

# The Angelic View: Architectural Drawings as Wonderful Demonstrations<sup>(1)</sup>

To consolidate his theory of image-construction, Giambattista Vico promoted a "mental glossary of images" (Vico 1744: I, 9; #473-482), a thesaurus of intelligible universals embodied in meaningful theoretical images. Angels belongs to this Viconian compendium of images. Angels are not things but are like the things themselves. Massimo Caciari (1988:155) has pointed out that "only the angel free from demonic destiny poses the problem of representation." Angels have the consistency of the thing since they have the symbolic primacy. From this angelic point of view it is then possible to state that in architecture each angle is an angel. Demonstrating a possible agenda of architectural research, this statement is in itself an image which belongs to Vico's glossary of images. This is a research, which uses imaginative knowledge instead of normative data.

The instrumental representation 'angle' as image belongs to the Viconian mental glossary of theoretical images when it is connected with its symbolic representation 'angel'. The two terms--angle and angel--share a possible common etymological root. Suggesting the procedure for finding guidance in the stars, this root originates in a idiom used by the early Mediterranean sailors. The imagining of angels, guiding essences, was a way of finding angles necessary to the sailors to determine the direction for reaching safely the land. In architecture this traditional chiasm of symbolic and instrumental representation is recorded--in an oblique way--by Vitruvius (Book I, vi, 4), in his explanation of the planning of the 'angles' of cities, using as epitome, the Tower of Winds in Athens. This Hellenistic edifice incorporates both the representations of the winds as figures of angels and as the angles of the direction. This etymological explanation belongs to the realm of necessary fables.<sup>2</sup> Such fables are associations of imaginative class concepts (Vico's *generi fantastici*) by which it is possible to produce significant artifacts. An instance of the fruitful power of the angelic images is the linguistic growing of the designation of the angular image contained in the word 'temple', which presents us with the aporia of the angel of time.

The basic word *temeyos* (*tempus*), *templum* signified nothing other than bisection, intersection: according

to the terminology of later carpenters two crossing rafters or beams still constituted a *templum*; thence the signification of the space thus divided was a natural development; in *tempus* the quarter of the heavens (e.g. the east) passed into the time of the day (e.g. the morning) and thence into time in general (Usener, quoted by Cassirer, 1955, p. 107).

In the present status of architectural production, the envisioning negates construction, especially in the understanding of the translation that occurs between drawing and building. The past interpretation of this translation was that an architectural drawing is a graphic projection of a deceased, or existing, or future building. The present condition of the phenomenon is that a building is a translation in built form of 'pre-posterus' drawings. In the past the symbolic and the instrumental representation were unified in the building, and the drawings were seen as instrumental representations, the translation was also a transmutation through construction. In the present reality, however, the union of the symbolic and instrumental representation in the building depends on their presence and union in the drawing. The transmutation should take place in the drawings. In the drawings, angles should transfigure themselves in angels.

