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Type and craft in the production of architecture

Robinson, Edward Wyllys Taylor, M.Arch.

Rice University, 1993
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TYPE AND CRAFT IN THE PRODUCTION OF ARCHITECTURE

by

EDWARD WYLLYS TAYLOR ROBINSON

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

MASTER OF ARCHITECTURE

APPROVED, THESIS COMMITTEE:

[Signatures]

Gordon G. Wittenburg, Director
Associate Professor of Architecture

Mark S. Wamble, Advisor
Assistant Professor of Architecture

D. Steven Fox, Advisor
Adjunct Lecturer

Houston, Texas
April, 1993
ABSTRACT

TYPE AND CRAFT IN THE PRODUCTION OF ARCHITECTURE

by

Edward Wyllys Taylor Robinson

Type and craftsmanship are closely bound in an architecture of urban density. Craftsmanship, manipulating material and understanding material culture provides an essential base for knowledge that can guide the design process. Type, acting as a neutral construct relies on craftsmanship to resolve conflict, respond to local traditions of construction, and develop cultural coherence.

The proposed mixed-use housing development for the Magnolia Park district of Houston draws on local typological models and an analysis of local construction relationships to make an architecture that is legible and meaningful in its specific situation.
ACKNOWLEDGEMENTS

I would like to thank all the members of my thesis committee for their time and help. I'd especially like to thank Steven Fox for his formidable editing and his commitment to scholarship and Louis Delaura for his unfailingly clear criticism at each stage of the thesis. I would also like to thank my parents who have helped me at all turns.
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THE RELATIONSHIP OF TYPE AND CRAFT

Myths should be seen as constituting local and temporary answers to the problem raised by feasible adjustments and insoluble contradictions that they are trying to legitimize or conceal.\(^1\)

By analogy this relation of the structure of myth to its specific elaboration to resolve or heighten contradictions coincides with the formal aspect of type modified and adjusted to a particular place with its particular material culture. This can be seen clearly in the adaptation of Roman court houses to unusual sites. (Fig.1,2) Carlo Scarpa’s architecture represents this modifying aspect of myth in its handling of details, but with a modern sensibility that doesn’t attempt to resolve all contradiction. (Fig.3,4) Type is adjusted by particular situations to reveal unseen relationships. It is in fact the architects place to retell the myth of a building through craft.

Martin Puryear’s sculpture has incorporated the powerful resonances of crafts in his work to create layered meanings. (Fig.5,6) Puryear worked in Africa studying craft techniques and later moved to Stockholm where his friendship with James Krenov greatly influenced his work. His philosophy and outlook derive from the craft teachings of Soetsu Yanagi, leader of the crafts movement in Japan. For Puryear, craft is a means of expressing an unselfconscious way, not an end in itself. It enables, “a surety of mind and hand that lends an unmistakable formal authority.” Puryear’s sculptures

\(^1\)Levi-Strauss, *Naked Man*, p.629
are not self-satisfied absolute conceptions, but visible struggles that are suggestive of potential. His sculptures have a general appearance of simple type objects of unknown origin and use. In a way his sculptures are similar to Brancusi’s in their search for primitive shapes combined with sophisticated means.

The ultimate point has never been to mimic rustic technologies or gloss atavistic symbols so as to involve or recreate an anachronistic world. The point is to recover the creative possibilities offered by the highly refined crafts that have been marginalized by industrial society, or simply lost to it. 2

Puryear’s work dignifies the idea of craft as a notion of mastery of skills patiently acquired. His quiet approach is not one that proclaims innate ability or the status of genius, but suggests an open ended continuum that is inherent in the nature of craft. It is an invitation to join in to the task of forming and making.

The Shakers represent this spirit of creative refinement through the teleological development of a craft tradition in a pure form.

[The Shakers] recognized no justifiable difference in the quality of workmanship for any object, no gradations in the importance of the task. All must be done equally well. Whether it was the laying of a stone floor in the cellar, the making of closet doors in the attic, or the building of a meeting house, the work required nothing less than all the skill of the workmen. 3

2 Puryear, Martin Puryear, 133.
3 Spring, Shaker Design, p.10.
The work of the Shakers testifies to the fact that inspired work does not depend on a rejection of tradition, an embracing of utility, simplicity or perfection but of a commitment to quality through labor. (fig.8) Theirs was a transformation of common objects that have no starting or ending point in aesthetics, or style and everything to do with meditation and concentration. Shakers of the second generation, that is those completely removed from worldly ideas of pleasing clients, had the clearest understanding of this spirit. This generation, "did not so much create a new design but endlessly refined an inherited one." The Shakers' optimistic attitude toward work is a example of what may be accomplished through a revitalization of craftsmanship.

