it be, as Colin Rowe conjectures about Le Corbusier, that an architect would characterize his or her design process as being "obedient to the exigencies of the eye rather than those of the work, to the needs of the conceiving subject rather than the perceived object"? Could it be, as Maurice Merleau-Ponty suggests, that "The joy of art lies in its showing how something takes on meaning – not by referring to already established and acquired ideas but by the temporal or spatial arrangement of elements" (1964, pp. 57–58)?

The questions will remain open, but the speculation itself raises another question. What of our tools of representation? To the extent that such analysis *could* inform the design process (and the current milieu of cultural criticism suggests that it might), a critique of the tools of representation that are available to abet such design thinking should not be avoided. It is no longer legitimate to deny the ubiquity of computer applications as the primary tool of representation for the architectural designer. Although there are a multiplicity of applications, the focus of their performance is on the description of the object and the means of its transformation. While distances can easily be manipulated, these applications are not readily suited to altering objects with respect to subjective views – for example, of depth. No more are they prepared to represent the human experience of objects in a delimited space with anything like Merleau-Ponty's world of the "I can."

We get from our tools of representation only what we ask of them. To reaffirm the value of human experience, to reinstate the human subject in the world, we may wish to ask for or invent tools that include the presence of the subject in design representation and therefore in the design process.

Notes

1. For example, see Harbison, R (1997) *Thirteen Ways*, The MIT Press, Cambridge, MA, 160–173.
2. The use of the word symbol here is a direct reference to Ernst Cassirer's concept of "symbolic form," which derives from Kant's notion of categories.
3. Michael Ann Holly's research on Erwin Panofsky's early essays demonstrates the extent to which Panofsky attempted to understand art history synchronically but was nevertheless unable to avoid the diachronic aspects of his own contemporary philosophical influences. Holly, M.A. (1984) *Panofsky and the Foundations of Art History*, Cornell University Press, Ithaca.
4. The metaphysical and epistemological basis for the modern view of subject and object must be understood in post-Kantian terms. Whereas the existence of the objective world is reaffirmed, *knowledge* of it can only be subjective. While Kant does not eradicate the mind–body dualism, he does not assume, as Berkeley did, that all matter exists only in the mind, or, as Descartes did, that the properties of matter are subjectively constituted.
5. Merleau-Ponty makes such a distinction when discussing Bishop Berkeley's argument for the necessity of intellectual spatial restructuring of the visible world. Merleau-Ponty, M. (1996) *The Phenomenology of Perception*, p. 255.
6. My review of work that could be considered generative was necessarily cursory and mostly in vain. It is, I believe, well worth extended research. Such research is made difficult, however, because of what Lauretta Vinciarelli (Colomina, p. 245) has identified (in contradistinction to Croset's loss of the experience of the building) as the "loss of the experience of the project." With the exception of the publication of sketchbooks of a few major architects, there is little published documentation of drawings that reveal the design process.
7. Computer-generated animations of architectural designs are notorious for this disembodiment: gravity-defiant "cameras" often produce fly-throughs or crawl-throughs instead of walk-throughs.
8. Edgerton, S. (1975) *The Renaissance Rediscovery of Linear Perspective*, Basic Books, New York, p. 26.

9. Evans offers collaborative photographic evidence to suggest that Mies was well aware of this effect.
10. According to Samuel Edgerton, Alberti's method for determining what is now known as the distant point was the most consistently ignored of Alberti's rules for constructing the image. Edgerton, S. p. 55.
11. Alberti's "centre point" is now generally referred to as the "vanishing point" because of its theoretical association with a point at infinity. It is interesting to note that for more than two centuries pictorial perspective was practised without such knowledge or association. It was only in 1639 that Girard Desargues observed the mathematical connection. Pérez-Gómez, A. and Pelletier, L. (1997, pp. 132ff).
12. See, for example, Jay, M. and Crary, J. (1992) *The Techniques of the Observer: On Vision and Modernity in the Nineteenth Century,* The MIT Press, Cambridge, MA; Levin, David Michael (1993) *Modernity and the Hegemony of Vision*, University of California Press, Berkeley.
13. No doubt influenced by the notation of a geometric centreline that was essential to Beaux-Arts *parti* studies, he severed himself from the academic tradition of planning which produced nothing but planimetric "star shapes." Le Corbusier (1968, pp. 180 and 191).
14. For purposes of comparative clarity, I am continuing the use of the term "vanishing point" even though it is an anachronism with respect to Piero's painting.
15. In fact, initial analysis would suggest that Piero's choice of the vanishing point is not a primary compositional device, even though he uses it instrumentally to establish the "deep space." Robin Evans' analysis of this painting consults Piero's own *Treatise on perspective* to suggest that he was employing more than one method of projective construction in this painting. Evans, R. (1995) *The Projective Cast*: *Architecture and Its Three Geometries*, The MIT Press, Cambridge, MA, 147ff.
16. (1979) *The Random House Dictionary of the English Language*, edited by Jess Stein, Random House, Inc., New York.
17. Merleau-Ponty, M. (1954, p. 162).
18. Perhaps an obvious answer would be the cinematic art forms, but they, too, are primarily in the service of rendering images objectively rather than subjectively. Animation, in particular, must be objectively conceived and executed before it is set in motion.
19. Berenson, B. (1954) *Aesthetics and History*, Doubleday, Garden City, NY.

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