter late sixteenth- and seventeenth-century culture. This essay explores the spiritual significance behind the prints of “imaginary architecture” within Vredeman de Vries’s treatise *Perspective*, one of his last publications. Contemporary studies of this treatise have typically been fragmented into discipline-specific discussions.¹ These modern distinctions, however, did not apply to sixteenth-century thought. My intent is to explicate the ramifications of the decisions behind the engravings themselves. Choices such as the nature of the perspectival grid paving, the quantity of architectural elements, and the location of the centric point give us clues as to Vredeman’s particular understanding of perspective.

Perspective was first published in The Hague in 1604 by Hendrick Hondius and dedicated to Prince Maurits of Orange. Vredeman was well aware of the newfound power in the distribution of printed works, and had aligned himself with emerging and notable publishers such as Hondius. There existed a dual purpose to the manual’s production – as a pattern or source book and as a collectable item. It was thus equally at home in a dilettante’s house, a joiner’s workshop, or an architect’s library. Those using the engravings would either copy the works into architectural settings or use them as sources of inspiration, and collectors were presented with a series of little theatrical worlds. The book was largely written in between royal assignments in various northern cities. Consequently, Vredeman himself mentioned that his work represented an absorption of other German, Italian and French writings that he discovered on his travels. That this publication was intended to have a wide-reaching audience is evident from the title, which proclaims the book to be “for all painters, engravers, sculptors, metalworkers, architects, designers, masons, cabinetmakers, carpenters, and all lovers of the arts who may wish to apply themselves to this art with greater pleasure and less pain.”² With regard to theory, *Perspective* offers little that is new in comparison to the publications of Dürer and Alberti,³ yet Vredeman well understood his role as supplier of designs for artistic endeavours and one can note the instructional quality of the work in the increasing formal complexity of the plates. The engravings progress from representing paving grids and simple geometrical objects to illustrating architectural settings and urban environments.

Geometry and Fantasy

The crux of my argument hinges on the representational choices made by Vredeman himself in the creation of these perspectival engravings. The first plate [Fig. 1] of this opus provides insight into the following scenes, inasmuch as it is, in the words of the author, a work “touching the fundamental rule of Perspective, considered according to her nature, as is represented in this circle.”⁴ In almost all instances of the subsequent plates, the foreground is delineated with a grid. In these engravings people are either absent or so few in number that the gridded space takes on an unreal quality. Even the shadows are made subservient to the construction scheme in that they are always perpendicular to the centric ray. Perspective would have been understood, in Vredeman’s time, as a subjective appearance of an objective reality. The picture plane, or the engraver’s print, represented an artificially constructed view of a true world beyond. This is underscored, for example, by the dashed lines which complete the Euclidean-based geometries in those areas of the engravings, such as the reverse of an arcade, that are invisible to the viewer. Vredeman remained very conscious of the disparities between the artificial perspectival construction and the naturally viewed world. As he noted, “vision does not produce any perfect squares... but sees everything in the round.”⁵ In the introduction to *Perspective* he suggests the use of a restricted angle of view [Fig. 1]. The viewer stands at the centre of the geometry, but records only one quarter of a full panorama in any of his or her drawn perspectives.

Art historian Martin Kemp has suggested that the connections between Vredeman’s and Viator’s perspectival scenes are not coincidental.⁶ In 1505, Viator – Jean Pèlerin by birth – had published one of the first books on perspective for artists north of the Alps, *De artificiali perspectiva*. The text contains, as curator William Ivins pointed out, probably the first references

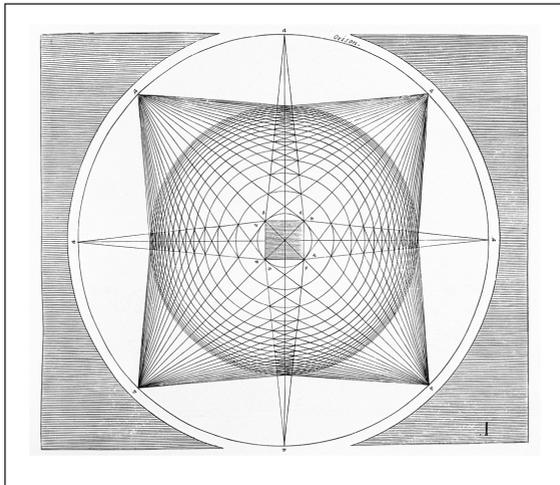


Fig. 1. Hans Vredeman de Vries, Plate 1, *Perspective*
(The Hague: Hendrick Hondius, 1604).

in print to the ground plane, the horizon line, and “tier points,” all in advance of what was later termed three-point perspective.⁷ This particular mode of perspectival arrangement, especially in its use of “tier points,” is echoed in Vredeman’s engravings a century later.