An emphasis on craft allows one to activate an intuitive process in the teleological development of an idea. The craftsman's process of using precedent on which to build recreates forms that are similar but each time different. In the making of primitive artifacts form is repeated through an internalizing of antecedents. In making a boat, its shape is in one's mind as the objective reality of it unfolds and develops in one's hands. The mental process is an intuitive one in which decisions are made in accordance with the accumulation of knowledge of the process and the materials. The painting of Chinese characters and landscape painting involves a similar process of repetition of form toward an idea, but with each manifestation of it being a fresh recreation. Music also function on a similar level, in which it is not the exact form of the music that is as important as the spirit which is used to produce it.

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4Spring, *Shaker design*, p.20.
IV THEORY OF MAKING

The normative experience in our modern civilization is a condition of estrangement from raw material. Rarely do we experience material other than of a highly distorted and disguised nature. Material being commonly formed through an industrial process creates a world of built-in limitations and defined products that do not encourage growth in the craftsman or in the creator's ability to see latent possibilities. Material, the primary element defining a building, has a direct impact on the significance of one's experience. This specifically has been devalued. Kahn believed that through a diligent use of material, architecture could reestablish the relationship between humans and nature. An approach towards architecture that emphasizes experimenting, manipulating, understanding, and intuitively using material provides the foundation of a craft-based architecture.

The mental engagement in the physical through working materials sparks the mind in unexpected ways. The resistance of material reveals its natural strengths, weaknesses, and character. This immanent quality of a material can be heightened and made to establish a language that is appropriate to it. As Fay Jones said, "Do not embarrass material by making it do something it doesn't want to do."5 The material always reminds one of the necessity of accommodating local conditions and perhaps celebrating them.

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The responsibility of a craftsman is to have a knowledge of how to work material. The rewards of this firsthand knowledge are personal growth and a conviction based on reality.

You will never achieve anything unless you work up towards it. You can’t break in halfway through the process, and least of all you can’t start with the result. You must start at the beginning. Then you will avoid all trace of artificiality, and the creative process will function without interruption.  

As Klee asserts, one must start from a solid foundation of experiential knowing for all good design. If knowledge and understanding is necessary for good craftsmanship it is the craft process that is so instructive and points to how one might gain a bigger picture through it.

The direct making of form from raw materials is a primary act which engages the hand, eye, mind, and body. Through this process material is transformed and emanates power. "Formed things and thoughts live a life of their own; they radiate meaning." Through one's hand a person learns at a physical, sensate level lessons of equal importance to learning at an intellectual level. Albers believed that too much intellectual training in schools was dangerous because it often led to an emphasis on aesthetic qualities over construction. She felt it was through crafts that the appropriate creative sensibilities were awakened.

The crafts retreated, a defeated minority. We do not depend on their products now, but we need again their

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6Klee, Paul, The Mind and Work of Paul Klee, p.83
7Albers, Anni, On Designing, p.33.
through contact with material and their slow process of forming.  

Through manual involvement, the mind becomes engaged in concrete reality. Thinking and acting are united. (Fig 9, 10)

The potential of the hand and its impact on making a building reveals human dimension, labor, and thought. The hand and its creations demonstrate a capacity for expression that is only rivaled by speech.

That the hand must exhibit and reveal the inherent nature of individuality as regards its fate is easily seen from the fact that after the organ of speech it is the hand most of all by which man actualizes and manifests himself.9

The material product of perceptual thought is a recording that acts as a repository of memory to all those who look at it, revealing its tools of manufacture as an order resonant of the body.

The practice of craft and technical imitation is essential to the maintenance of a tradition of construction. Aristotle recognized the value of learning from imitation in the poetic arts in particular. This is also the method of transmitting the tradition of Chinese brush painting. Without technical imitation there can be no tradition. Conversely, once the tradition is thoroughly understood there is the possibility of free interpretation. Through knowing about construction and material one is able to transform and free objects from an inanimate state. From a base of knowledge we can make meaningful architecture.

