PIRANESI

AND
THE IDEA OF
CRITICAL DRAWING

by James Aitken

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THE EARLIEST examples of architectural drawing in the 'modern' era date from the Thirteenth Century and the sketchbook of French gentleman designer Villard de Honnecourt. Regular use of architectural drawings as we now know them, however, does not occur until the Italian Renaissance of the Fifteenth Century. Since then the notion of 'architectural drawing' has undergone several transformations. In each transformation the 'revolution' is never complete and traces of l'ancien regime persist. Consequently 'architectural drawing' stands today as a complex conceptual notion with layers of accrued rhetoric. Precise analysis then is possible only through an archaeological unravelling of drawing's constituent concepts.

Colin Rowe tells us that "the artistic process is not the impressionistic record of the thing seen; but is rather the informing of observation by a philosophical idea". Drawings may be considered a trace or graphic record of this idea. Drawing transformations are thus predicated on changing philosophical ideas.

Historically, the first philosophical idea informing architectural drawings can be characterized as 'symbolic-iconic'. The representative image is created as a substitute for the object which it intends. Thus, for the purposes of the author, which may or may not require visual likeness, the image is the intended.

The next 'idea' distinguishes between the image and the intended object, and sets up analogical relations between the two. These referential relations are of two types which may be characterized as 'pictorial-empirical' and 'rational-abstract'. Pictorial-empirical drawings cater to the visually accessible world while rational-abstract drawings appeal to the intellect of the observer and depend upon a conceptual understanding of the intended object. In both cases the idea of 'form' is reduced from its metaphysical iconic 'essence' to more empirical 'shape'. The drawing still derives its form and structure from its subject but is more conscious of itself as a representative image. Referential drawings in general promote a consciousness of design and thus a conscious awareness of the idea informing the drawing. In symbolic-iconic drawings on the other hand, the 'idea' is relatively transparent to its users.

The third transformation renders the drawing completely independent of the subject it graphically recreates. The drawing is now a fully self-conscious image. As a work, the drawing stands
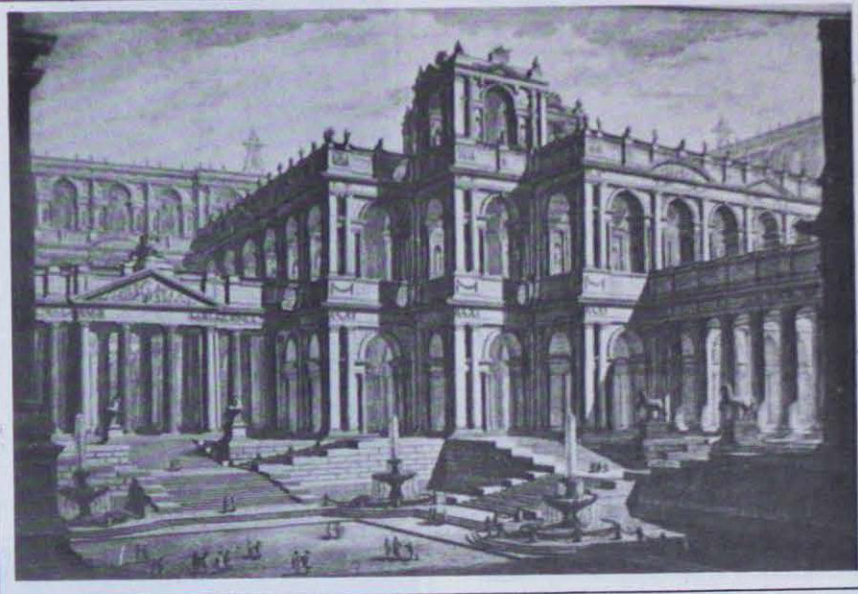
on its own, independent of all external worlds, and capable of sustaining its own internally coherent virtual world. The drawing is a fiction and, as fiction in literature, it is **not** reality but is **like** reality. It thus becomes a meta-reality: a second and potentially valid reality which is similar to but removed from the first. It is thus capable of passing critical commentary on the first. Meta-reality, as a metaphor (an image designed to 'carry (the idea) beyond' the immediate) can critically extend and develop the meanings of the system or work upon that which it is operating. Drawings of this type, which deal with issues independent of the subject, can be characterized as 'critical-atmospheric'.