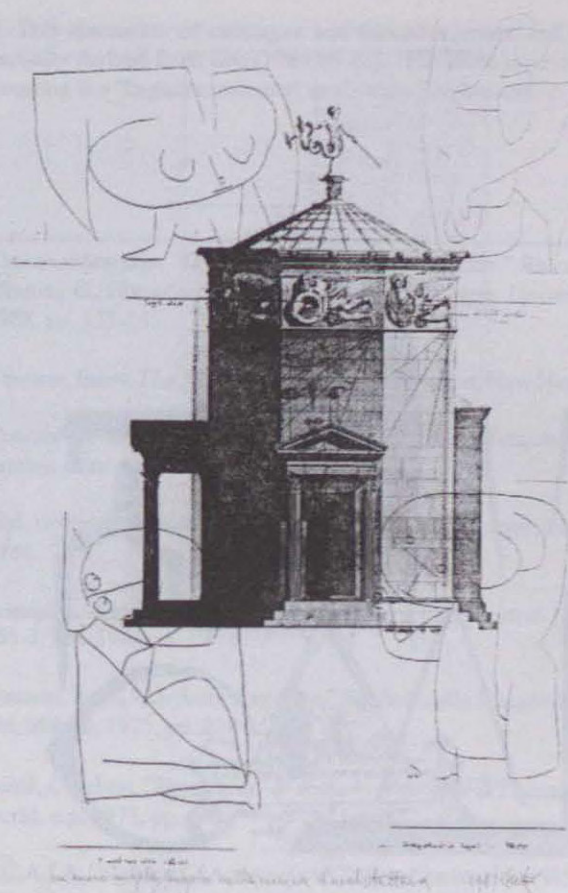
An understanding of the present aporia of representation in architecture can be gained by analyzing the role of the architectural project which must evolved from being a professional service to become a critical tool for the shaping of human inhabiting. A productive approach to a critical architectural project is achievable only if the complexity of the angelic image is preserved. This is possible only through a radical change of our understanding of the role of drawings in architecture. Drawings must be conceived within an angelic gaze since building should be built within the same gaze. Drawings are graphic representation analogously related to the built world through a corporeal dimension and embodying in themselves the chiasm of conceiving and constructing. Drawings are specific acts of demonstration belonging to an architectural encyclopedia, which is a thesaurus of angelic images.



In architectural research, the use of the intelligible universals has produced catalogues, or building codes, or dictionaries, whereas the use of imaginative universals has produced treatises or discourses, or encyclopedias.<sup>3</sup> Dictionaries and catalogues are assemblages of definitions of architectural parts, elements and artifacts, based on a model of definition structured by genera, species, and differentiae, generally known as the Porphyrian tree. This is a procedure which generates univocal meaning and attempts to restrict any interpretative processes. Treatises and encyclopedias are presentations of the parts of architecture through a system which can be equated to a net, and works like a Roget's Thesaurus.<sup>4</sup> A Roget's is a practical book and it is not concerned with the idea of classifying, a setting of orderly listed definitions, but rather, as the subtitle states, it is "Arranged so as to Facilitate the Expression of Ideas and Assist...in Composition." The scope is to generate an understanding of meaning through interlocked clusters of signifiers. It is a difficult book to use; in a Foreword to an alphabetized version of it, it is stated "a frustrated writer seeking help in Roget's finds himself wandering in a (labyrinth) where each turn of thought promises to produce the desired synonym"<sup>5</sup> (Laird 1971:vi).

The names listed in the dictionaries are the *omona*, pure names which mortals laid down believing them to be true" (Parmenides frag. 8.39). In utterances, *omona* are used as graphic conventions, templates and graphic standards are used in design production. An instrumental presence in architectural projects, a template "in nothing other than the representation of the entity in the *doxa* of mortals" (Caciari 1988:157). From a critical point of view "names (*omona*) and templates belong to the realm of opinion to which the truly real thing escapes". Names and templates "are in no case stable. Nothing prevents the things that are now called round from being called straight and the straight round" (Plato Seventh letter 343a-b). The outcome of this instability is that "the representation by the means of the name does not give the thing but the *doxa* around the thing" (Caciari 1988:158). A public relation statement made by Arquitectonica, a fashionable architectural firm in Miami, is an affirmation of the power of an architectural *doxa*. Produced using a contrived style generated by the use of Russian Constructivist templates mixed with the templates of successful speculation developers within the Cartesian look of isometric drawings, Arquitectonica designs are object-like buildings which can be located anywhere at any time, but this careful edited piece of public relation utterance affirms that:

