

THE PROCRUSTEAN FRAME

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The ordering principles of architecture have varied through the years from the extremely pragmatic to the most peripheral and evasive. Regardless of whether those principles hide under the tutelage of reason and clarity or are lost in ambiguity, there is a striking persistence to allow the priority of the systems formed to precede their need and relevance. The effect of this Procrustean¹ attitude in developing architectural intentions is the launching point of this paper. The implications of fitting ideas into rigid and preconceived patterns are numerous. The focus is on the role of drawing, specifically the role of drawing as a means of “seeing,” in architectural production. The elusive relationship between buildings and their representation is distorted under the persistent reduction of interpretations into homogenized units with clear applications. With the belief that “the way in which we search limits what we find in our searching,”² these reflections are a step in recognizing the conditions under which architects work and the distortion they introduce.

*Visual ideas are never born from whole ether. They are the consummation of complete participation in experience. By which we mean total experience, everything—visual and nonvisual, concrete and conjured, empirical and fantastic—that is the configuration of our lives. In order to apprehend meaning in our experience it is essential for us to see, and drawing is the instrument of an inquiring eye that teaches us to see.*³

A broader context must be borne in mind when inquiring into the role of drawing in architecture, as it is too quickly restricted to the particular problems of neutral representation or self-expression, approaches which obscure the complexity of levels on which the act of drawing operates. In a time when the influence of computers on the process of design, from initial stages to final execution is so dominant, the question arises as to the possible anachronism of teaching prospective architects the traditional role of drawing by holding a pencil, a brush, or a piece of charcoal. Computer advocates see a nostalgic longing for a dying medium lodged in a memory that has not yet faded. Even with the aid, or overbearing power of the computer where the gestural sketch can instantaneously be transformed into a walk through perspective, there is a role for the drawing as a thinking tool. Architecture is predominantly brought into existence through drawing with the future of the idea lying “in the hope of being drawn, in the struggle to rework it and to offer it back through the structure of the work itself, a process which finds its destination through drawing, redrawing, drawing out, drawing towards,”⁴ each step effected by the medium of its execution.⁵

In its simplest form, drawing is a means of recording the mind’s perception. Even in that seemingly simple act, it becomes a form of experiencing, a mode of seeing, a way of measuring the proportions of existence at a particular moment. Through the requirements of the medium, a simple act of sketching an existing object, visual sensitivity is heightened and observation sharpened. The drawing that motivates the act of design differs in that it stems from an initial desire to locate something which is not known but felt as a vague presence in the mind. When design is initiated in architecture, the drawing is not done as an investigation of the environment by replicating it. Drawing in architecture is not produced by reflection on the reality outside the drawing, but productive of a reality that will end up outside the drawing.⁶ The two modes of drawing are interdependent and well expressed in the work of Leonardo Da Vinci. Through relentless studies, he honed drawing to an instrument of incredible sharpness capable of the most precise incisions into reality, conducting examinations of the visible world that he then applied, directly or indirectly, to his inventions.⁷

In the desire to locate that vague presence in the mind, one can speak of courting an idea through drawing. It is an evolution whereby blurred mental images, once projected onto paper are slowly given identity by line, form, texture and tone. The outcome is not merely a gesture that looks accidental but has the “precision of one who is trying to awaken the sense of a thing once seen so clearly in the space of the imagination.”⁸ It is a process in which one often sets out to draw something thought to be accurate in the mind, only to find it transformed as the lines begin to take shape. The original idea can then be judged, developed and resolved, if resolution proves possible, or altered and discarded. It is an unpredictable process that cannot occur in the mind but relies on the insight derived from the medium of drawing for the translation, from intention to construction to occur.