Manfredo Tafuri has traced the development of drawings as critical images from the first illustrated architectural texts by Sebastiano Serlio through Peruzzi to Palladio. It was Palladio's refinement and cannonization of graphic conventions that led to the development of the first fully coherent architectural meta-language. Montano provides an early aberration to the classical ordering principles with his series of church plans that challenge the notion of centrality. He provides exceptions to the rule that test it in **a consistent manner** and thus establishes a counter metalanguage: mannerism. Piranesi's **Prima Parte d'Architettura e Prospettive** provides much the same challenge to perspective as a space ordering concept and to linear perspective as the fiction that recreates conceptual perspective on paper.

Piranesi published the "Prima Parte", his first text, in 1743. His purpose was stated in the introduction to the plates.

"These speaking ruins have filled my spirit with images that accurate drawings, even those of the immortal Palladio, could never have succeeded in conveying, though I always kept them before my eyes. Therefore, having the idea of presenting to the world some of these images, but not hoping for an architect of these times who could effectively execute some of them... there seems to be no recourse than for me or some other modern architect to explain his ideas through his drawings and so to take away from sculpture and painting the advantage, as the great Juvarra has said, they now have here over architecture...".

G.B. Piranesi
Prima Parte d'Architettura e Prospettive, 1743.

These drawings - fanciful constructions of antique Roman building types - reveal Piranesi's early critical preoccupations. Examining the publication as a **set** of plates clearly reveals their critical value. There are at least four themes or parameters internal to the work which are experimentally controlled and varied.

One theme considers the relations of object and space within the graphic image. Plates such as the diagonally receeding view of the 'Ancient Mausoleum' focus on the building as a monumental object. The 'Ancient Forum', 'Ancient Capitol' and 'Group of Stairs' emphasize a perspective spatial structure defined by the architecture.

top left: *Great Gallery*
top right: *Ancient Temple of Vesta*
middle: *Group of Stairs*
bottom: *Magnificent Bridge*

The architecture in turn acts as a setting for objects.