Although Vredeman is precise in his overall constructions and orthogonal lines, the smaller details and more curvilinear elements of his pictures are often not quite accurately drawn apropos the observer’s point of view [Fig. 2]. Column bases tend to sag, capitals droop, balustrades quiver. One might ask how these smaller elements are to be interpreted in terms of the intentions of the engraver. Perhaps Vredeman made a distinction between the primary architectural elements, which rigorously follow the system deployed, and secondary embellishments. At the time it might have been thought that our perceived world would be all too dry and mechanically-determined were we not to let such awkward moments exist. Meanwhile, despite the lesson in mechanics which he offers, select few occasions exist in Vredeman’s illustrative plates for dogs to frolic, lovers to caress, and townsfolk to converse, thus marginally relaxing the perspectival system.

The ability to play with the rules of a conceptual structure, as Vredeman does with perspective, only carries true significance in conjunction with a thorough understanding of those rules. Whereas the perspectival nature of Vredeman’s engravings remains inadequate in dealing with the infinite richness of particulars in this world, his subversion of perspectival rules offers the promise of opening up that inadequacy. The aforementioned sagging column bases serve as an example of this promise given that they resist conforming to the perspectival structure. The major metaphysical point here is that the power of perspective would enable one to achieve self-transcendence. Transcendence, in this sense, refers to a moving beyond

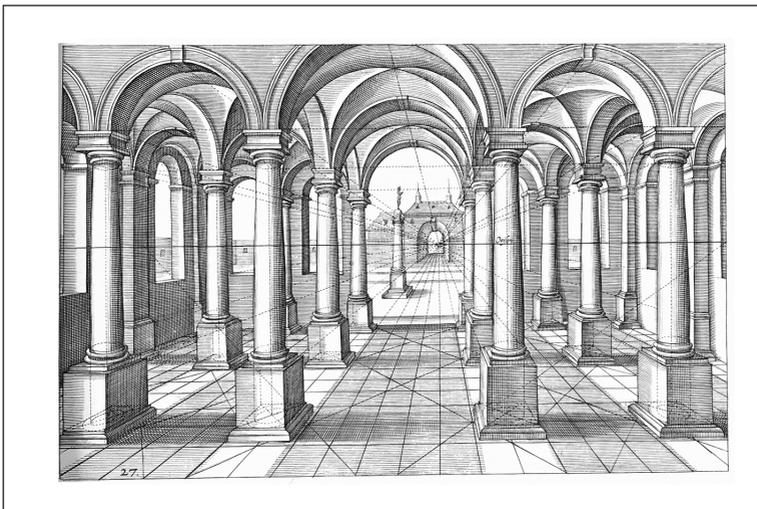


Fig. 2. Hans Vredeman de Vries, perspective engraving, Plate 27 of *Perspective* (The Hague: Hendrick Hondius, 1604).

the here and the now – whether it be thought’s ability to transcend our material being, God’s ability to transcend comprehension, or perspective’s ability to transcend ourselves. Spatially, one could envision occupying a limitless space unfettered by the place to which each individual already belongs. Such dreams of moving beyond the continuities provided by nature and history represent attempts at the pursuit of truth. If truth demands that one move totally past a sensuous realm, then art, being tied to that realm, could not offer us a lucid understanding of that truth. Thus Vredeman’s images in *Perspective*, connected as they are to a spatial freedom, represent the contradictions of attempting that pursuit through the sensuous medium of art.

Vision and Power – Beyond Artifice

Common to the majority of Vredeman’s pictures is the placement of the centric point within the drawing. Seldom is this point placed on a blank surface such as a wall, or on an undifferentiated line such as a horizon line. For example, in Figure 5, a low wall, below our centric line, has consciously been interrupted to allow our primary line of sight to pass through it. Similarly, in many other plates an arcade forms the last threshold surrounding the centric ray. The reason for such deliberate openings is to allow the path of vision the room needed to advance. More importantly, they imply movement in the drawing, as if the architecture is taking us somewhere specific, or important.