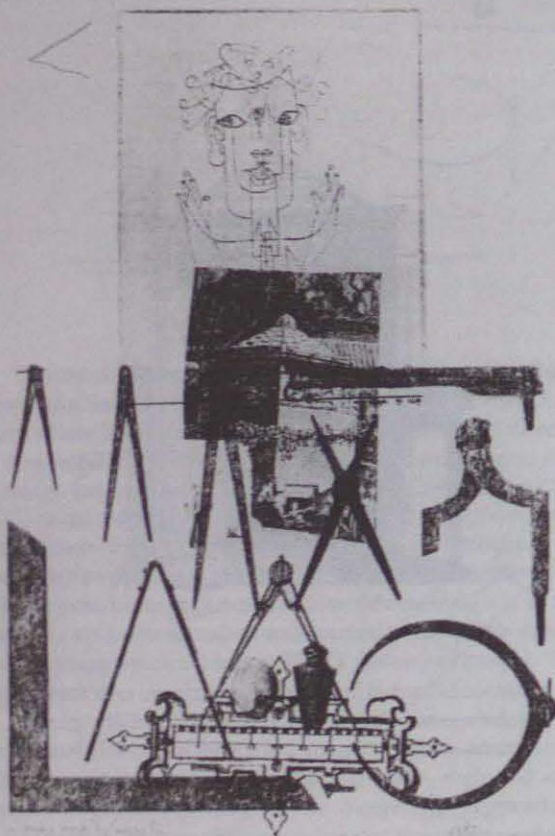
"Arquitectonica's approach to design is both modern and contextual. The design seeks conceptual clarity and freedom of the limitation of style. Architecture is conceived to capture the intangible spirit of place and time by recognizing place and time as two equally important elements of context" (S.C.A.I.A., 1989).



This is a clear case where the steps in an architectural project are solely translation. Drawings are translated in built forms. Buildings are translated in verbal forms, and as an old Italian saying states: *traduttori, traditori* (translators, traitors).

The nature of the traditional interpretation of the translation from drawings to buildings can be understood through the myths of origin of drawing and of the construction of the Temple. For the construction of the Temple, on the mount Sinai, Jehovah, the divine architect, shows Moses, the mortal builder, the designs of the future sanctuary that he has to build for him and warns him "...and look thou make them after their patterns which was shew thee in the mount" (Exodus 25:9,4). The myth of the origin of drawing, as it has handed down to posterity by Pliny the Elder, tells us the story of Diboutades tracing the shadow of her departing lovers on a wall. These traditional drawings are merely jigs and templates; they are an intermediary step of a design projection, where the interpreter is the architect. The drawing are then pre-posterus tools. In the present situation, the drawings must become demonstrations of architecture, they have to be pro-sperus tools for the builder not a prescription but angelic





images showing the nature of a construction. These graphic demonstrations are angels within the angled labyrinth of the building trade. They are the documents out of which the builders, the building management and all the other trades related to the making of buildings derive their interpretation in the making of the templates and jigs necessary for construction.

Drawings must demonstrate the angelic image. Displayed as whole, the palimpsest of the angelic image is the matrix of the representational theories of the constructed world. This palimpsest is an act of projection: a casting forward becoming a point of projection itself. The origin of drawings as angelic demonstration of construction is embodied in Vitruvius's description of the concept of arrangement.

"Arrangements is the fit assemblage of details and arising from this assemblage, the elegant construction (*operis*) along with a certain quality" (Vitruvius 1930: I,ii,2).

These are the kinds of arrangement listed by Vitruvius who also points out that the Greeks call them *ideai*. The first *idea* is ichnography, which depends on a competent use of compass and ruler; the second is orthography which is the vertical presentation of a future building; the third is scenography which is the presentation of the front and the side with all the lines resting in the center of a circle. The *ideai* are born from the consideration (*cogitatio*) of all the parts and are found (*inventio reperta*) through a *techne*. Thus, the making of architectural drawings is based on cognitive representations or known objectivity. A circular procedure is involved here. The understanding of the part is done considering the whole and the understanding of the whole is achieved through the consideration of the parts.