In some plates the focus is unclear. The 'Ancient Forum' focuses as much on the framed space in the foreground as on the object in the background. The reverse is true of the 'Magnificent Bridge' where the bridge competes with the space framed by its arch. In the 'Great Gallery' the central group of columns vies with the space surrounding it for our attention. In 'Ancient Roman Room' space exists both before and beyond the planar object of the pedimented portico. The graphic structure of the 'Great Gallery' is similar to the central region of the 'Group of Stairs' which more or less asserts the perspective structure of the space.
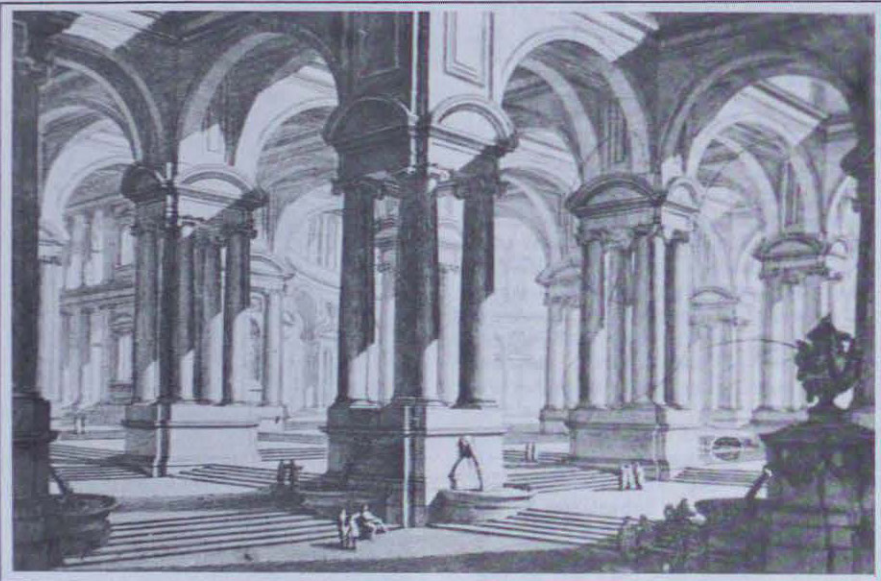
Another theme explores the principles of ordering objects within the view. Three distinct principles are apparent. First is the precise location of individual objects within a rigid perspective spatial structure. One can easily imagine reconstructing the plan layout of the monuments in the 'Ancient Capitol' or the column groups in the 'Group of Stairs' from the information given in the perspective view. Another principle is the creation of a centre around or about which objects are regularly disposed. The 'Temple of Vesta' for example assembles the circular colonnade of the reconstructed temple, a circular stair, and the hemispherical dome of the pantheon. The third principle is apparently complete randomness where objects are simply piled up with no centre or perspective structure. The 'Ruins of Ancient Buildings' and 'Ruins of an Ancient Tomb' are both of this type.