8 Albers, Anni, *On Designing*, p.32
Architects must also refine an intuitive sense based on understanding gained through perceptive seeing. (fig. 11, 12) This in part is developed through drawing but is fortified through making. Charles Eames was a master of both seeing and making. His eye for form and space is quickly revealed through his photographs, but is more pointedly shown in his development of chairs.

The particular spirit of a material is not evoked intellectually, but is understood through sensory experience, and especially through sight. Shintoism is based on a fundamental belief that materials have an immanent nature and that each has its own special spirit and aura. Heiddegger likewise put forward the belief in a spiritual quality to material itself. Materials have a large impact on how we understand and become aware of a building. Our sight, although limited to surface evaluation, is very keen and perceptive, while our other senses pick up clues of solidity, weight, echo, aroma, flavor.

PROCESS OF WORKING:

Through a process of working material its properties and qualities become apparent. These aspects of materials are just below the surface.

Everything that nature makes it records in what it made, how it was made. In the rock is the record of the rock. In man is the record of the man. And through our gift of consciousness in, I would believe, the hierarchy of consciousness, in which I believe even the rose has consciousness of its kind, or every living thing has, there is this affinity for the great history of how we were made, and so, we are endowed with the ability to
reconstruct the entire universe just by knowing a blade of grass. 10

Through experimentation the innate structure of a material is persistent and one can understand its properties. More important its multiple characteristics and qualities start to rise to the surface. It soon becomes apparent that the quality a material exhibits is not just discovered, it is also made though careful attention to treatment. It is in fact the variety of qualities that are revealed through experience and the appropriate use of these qualities that an architecture of meaning is produced.

Knowledge of materials is essential to developing a full range of expression. To be presented with a material ready-formed is a narrowing of the building profession that usually happens too soon. A building's conception could easily start from a material experiment. In the process of working material, one recognizes structure and innate laws and that within these structural properties there is an enormous degree of potential form and meaning. As Holl asserts, "an ideal exists in the specific; an absolute in the relative" 11 The more resistant the material, the more of an understanding of its structure one receives.

We can recognize in materials a willing bearer of ideas we superimpose on it, provided they are conceived in accordance with its structure. 12

It is in fact the understanding and interpretation of this structure that provides a degree of license. Moneo has shown in his buildings an ability to exhibit this concept, even to the level of his guidance of the craftsmen

10Kahn, Louis I. Kahn, p.109
11Holl, Anchoring, p.9.
12Albers, On Designing, p.46.
who construct his buildings. In the Miró Gallery in Majorca, he has allowed the rough concrete work of the lower foundation to contrast with the highly refined and articulated windows that punch through it. The exterior of the galley can be read as the recordings of sufficient method of the workman.

Material forming in Modernist ideology was about expressing properties, often neglecting the fertile ground to be found in the manipulation of quality. Further, Modern expression of elements of a construction was of their independence. Despite the fact that enclosures require the connection of materials, the manifestoes and aesthetics of Modernism dictated the illusion that materials, as discrete and unrelated pieces, sheared and passed one another in space and time such that each piece was discreet and independent within the whole.13 But if form acts to reconcile human condition, articulation can be made to reflect the real interdependency of material.

Combining materials and revealing their interdependency creates an architectural density and an appropriate analogy to the craft process

An architecture of matter and tactility aims for a poetics of revealing, which requires an inspiration of joinery. Detail, this poetics of revealing, interplays intimate scaled dissonance with large scale consonance. The vertical patience of a massive wall is interrupted by a solitary and miniature cage of clarity, at once giving scale and revealing material and matter14

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13Soroken, Ellen, "The act of interface in the work of Carlo Scarpa", Modulus 19
14Holl, Anchoring , p.11
It is in the details that you see the essential unifying of the concept and an
intuitive handling of material. This represents the recombining of thinking
and acting, the subjective and objective, intellect and feeling. Such
relationships that draw on the local material culture are significant.
The guiding method in this approach ought to be alert acquiescence
as opposed to willful design. Finally, manipulation of material is important
as an understanding of contingency and our connection with the elements of
the universe.

VII THEORY OF BUILDING: The rationale for incorporating craft
experimentation to inform architectural development.

Knowing materials through experimentation can function as a part of
the building process. First one must know through experimentation.
Through such an approach one can bring the design process closer to the
reality of building.