In most of Vredeman’s drawings, the fact that the centric ray rests on open space rather than on a focal point such as a fountain or a balustrade remains meaningful, for it allows our vision to run its course uninterrupted. By the artist’s placement of an important focal point

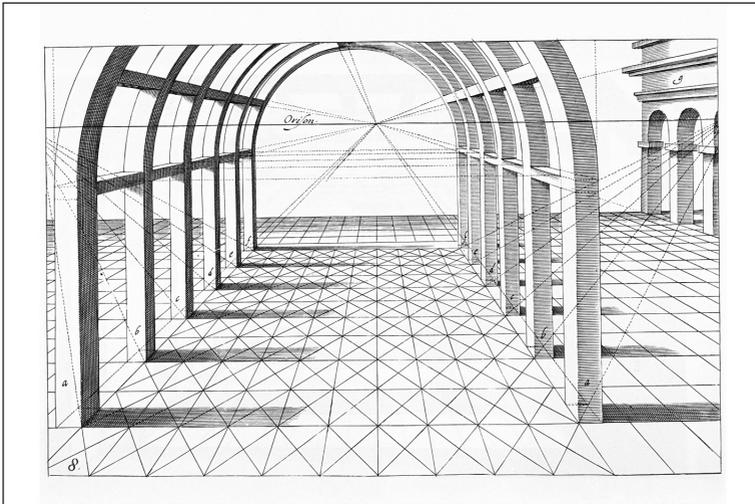


Fig. 3. Hans Vredeman de Vries, perspective engraving, Plate 8 of *Perspective* (The Hague: Hendrick Hondius, 1604).

within the drawing, we as spectators are asked to remain within the space of the drawing. Our desire to inhabit the world viewed before us is to be met in the illusory space of that locality. Vredeman consistently allows us to travel beyond the pictorial plane, thus reminding us of the artificial nature of the depicted environment. Our vision ultimately rests beyond the space of the frame, pointing to the inability of such representations to bind us to their depicted space. It is as if a window frame looking into the drawn scene is reopened on the other end of that scene. In Figure 6, someone might theoretically be looking back at us, thereby reinforcing the arbitrariness of our point of view. In observing the lines that appear to emerge from, or converge upon, the figure in this open doorway, one perceives that these lines represent the end point of the trajectory of the orthogonals moving toward the centric point. That their meeting point coincides with the head of this figure suggests something more. The lines speak of a power, now invested in the individual, to configure the world before him. This person views the same scene but from a completely different perspective. As Giulio Argan comments, “The novelty in the Renaissance concept of space lay in the fact that perspective was no longer considered as the law of our vision, but as the constructive rule of space itself.”⁸

Transcending the Frame

The consideration Vredeman gave to the perspectival vantage point remains highly significant. His landscapes, architectural or otherwise, are denuded to show the underlying principles of their construction and better illustrate the different perspectival rules and methods of depiction involved [Fig. 3]. If we apply this concept to the creation of architecture, then a building conceived predominantly or wholly in perspective would certainly have its fixed

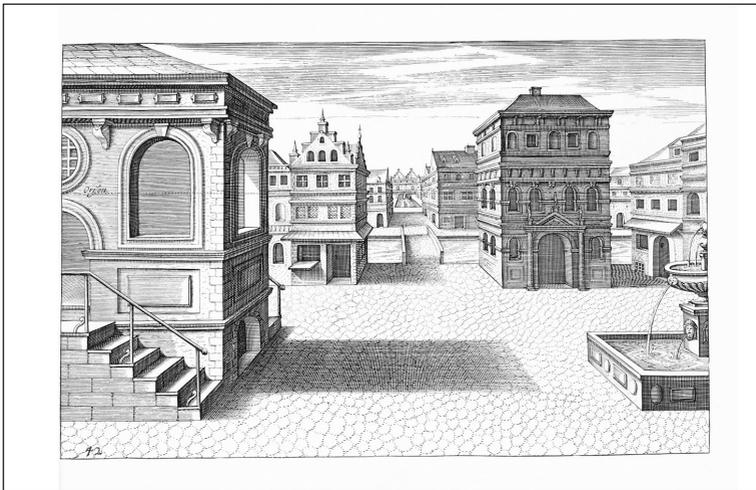


Fig. 4. Hans Vredeman de Vries, perspective engraving, Plate 42 of *Perspective* (The Hague: Hendrick Hondius, 1604).

points of optimal observation. An experience of the intentions behind the construction of such an edifice could be likened to encountering a series of pictures, with the viewer observing one perspectival image after another.