A close examination of these plates however reveals certain discrepancies between the actual and the apparent order. The 'Group of Stairs' in fact cannot be rationalized into plan form as has been shown by Piranesian scholar Ulya Vogt-Goknil. In the 'Temple of Vesta' the centres defined
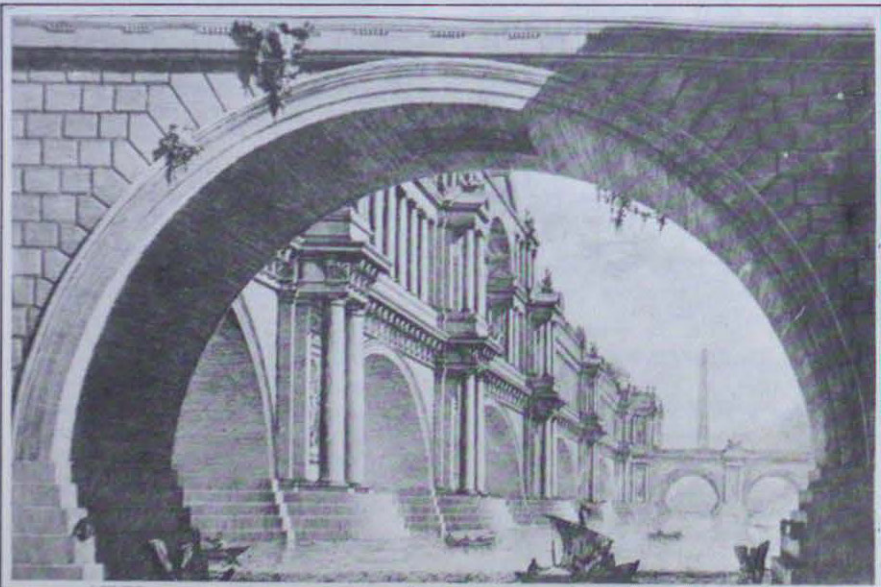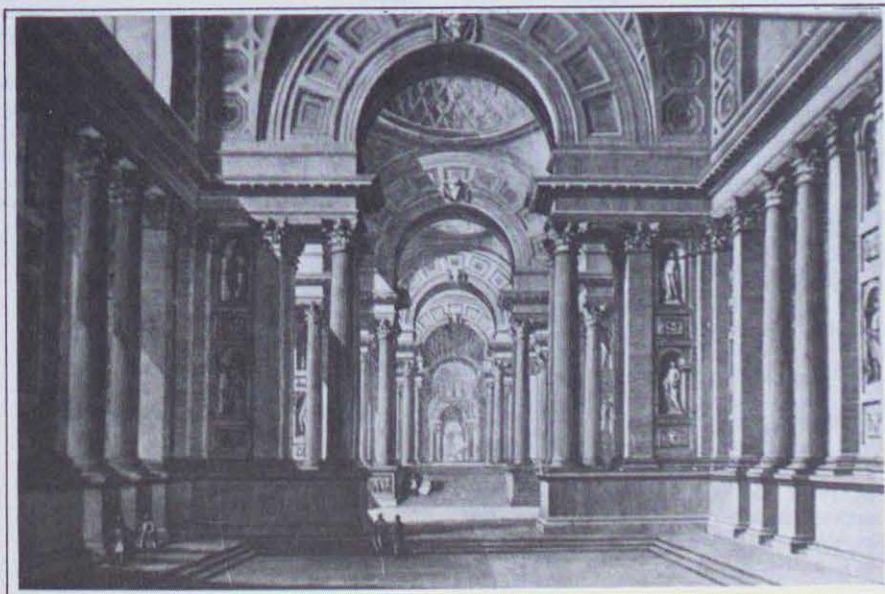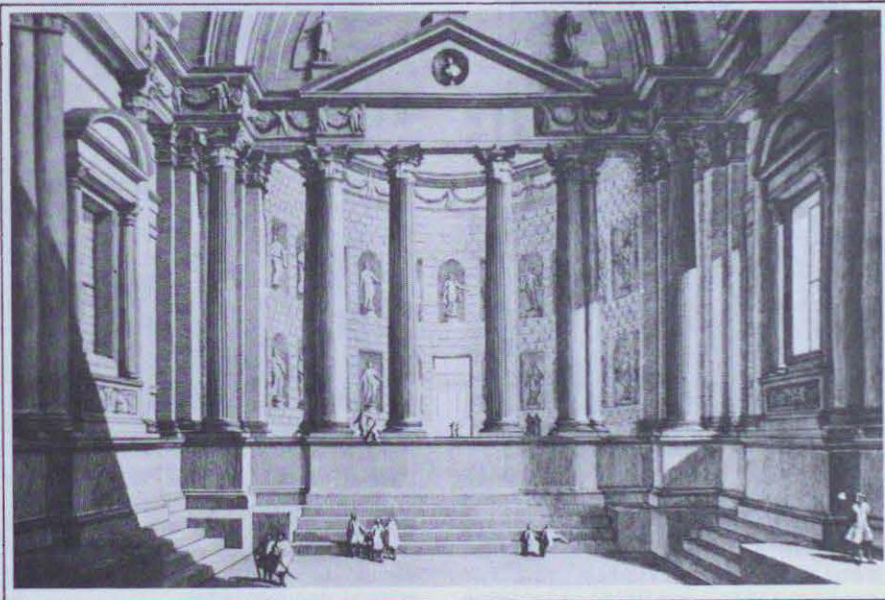
by the various elements do not actually coincide. The lack of a cohesive spatial ordering principle turns this 'reconstruction by direct quotation' into a pile of incoherent objects, destroying both historical and spatial perspective.

These discrepancies are hardly errors. Rather they are calculated challenges to the validity of linear perspective and centrality as ordering principles.

The next theme involves principles of ordering the space of the view. In all of the plates, save those where objects are simply piled up, linear perspective is the spatial organizing principle. Of these plates there are three types of perspective views. The 'Ancient Temple' presents us with a pure frontal view and a central vanishing point. In this view Piranesi actually 'constructs' the vanishing point while in 'Ancient Roman Room' he obscures it by the curved wall at the rear. The 'Magnificent Bridge' is similar but with an oblique frontal view and a single eccentric vanishing point. The third type is an 'aggressive' oblique view with orthogonals receeding to vanishing points left and right. This graphic structure is usually employed to emphasize objects as it gives prominence to their leading vertical edge. Piranesi however uses it to explore also spatial depth as in the 'Group of Stairs' and 'Carcere Oscura'.

