The distinction between subject and object lies at the core of the Western philosophical tradition. The subject is the being who views the world through individual apparatus. Objects comprise that world. Post-Socratic philosophy conferred on the human the paradoxical properties of being both an observing subject *and* an object in the world of objects. This dualism was exacerbated by the epistemology of the 17th-century philosopher René Descartes, in which the rational mind of the subject is elevated above the physiological senses as a means of comprehending the world. The Cartesian *cogito* is thus the subject, or self, relegated to an existence within its own intellectually constituted world. Severed from the world of sense perceptions, the *cogito* is disembodied – a kind of universal Being cerebrally observing the world's objects in a rationalized space – uniform and infinite.

Two very different strains of thought have characterized the ever-increasing distance between the subject and the objective world that resulted from the Cartesian mind–body dualism. The first resulted in the technological scrutiny undertaken by the 19th-century Positivists who exploited their intellectual distance from the objective world. By dissecting and classifying the objective world into constituent parts, they sought to discover ever more precise truths about the workings of nature and the universe. The other strain of thought considered the objective world to be extraneous to the better workings of the subjective mind. Nineteenth-century Romanticism assumed that creative endeavours were stimulated by individual intuition and invention. Concomitantly, a new concept emerged in which aesthetic beauty was no longer inherent in the object but determined by the eye of the beholder. The lingering legacy of this 19th-century distinction, Positivism and Romanticism, has continued into the 20th century, and this confrontation, broadly speaking, characterizes the popularized notions of the differences between science and art. It is perhaps in the design fields where the conflicts inherent in this distinction have their greatest impact, as the designer sees himself/herself at one moment as a scientist, at the next as an artist.

Fundamental to much of 20th-century philosophy is the disavowal of the Cartesian mind–body dualism. It is held by many to be responsible for much of what is objectionable about our current technocratic state. As Martin Jay (1994) has documented in his book, *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought*, the fear of residual Cartesianism has engendered a nearly insurmountable distrust of vision because of its association with the *cogito* – the disembodied subject. Likewise, the Romantic conception of subjectivity is distrusted for its visual relativism and eccentricity.[1] The architect's design process at its best is a conceptual act. However, when the conceptual is made material, the visible environment is significantly altered. Although there are numerous other conditions influencing the act of design, it is foolish, if not dangerous, to disregard the visual results. Many architects would agree with Steven Holl (1980) that "Architecture . . . [is an] essentially wordless art – that is, . . . [an] art that lies just beyond the reach of words" (ibid., p. 71). Indeed, the architect must rely on visual representations to present or reinforce those aspects of the design that are impossible to convey with words alone. The issue, then, is not to circumvent the visual because of its metaphysical and epistemological associations, but rather to discover how we might redress the Cartesian disembodiment of the subject and restore interest in the subjective experience of the visible world.

At last I can see as God sees!

Leon Battista Alberti

In 1925 Erwin Panofsky postulated in his short but influential text, *Perspective as Symbolic Form*, that perspective, or any other pictorial "treatment of space," is not simply an abstract tool for two-dimensional representation, but a symbol[2] for the contemporaneous metaphysical understanding of the world. What is most provocative about Panofsky's essay, however, is the observation of an historical reconciliation between the subject and the object. According to Panofsky, the result of the mathematical "systemizing of space" in Renaissance pictorial representation was an "objectification of the subjective" (1991, p. 66) view of the world.[3] From Filippo Brunelleschi's first public demonstrations in Florence, perspective technique was intentionally mimetic. The philosophical question of whether the pictorial representation that awed the *quattrocento* onlookers was a representation of Brunelleschi's subjective experience or a reproduction of a purely objective condition is a diachronic one. In the 15th century there was man and there was God; the contemporary distinction between subject and object did not exist in the epistemology of the time. This vexing dualism required Descartes to make it manifest and Immanuel Kant to articulate it for the metaphysics of the modern world.[4]

A recent book by Alberto Pérez-Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (1997), is synchronically premised on the belief that the tools of architectural representation are never neutral, but are ineluctably linked to the metaphysical and epistemological beliefs of a particular time and place. These tools, and therefore these beliefs, "underlie the conception and realization of architecture" (ibid., p. 3). Their book documents a history of representation in which there are numerous examples of architects and artists who, in their theories and their representations, have consciously considered the subjective viewer. Pérez-Gómez and Pelletier share contemporary philosophy's critical view of Cartesian epistemology, noting that our tools of representation have been used increasingly as instruments to document the objective world as intellectually constructed by the detached, "disembodied" observer. The subjective point of view, they believe, has been purged from representation, while techniques such as isometry, axonometry, and, currently, computer drafting proliferate (Figures 1.1 and 1.2). These methods of representation rely on a spatial construct of absolute measurement in which the world's objects are contained and located without regard for the viewer's station point or the surrounding context.

The tragedy of our times is that measures have everywhere become abstract or arbitrary; they should be made flesh, the living expression of our universe, ours, the universe of men, the only one conceivable to our intelligence.

Le Corbusier, The Modulor

In response to the hegemony of this technological mode of vision and representation, Pérez-Gómez and Pelletier appeal for the recovery of meaning in architecture that can be discovered in human experience. They acknowledge the influence of the phenomenal ontology of the late French philosopher Maurice Merleau-Ponty, which endeavoured to revitalize the visuality of a reconciled mind and body. Merleau-Ponty certainly shared with his contemporaries the suspicion of the Cartesian *cogito* as a means to knowledge: "Intellectualism and empiricism do not give us any account of the human experience of the world; they tell us what God might think about it" (1996,