The first angelic image required by any architectural project is ichnography, and is ontologically the demonstration of a plan using lines, ropes and boards on the grounds of the selected site. In his commentary of the first Italian translation of Vitruvius's treatise, Cesare Cesariano, discussing the laying out of a plan, talks about the walking of the compass (*il pazzzare del circino*).<sup>6</sup> For Cesariano, the drawing of the plan is a graphic demonstration analogous to the demonstration of the future construction, given by the architect to the builder, and used while pacing through the site to point out the features of the building. An instance of this demonstrative pacing is the stepping with the foot in the mud done by the architect to demonstrate to the builder the corners (*angoli*) of the building, the place in which to locate the keystones for the construction, that is the cornerstones (*pietre d'angolo*).<sup>7</sup> Orthography is the demonstration of how the vertical raising of the building is done. The ontological demonstration of it is embodied in the structure of the scaffolding. An understanding of the procedure of this demonstration can be gained by looking to the medieval edifices with their brick facades marked by many holes. Those are the signs which allows us to reconstruct how the scaffolding interacted with the edifice during its construction. Scenography is the most difficult item to explain, because of the misleading notion generated by homophonous term which means stage design. As a result, it has mostly been interpreted as perspective. In his commentary, Daniele Barbaro, the most intellectually powerful among Palladio's patrons, calls this third kind of arrangement *profilo*, a cut feature showing the building during its construction.<sup>8</sup>

"The third idea, called scenography (*sciografia*), from which great utility is derived, because through the description in the profile we understand the thickness of walls the projections of every element (*membro*) and this the architect is like a physician which demonstrates all the interior and exterior parts of works." (Vitruvius 1584:30).

A profile is the demonstration of the stereotomy of the building parts, an anatomical representation of building elements. Through projections, stereotomy gives the correct angles of the faces of the stones to be



assembled for the construction of the edifice. As Kenneth Frampton (1986) has pointed out stereotomy, a Gothic demonstration devised to avoid the labor generated by the several presentings of the stone required for cutting it properly, is the beginning of the idea of project.

Now, to be consistent with the principles underlying this text, it is necessary to generate a Viconian mental image with architectural nuances, to explain the difference between dictionary and thesaurus and to bring back to our architectural understanding that "the thing itself and the name...form a symbol" (Caciari 1988:158-159). A dictionary is structured as a maze, whereas a thesaurus is organized like a meander. On the one hand, mazes, a Manneristic invention, display choices between paths, and sometimes paths are dead ends. The only possible path within a maze can be easily represented by the graphic notation called a tree. In a maze, Ariadne's thread is necessary, otherwise a life is spent in doing the same moves. No monsters are necessary in this kind of labyrinth. A maze is in itself the Minotaur. In other words, the Minotaur is the architect's trial-and-error process. On the other hand, a meander is a labyrinth that works as a net. In a net, every point is connected with every other point. These connections are not designed but they are design-able.<sup>9</sup> Furthermore, meanders are full of monsters. These Minotaurs, monsters conceived by inconceivable unions, demonstrate the possibility of union between different kinds of realities. They are not abnormalities but extraordinary phenomena which indicate the way for architecture: a way by which designs and drawings are not separate entities but unified in a symbolic dimension.

1. This short essay and the two drawings are dedicated to a new angel, Matteo.
2. This etymology, as any other Viconian etymology, *se non e vera, e ben trovata*; for a further discussion of the importance of this imaginative dimension of etymology see the discussion of folk etymologies in Coomaraswamy (1977).
3. Many treatises are pseudo-treatises. They are nothing else that disguised catalogues. In the same manner, many encyclopedias are disguised dictionaries.
4. I mean the traditional version of it, not the contemporary alphabetized versions of it, which are deleterious representations.
5. I substitute the original term *maze* with the word *labyrinth*, since in this book, the term *maze* takes on a very specific meaning.
6. *Circinus* is the Latin name of the nephew of Daedalus, who was killed by the uncle when the young apprentice gave away the secret of the compass, the articulated joint devised by Daedalus to make the dedalions, his wonderful walking statues.
7. For a discussion of the keystone and cornerstone identity see Guenon (1975: 238-250).
8. In the present architectural usage a 'profile' is a sectional elevation of a building.

9. This discussion of catalogue and thesaurus, maze and meander is partially derived from Eco (1984 80-81). The word meander with this meaning is a 'linguistic monster' devised by Eco himself.

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