Given that we occupy a particular vantage point, we see the world from the perspective of that location. This is not to say that we could not envision taking up a perspective from a different vantage point, all the while physically remaining in the first. Perhaps there is something innate in the human mind that wishes to see its locus as the centre of things. Already in the fifteenth century, well before Vredeman's time, Nicolas of Cusa had drawn attention to perspectival thinking.⁹ Realising that perspective affected thought, he pondered whether it was our location on earth that would give rise to a geocentric view of the universe. Admittedly, positioning persons geocentrically would seem to lead toward accepting the supremacy of a centralised point of view. However, that premise would have to deny the ability of thought to transcend perspective. No room could be made for putting a person in another person's position.

Medieval Christians had viewed life under one God as a kind of unified staging point of departure. Reflection on perspective would initiate a subtle transformation of the medieval geocentric persuasion regarding the cosmos. Limits, finitude, and centrality would gradually be rendered questionable. Little by little, many people came to think that it made less sense to speak of an innately-centred and finite world. The new science of Kepler and Galileo did not by itself inaugurate a *bouleversement* of the medieval cosmos, but it did grow out of speculations on the nature of perspective. Vredeman contributed to this subtle transformation in many ways, including through his emphasis on unenclosed spaces and open paths of vision.

What, then, are the architectural details in Vredeman's engravings that make their

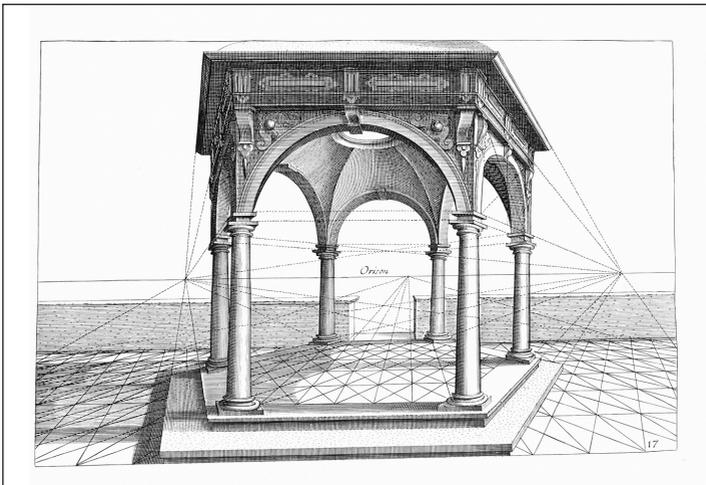


Fig. 5. Hans Vredeman de Vries, perspective engraving, Plate 17 of *Perspective* (The Hague: Hendrick Hondius, 1604).

perspectives so compelling? One possible explanation resides in the fact that some objects are in the near foreground, touching or nearly touching the picture plane, and other objects are in the middle-to-far distance [Fig. 4]. An interest in perceived depth, a necessary condition presupposed by this particular construction system, logically follows. A strongly delineated foreground acts as a frame, or at least a reference, for the ensuing spatial depth [Fig. 2]. This enables the viewer to more easily project himself into the pictorial space being presented.

Vredeman's grid paving [Fig. 3] invariably touches the picture plane. This gesture emphasizes the arbitrary placement of that transparent plane and affirms the illusory character of perspective. The viewer understands that the pavement should continue its trajectory and occupy the area beneath his feet. Thus, he feels as if he could transgress the picture plane and enter the view before him. However, not only does the picture obviously prevent this, but any such advancing motion would throw him out of the space which conditioned his previous desire.

The viewer realises that any invitation to inhabit the scene before him is mental rather than physical. Yet this does not situate perspective as an entirely cognitive achievement. Surely the eye needs to perceive such space before it, even though that oculus is reduced to a singular and static vision. Such tensions govern the nature of perspective vision: it remains at once deeply anthropocentric and yet quite foreign to us. Perspective does justice to the human being only in a limited sense. When we enter the space of the picture, for example, we must simultaneously bracket our existence in the space around us. No leeway can be made for our inability to remain perfectly still. Such a stance also precludes our ability to look at two pictures simultaneously. Not only is the world then reduced to a picture, but it is also reduced to one picture at a time.