Architecture needs the support of
matter....Architecture arrives when our tangible
thoughts about it acquire the real condition that
only materials provide. By accepting and
bargaining with limitations and restrictions, with
the act of construction, architecture becomes what
it really is.\textsuperscript{15}

Through this knowing one can imbue architecture with a high degree of
technical craft.

Learning from the material culture and history, one is provided with
primary architectural evidence of typological models and their
modification by craft. Scarpa's approach was to extrapolate and interpret

\textsuperscript{15}Moneo, "the Silence of Buildings", p.35 \textit{A+U}. 
tradition through a direct understanding of forming material. He stressed a reliance on craftsmen to understand new objects and to manifest the product as part of a shared tradition. His interest in the integration of ability created an opposing force to standardization and specialization making details that were not only particular to the resolution within the building but to the built culture which they reinforced.

The idea of deriving an architecture from the specificity of the material culture can be applied to the condition of the site. Local specificity implies a building that gathers and explains the site’s physical position within the city. As the metaphysical foundation of a construction, "architecture and site should have an experiential connection, a metaphysical link, a poetic link."\(^{16}\) It is this creation of a specificity of site that is analogous to bringing out the qualities of a material. The site becomes the material out of which a building develops. The particularity of the site and its adjacent conditions requires an adjustment to the continuous fabric of the building.

HOUSTON AS A TEST CASE:

SITE

The choice of Magnolia Park was arrived at through identifying a community within Houston that has, over the last seventy years, developed a particular material culture and vernacular tradition of construction. The

site, located between Harrisburg, the first settlement in Harris County, and what was to become downtown Houston, forms the edge of the Magnolia Park district. The community was developed speculatively as a working class community to service the ship channel and continues this function today. Conceptually, the site is significant in creating an edge to this particular community at its most active seam. It is on this community that I focused.

CITY PLANNING

There are real problems in the United States that need the attention and creative energy if this country is to continue to prosper spiritually, culturally, politically and economically. Foremost of the problems are the decaying urban centers. Government on all levels needs to involve communities in developing projects for addressing these problems like a massive dam which changes the course of the river while it controls floods and harnesses its energy. One area of needed development is for mixed use complexes that integrate new housing with existing communities and commercial strips.

The choice of the particular site and program requirements developed from a political, social, and economic analysis of this community. For there to be an effective housing development there needs to be a coordination of government, community, and individual interests and efforts. Community needs of housing and facilities for furthering the local economy were assessed through conversations with residents, housing experts (Thomas Lord), local development offices (John Rodgers), and city
planners concerned with inner city development of Hispanic communities. Adjacent to this particular site on Harrisburg Boulevard is an accumulation of city-funded services -- a transit center, a community center, a post office, a very successful retail development -- as well as cultural and religious and park facilities extant and planned that suggest the development of a higher density to coordinate the city's initial efforts. Size requirements were determined by economies of scale with regard to typical housing and commercial development of the local economy. Shared green space is provided in accordance with Houston zoning requirements for lots under certain size limits.

Institutional arrangements derive from the principles of coordinated urban development involving the government, community groups, and individual initiative. At present there are strong community and church groups that are involved in housing and would be able to manage the construction and administration of such a project with government support. This is not so different from the arrangements made to develop a successful strip center with community block grant funds on Harrisburg Blvd.

**TYPE**

With the density established it was necessary to look at community types in terms of their essential features.

Apartment flats typically occupy the upper level of many commercial structures that line Harrisburg. Their function of providing inexpensive housing alternatives for low-income residents and immigrants is essential. This type has remained unchanged in my proposal.
Commercial space along Harrisburg has traditionally consisted of party wall structures that allow for variable storefronts, the accumulation of signs, and a clear pedestrian zone. This type has been seriously challenged by the automobile. Any new development of this type needs first to make allowances for use.

Single-family detached houses are the dominant type in Magnolia Park and provide conditions crucial to the vitality of the community. Built on small lots that are primarily occupant-owned they have allowed for an ongoing growth and regeneration of the community. By creating the room for growth, this type, through additions required by use, desires for maximizing land and creating private space have mutated into another type, that of continuous walled courtyard housing. It is with this particular type that I have worked because of its important function of making a clear tie to the community.