*In each translation, in the four steps to be followed in architectural creation, from proportions to lines, to models, and to buildings, the problem is autonomous, the connection between the different steps is analogous to an alchemical transmutation, not to a mathematical transformation.*⁹

In the past, the idea and the construction would be reconciled through the architect’s involvement in building, allowing the architectural intention to develop in the immediacy of embodied perception.¹⁰ Architects and builders used their own body as the dimensioning and proportioning system that directed the construction.¹¹ In contemporary manufacturing

methods, the whole production of building is orchestrated at a distance. Architects dictate the steps of the operation “never working directly with the objects of their thought, always working with it through some intervening medium, usually drawing.”¹² Evidence of this detachment from construction is prevalent in most North American cities and is explicit in the development of cities in the Middle East in the last 25 years. Little scrutiny is needed to reveal the effect of architectural corporations building structure upon structure, directing the development of the whole urban fabric, never having set foot in the cities to experience the sites or understand the culture of the people who would be using, or be used, by their buildings.

The displacement of effort and indirect access between the architect and the craft of building has diminished the role of the architectural drawing to a scaled down representation of the structure. Drawings that function as substitutes of buildings that predetermine the final product often fail to provide thought on the interactive space of architecture. Architecture becomes readily reducible to the relations of forms and space, to an amorphous matter that is manipulated according to the rules of set objective relations. The rapid jump into the accuracy of the working drawing and the precision of the detail sets up a formal model to which the structure of a system of building must comply—a system of building rather than a process. Should it be called a process, it is one of perfection rather than one of invention, implying that plotting the course of an idea by drawing it out follows a predictive and righteous path.

In a world in which very little is constant, fixed or permanent, becoming anchored by trusting a system and savoring its mechanistic pleasure is a welcomed relief. A system provides stability with its steps, each part of a carefully patterned curve that forms the neat trajectory of beginnings, developments and ends. By uncritically adapting the system of the likeness, rather than the difference, between the drawing and the building,¹³ there is an ease for architects to think themselves able to appreciate and control the possibility of their mind moving ahead of the act of making and waiting in pleasure for the implementation of their drawings to catch up. In their anticipation, all circumstances, all probabilities have been calculated, expected, solved. Each medium has its own prejudices and the drawing as a simple communicant of unambiguous information is no exception.

In each process, insight is derived from the particular medium of its production. The drawing is not neutral, indifferent and waiting to be seized upon for the implementation of whatever the architect’s mind has made up. Standard architectural drawings can become powerful tools that dictate the spaces derived. The problem does not lie in the medium but the uncritical user that easily falls prey to its particularity, accepting its inherent limitations. Whether the towering potential of computer modeling and graphics is destructive or productive relies on the power of its influence and the ease of its seductive imagery. One of its limitation as an instrument of production is simplistically exemplified through the menace of graph paper. Graph paper provides lines as tools to guide not prescribe, but forgetfulness easily sets into the drafting hand that fails to remember the option to deviate from the faint grid as it traces its angular rigidity. Rather than deriving insight from the medium, it becomes easy to be dictated by it. A regular structure emerges as drafted lines are added and the eye starts to react to the accuracy of the technique, thinking it a reflection of the accurate-

ness of its resolution.

Drawing is a fabrication, of a different nature from building, but one nonetheless. To fabricate makes thought possible. The imagination and the technique have to work together. The possible actualization of the imagination is lost in the deceptive belief that there is no translation between drawings and buildings. The belief follows the same delusion that a paragraph conveyed in two different languages can remain the same; the context, the culture, the references can all be eliminated. This is based on the “assumption that the supporting layer across which the sense of words is translated from language to language has a requisite evenness and continuity; that there is a uniform space through which meaning may glide without variation.”¹⁴ Such a pure space does not exist and deviations from the precise pattern will occur. Only forms and dimensions are directly translatable, multiplied by a mathematical coefficient to adjust the scale.

Working with scaled down representations that make the translation between drawing and building transparent, the full impact of what is being proposed in the miniaturized version is lost. Models are notorious seducers in reducing the design to their vanity as beautiful objects. The limitations are also prevalent in drawings where a reaction is caused by the simplicity of the lines rather than the spaces implied. Lines are added to produce evocative images negating the relationship between what is being drawn to the proposed built space.