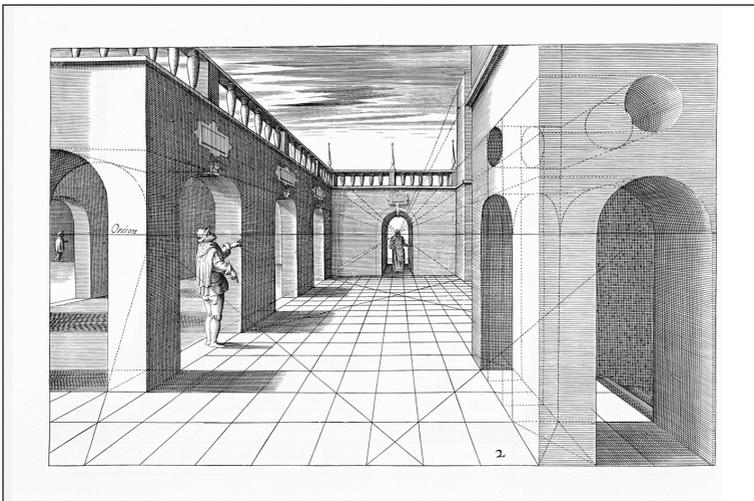


Fig. 6. Hans Vredeman de Vries, perspective engraving, Plate 2 of *Perspective* (The Hague: Hendrick Hondius, 1604).

This reductive capacity in Vredeman's prints allows the viewer to question whether or not the world can be perceived as a sequence of visual images. The world of concrete particulars would fit well into such an arrangement, provided the former had no need to interact with anything beyond itself. Our engagement with the world remains more than a polarised dialogue in which we sense some form of natural data, only to later award that data a name. Such a view would be born of a scientific and instrumental mode of thinking, in which one would be happy to give such designations an independent intellectual reality. Vredeman's perspectives point to such a reality. In following this view, one might note that a mental conception need not be corrupted by its physical counterpart. However, the experience of seeing something must involve something akin to knowing. Never does one perceive disconnected data. There must exist the experience of something that transcends phenomena understood as science understands it, for otherwise one would not be able to account for moral decisions and for the feeling, for example, that one ought to do something. Stripped of morality, humans as humans would be beside the point.

The Fixed Eye

Perspective is a kind of mental game projected on two- and three-dimensional space. The view is fixed, the viewer is fixed, and the transparent plane that separates the two, while arbitrary in its placement, is also fixed. Vredeman was conscious of this when he spoke, in *Perspective*, of the spectator's restriction of observing only one view at a time.

A problem occurs, then, when the spectator either moves or opens the other eye having looked at the world monocularly, or if the object to be represented moves. How does one draw what one sees while riding a horse? Can one draw a perspective of a fire or, say, laundry flapping on a clothesline in the wind? What would happen if a painter looked at a potential view with his eyes out of focus? Questions like these will always haunt a perspective defined as the capacity to see the subjective appearance of an objective reality. Dürer, in his own treatise on perspective, calls our attention to this immobility a number of times. In describing an apparatus for rendering something in correct perspective, he states: "Let the subject rest his head so that he will not move until all the needful strokes are completed."¹⁰ Dürer reinforces his implied concern even with regard to inanimate objects: "Place a lute or another object to your liking as far from the frame as you wish, but so that it will not move while you are using it."¹¹ Perspective alone, as generally depicted in Vredeman's scenes, is unable to render motion or time, yet his modification of its rules, such as the non-conforming quivering balustrades, opens a potential window within the constraints of that perspectival system.

The Endless Vista

A further commonality between all the Vredeman pictures is the high degree of repetition of architectural elements and, in particular, of columns. Art critic Erik Forssman elaborates on how Vredeman becomes intoxicated by his own column positions without reflecting on their purpose and sense.¹² He perceives Vredeman's architecture, following the publication of *Scenographie* (1560), as being completely senseless and meaningless, and notes how many of

Vredeman's column positions often do not support a roof, how arcades go nowhere, and how the imagery of a Roman temple is often sustained. Nonetheless, Vredeman's architecture is hardly one of gravity or of enclosure; instead, it is one of geometric entities. The viewer needs to see those geometries up close as well as far away in order to appreciate the perspective [Fig. 2].