The apparent rhetorical order of the perspective space of these drawings is also subject to scrutiny. Linear perspective, by definition, is a focussed system. In the 'Magnificent Bridge' however, the centres defined by the frontal view of the bridge arch, the vanishing point of this arch, the vanishing point of the receeding buildings to the left, the vanishing point of the arches in the background, the planimetric centre of the colonnade in the background, and the base of the obelisk, do not coincide.

The final theme concerns rendering style or technique, of which there are two. The forms in the title page and other drawings of ruins are built up out of shadows indicated by loose organic lines in the manner of the later groteschi. The ruins are tentative forms with a fragmentary existence in the Eighteenth Century - a once grand order fallen into ruin. The other style has the crisp prismatic appearance of a neoclassical engraving. Buildings in a newly constructed state are geometrically delineated with shadows indicated by a series of relatively even weight parallel lines. The two styles together give the impression of an historical perspective with distance in time rather than distance in space causing the sfumato atmospheric distortion of the lines in the ruins.

In summary, these plates, are a systematic putting to the test of two organizing principles. These are:

    i) the continuing debate on 'centrality' carried over from the traditions of Palladio and Montano, and here applied to the graphic organization of objects; and
    ii) the graphic convention of linear perspective, which is **not** the structure of space but a rhetorical artistic device used to create the illusion of real space. Linear perspective, and indeed all drawing, is fictional and independent of reality. As such it all has critical value.

This publication, which translates as 'First Part of Architecture and Persþective' belongs to the established tradition of architectural treatises which are prefaced by graphic essays on either geometry and perspective or the orders of classical antiquity. The latter are treatises modelled on Palladio (who actually took it from Serlio's fourth book) and the former are modelled on Serlio himself. Immediate precedents to Piranesi's

publication include the works on architecture and perspective by the Bibienna, a Bolognese family of stage designers. Piranesi's spatial constructions display similar scenographic qualities providing settings for objects and human actions. The horizon or viewpoint of the observer is set approximately one third of the way up the page at the base of the architecture, similar to the Bibienna drawings. The horizon line divides the plane of human action - flat surfaces, stairs, water, etcetera - from the upper region occupied by the building. The figures appear as miniature actors below the observer while the grand buildings tower above him. In addition, these scenographic views are framed by dark elements in the foreground that recall the proscenium stage.

The "Prima Parte" however, is a major departure from the aforementioned tradition. Its purpose is not to give instruction on the **methods** of linear perspective construction, but to actively use it as an expressive tool, perhaps in a virtuoso performance, and in any case to reveal its fallacies and its contradictions. These are
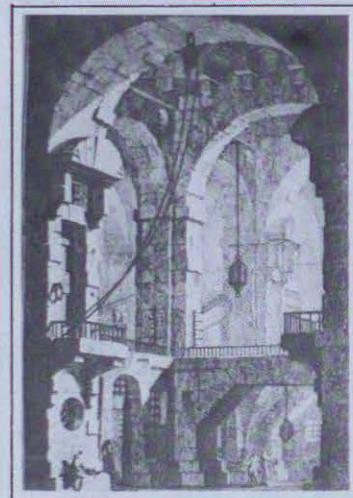
Piranesi's critical ideas on perspective and architecture as presented in his drawings. He uses the autonomous fictional world of the drawing as a virtual form with which to make his critical commentaries.   □

Notes

1. Validity is a function of internal consistency.
2. The idea - the design - belongs to the subject. The drawing merely exhibits this design. The substance of the design is not exclusive to the drawing itself.
3. The terms of this likeness need not be visual similarity.