With the acute awareness of the distortion between the process and the final product due to the methods of contemporary production, attempts have been launched to reconstitute architecture. Recent trends attempted to reclaim architecture as that which the architect directly manipulates with his/her own hands. The implications of this insistence on the direct access to the work on drawing has manifested itself in the form of two predominant categories. One trend under the heading of the authenticity of making, has cast drawing all together in favor of unmediated construction. Direct access to the work assigns the architect the responsibility to build without the mediation of representation. Buildings inadvertently become smaller, the interventions and contributions of the urban scale more subtle and less pretentious about the social and political order of their responsibility. Adherence to the purity of the idea becomes difficult as the scale of the work grows.

The second category accepts the limitation of the architect within the formulation of production, resting the authority of making in the realm of drawing. The last ten years have witnessed the appropriation of selective critical projects, spreading an epidemic of stylized architectural drawings with little purpose beyond visual consumption. The proliferation of superficial theoretical projects reduced architecture to stylized imagery. The common referential fabric easily becomes tenuous as viewers become wholly responsible for constructing the content of their consciousness in experiencing the drawing. Claiming to challenge these islands of subjective interpretations, the rigidly directed architecture of accurate drawing similarly falls prey to the image. Its addiction to the predominance of the eye stems from the reliance and assumption that anything of relevance is measurable by what is, or can be shown,

In that context, the role of drawing becomes the transmission of visual representations that exist in the architect’s mind-space to be transmitted existing prior to the work of transmission. The visual information stands before the architect

fully formed before its descent into material transcription. The process is predictable and consciousness passive. Perception is reduced and the body simplified and abstracted to an eye suspended in diagrammatic space. The visual field becomes two dimensional. The experience of spatial depth an instrumental illusion and the architecture produced a series of predictable frames. The varying forms of drawing as tools for investigating and expressing architectural intentions become dormant as the suspended eye continuously witnesses without interpretation, even if what lies ahead of it is a field of possibilities.¹⁵

Without undermining the importance of precision—the plan, the section, the detail, all drawn with exactitude—without denying that at the later stages of design one is held accountable for every line traced, it is important to learn to trust in the unfolding of the idea, to be receptive to the growth of the image, to allow the drawing to lead, but at the same time be able to select, discard or further build upon uncovered possibilities. To do so one has to allow half resolved forms, which in their ambiguous state may provoke alternate possibilities.¹⁶ The experience invoked might be one of uncertainty comparable to a sense of organized disorder. Paths might lead nowhere, suggestions not pursued as strange combinations and associations of ideas emerge, hints teasingly dropped.¹⁷ Architects should remember the art of courting by allowing the drawings to turn in to reveal the terrain of their imagination. They need not replace the accuracy of the working drawings needed for final execution, but allow the intention of preliminary studies to evoke or provoke by supplying sufficient definition for the next stage to begin, without providing a complete determination in advance.

In the present relativistic culture which easily allows all principles to decay into personal stylistic maneuvers, the task is not to reduce architecture to conceptual representation, but to draw without forgetting the relation of the drawing to what it represents. Restoring the credibility of the poetic imagination is a possible means to resist the sterilization that architecture finds itself in today. In investigating and expressing intentions, accuracy and ambiguity in architectural drawings are opposed but not incompatible.¹⁸ They do not meet on a middle ground. There is no room for compromise. The potential lies in an intricate codependence that is the outcome of a tension—a process oscillating between modes of drawing, forcing both sides to confront their limitation. Although it is crucial not to deprive the drawing of a common cultural orientation to become revelations of personal beliefs that stand alone, it is just as crucial not to deprive the imagination of its potential expression.