The nature of perspectival drawing invites regular and ordered geometries. One might even imagine a personified perspective stipulating a geometric decipherability of architectural plans. The architecture of the early Renaissance exhibited very exacting and rational floor plans, as the lucidity of perspective could not be envisioned independently of the plan. In the pictorial engravings of Vredeman, the method of the imaginary view's construction leaves its mark on the drawn picture. According to the principles of this method, a successful perspective demands a clear and objective understanding of perspective's rules of construction. The implications of such a way of thinking and drawing had a profound influence on architecture. For example, elements such as arcade piers could be repeated identically only to enhance the perspectival structure that had generated them. Nonetheless, there is the risk that the power and beauty of the drawing, in its ability to conform to perspective, would not be sustained in the actual physical-site environment. A very different architecture could be imagined in which such repetition would figure less strongly, or for another reason, such as the marking of a progression through time. Although Vredeman does not pursue this, an architectural construction without such repetition could undermine the power or influence of perspective much in the same way that certain elements of Vredeman's scenes do not abide by his perspectival rules.

Conclusion

Vredeman's work continued the perspectival tradition as developed by Alberti, Viator, and Dürer. The understanding of perspective as a subjective appearance of an objective reality was still at play in the sixteenth century. Several key components of Vredeman's engravings enhanced this conception. The grid paving, when it touched the picture plane, bolstered the sense of the illusion depicted. The repetitive elements strengthened the construction scheme itself. The centric point's placement on an opening reinforced the need for the viewer's eye to move beyond the picture. All the while, some smaller details, unable to cooperate fully with the perspectival construction method, awakened the spectator to the inadequacy of perspective. Ultimately, along with Vredeman, the reader of the treatise *Perspective* can come to imagine a world of endless points of view. Understanding a particular viewpoint as one among many would be to embrace a relativist stance, with such thinking leading to an interpretation of the world as infinite, homogenised, and objective. Such a world was implied through the imaginary perspectival architecture of Hans Vredeman de Vries. His geometric architectural fantasies represented dreams of spatial freedom.

- 1 See Christopher Heuer's art historical account, *The City Rehearsed: Object, Architecture, and Print in the Worlds of Hans Vredeman de Vries* (London: Routledge, 2009); and Piet Lombaerde's edited compilation of architectural and art historical studies, *Hans Vredeman de Vries and the Artes Mechanicae Revisited* (Turnhout, Belgium: Brepols, 2005).
- 2 H. Vredeman de Vries, *Perspective id est celeberrima ars insipientis* (The Hague: Hendrick Hondius, 1604) 1.
- 3 Compare with A. Dürer's *Vntenweysung der Messung mit dem Zirkel vn Richtscheyt* (Nürnberg: Hieronymus Andreas Formschneider, 1525), and L. B. Alberti's *On Painting*, trans. J. R. Spencer (New Haven: Yale University Press, 1965). Alberti's treatise, *De Pictura*, was first published in 1435.
- 4 Vredeman de Vries, *Perspective*.
- 5 "Das Augensicht keine eckichte Quadratur macht (gleich wie in der Vorrede erzehlet wirdt) sondern alles in die Runde." Author's translation. See Marolois's 1628 edition of *Perspective*.
- 6 See M. Kemp, *The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat* (New Haven: Yale University Press, 1990).
- 7 See W. Ivins, *On the Rationalization of Sight: With an Examination of Three Renaissance Texts on Perspective* (New York: Metropolitan Museum of Art, 1938) 27.
- 8 G. Argan, *The Renaissance City*, trans. S. E. Bassnett (New York: G. Braziller, 1969) 21.
- 9 See his *On Learned Ignorance* (*De Docta Ignorantia*), his *Layman* (*Idiota*) dialogues, and his dialogue *On Not-other* (*De Li Non Aliud*).
- 10 A. Dürer, *The Painter's Manual: A Manual of Measurement of Lines, Areas, and Solids by Means of Compass and Ruler*, trans. W. L. Strauss (New York: Abaris Books, 1977), 389.
- 11 *Ibid.*, 391.
- 12 See E. Forssman, *Säule und Ornament* (Stockholm: Almqvist & Wiksell, 1956).