The whole is a process of seeing and seeing is not an isolated experience. Drawing as seeing cuts through isolated objects to search out the evasive relations between things. It is a vision that penetrates the surface of appearance, where past experience and preconception assist but do not substitute for fresh examination. Though one may be possessed of an idea, a vision, the final form remains indeterminate until the entire process of making is complete, from intention to specification for careful execution, to construction. As architects, we do not really see until we have given concrete and integral form to an idea.¹⁹

By moving beyond the limited definition of drawing as representation or self-expression to understand drawing as a means of thinking one discovers that it is impossible to define a rigid practice of design without controlling the spaces and events derived from it. It is a practice that cannot be theorized, enclosed,

It does not mean that it does not exist. In refusing to be contained, it will always surpass the discourse that regulates it as a system. The imposed purity of the principles of absolutes fears contamination. It is a fear that all distinction will be lost should one category come in contact with another. Behind all rigid categorization lurks fear. In architecture, the fear seems to be the condemnation to creative uneasiness. There is no claim of reinventing architecture. The hope is that, before hastily accepting the prevalent process of making and act of seeing, a critical look will be cast. A patient look that will see the rules change into guidelines of workable possibilities. A look that will defy the perpetual false belief that “architecture is an attempt at maximum preservation in which both meaning and likeness are transported from idea through drawing to building with minimum loss.”²⁰ A lingering look that will “reverse the previously static and perpetually frozen”²¹ as it strives to include, rather than discard, all the layers that involve and define human interaction with space through the process of drawing.

*In drawing is the reminder of both the pleasure and the difficulty of the architectural task: the reminder of how in the act of design and specification the interminable burden of careful execution must be set against a flash of insight, a quick prospect of the imagination, that elusive moment when a mind lights upon an object with a glimpse of its potential transfiguration; when a thing is seen both for what it is and also for what it otherwise might be. When a course of painstaking work is initiated from a first and sudden emotion—an emotion which is remembered merely by a sketch or a remark in a notebook, a gesture which begins to fade as soon as its presence is registered.*²²

NOTES

1. The myth of Procrustes: Greek legendary figure who had an iron bed on which he compelled his victims to lie, and then either stretched them or lopped their limbs off to make them fit its frame.
2. Heim, Michael, *The Metaphysics of Virtual Reality*, Oxford University Press, Oxford, 1993. p.15
3. Hill, Edward, *The Language of Drawing*, Spectrum Book, New Jersey, 1966. p.39
4. Whiteman, John, “Drawing Towards Building” introduction to Ben Nicholson’s *Appliance House*, MIT Press; Cambridge, MA, 1990. p.7
5. In speaking of the process of design issues about model making will be bracketed out. The similarities and oppositions between model making and drawing will not be addressed. Both are understood as physical acts that work toward defining a concept that has but a vague presence in the mind that is then shaped and examined to arrive at the final precision needed for building. Some of the things said will apply to model making, others will be defied by it.
6. Evans, Robin, “Translations from Drawing to Building,” *AA Files*, 12, Summer 1986. p.4
7. Hill, p.9
8. Whiteman, p.8
9. Perez-Gomez, A. & L. Pelletier, “Architectural Representation Beyond Perspectivism,” *Perspecta* 27, The Yale Architectural Journal, 1992. p.23
10. Perez-Gomez, Alberto, “Architecture As Drawing,” *JAE*, 38/2, Winter 1982. p.1
11. Pallasmaa, Juhani, *Polemics: The Eyes of the Skin, Architecture and the Senses*. Academy Group, London, 1996. p. 42
12. Evans, p.4
13. Evans, p.3
14. Evans, p.5
15. Bryson, Norman, *Vision And Painting: The Logic of the Gaze*, Yale University Press, New Haven, 1983, pp.10. The advocates of virtual reality see the dominance of the eye fade with its technology: “Virtual reality

changes our relationship to information in an ever more fundamental way. It is the first intellectual technology that permits the active use of the body in the search for knowledge." Quoted from Myron W. Krueger in the forward to Heim. p.8. It would take more than a brief article to reveal the full extent of this statement and its understanding of the material and muscular body.

16. Hill, p.37
17. Hannoosh, Michele, *Baudelaire and Caricature: From the Comic to an Art of Modernity*, Pennsylvania University Press, University Park, 1992. p.6.
18. Evans, p.5
19. Hill, pp.26-37
20. Evans, p.14
21. Van Herk, Aritha, *In Visible Ink, Crypto-Fictions: The Writer as Critic: III*, NeWest Press, Edmonton, 1991. p.132.
22. Whiteman, p.7