The arrangement of parking, retail, public housing and private property and their corresponding types within a single overall structure creates a dense overlap of function. Through coincidence, overlap can be manipulated to intensify the area's urban character. By drawing on the extant typological conditions within a confined area its qualities are heightened and their resolutions with the context more critical.

One result of this densification is the introduction of a new type. The party wall housing proposed already exists within the community but as an unplanned structure that reflects collective desires for clear boundaries, the creation of private yards, and the maximization of spaces. Taking this condition as the model of organizational one is able to build on existing patterns in the creation of a building type that reflects the habits,
mores and desires of the community. The party wall units allow for the possibility of a wide variety of private and public spaces, depending on the individual’s taste.

Additionally, through an efficient implementation of such a model, it allows for gross economic savings, although such a construction of the city’s infrastructure shouldn’t demand maximum economic savings in all respects. Certain aspects of it, reflecting an attitude of consideration and deliberate integration, demonstrate the parts relation to the whole, the buildings relation to the site, and the community’s relation to the city. It establishes the structure as a vehicle for resolving conflict and contradiction. Type provides the structure and formal organization of a myth. Craftsmanship is its retelling and integration with particular circumstance.

In providing a structural frame and services within a shell as opposed to finished units there is the provision of a consistent type with the allowance for the variability of craft. There are a number of advantages to such an approach:

1. Specific spaces and arrangements will be determined by the inhabitants.

2. By allowing room for growth and change the units have a use beyond immediate needs.

3. Local residents have expressed a desire to construct their own houses in a recent housing experiment in the community.

Tradition of Construction
The development of an architectural project in an urban context proceeds from an understanding of the material culture of a specific community's built tradition. How it is built provides essential clues for how one might conceptually and materially continue its traditions and make a construction specific to its place.

From an analysis of the use of materials and methods of construction a hierarchy of materials is established to provide a spatial and structural framework of services:

- concrete primary floor slabs and parking lots,
- static, load-bearing concrete block enclosing wall system,
- dynamic steel column structure for unit interiors,
- precast concrete walkway system for all publicly used surfaces

The combination of building systems creates a hybrid system that is very much within the building tradition of this community. This is an open system that allows multiple avenues of development depending on economics and the consequent availability of materials, as well as the desires of the inhabitants.

The development of details concerning the separation and integration of materials proceeded as an outgrowth of the traditions of construction in its attenuated condition. The limitations and potentials of materials bear on decisions in the reinterpretation of the traditions of the community. Concrete is molded and bumps up at its connections with other materials to provide the primary platform. It envelopes the parking of the commercial zone and creates the upper floor of the housing. Bond beams of no greater length than eight feet span block walls and carry a precast slab over the residential parking. Steel pipe columns of limited length necessitate
connections that support variable level floor connections. The connections themselves are the resolution of there specific conditions as well as the properties and qualities of their materials. It is at this level that the individual’s mark is significant. The maker and the degree of care become evident through the process of construction. Through creation and making, type can evolve.

Craft and type are bound. Their relation defines the architectural project. The application of the principles of this relationship derived from the material reality of a project are not confined to the development of details but to the entire construction.

CONCLUSION

Freedom is not static but dynamic; not a vested interest, but a prize continually to be won.17

Craft speaks of a specificity of intent and integrity. It operates on a visceral level of communication about significance and quality that defines the larger concept of a whole built project. It gives a building authenticity through tangible proof of a physical knowledge of materials and technique used in accordance with inherent structure and qualities. The imprint of the hand is an indelible mark that speaks directly of the human condition, a struggle to make the formless material world conform to will. Through one’s hands in the act of making, experience is grounded on knowledge. One becomes active and engaged in the physical world.

17Ellul, Technological Society, p.7.
Technique pervades all facets of the profession. But through the use of craft, one can integrate technique with the specific material culture of a site. The tempering of universal technique with attention to a local tradition in the design process allows new variables to enter.

The proposed mixed-use structure demonstrates how these principles can be applied to the context of Houston's Magnolia Park. Its integration of craft with typological models gives it the ability to relate to the community from the level of city planning to the detail.
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Primary Texts:


Behne, Adolf. “Art, Handicraft Technology,” *Oppositions* 22 (Fall, 1980).


Perez-Gomez, Alberto. *Architecture and the Crisis of Modern Science*  


Semper, Gottfried. *The Elements of Architecture*.


**Secondary Texts:**


Frampton, Kenneth. “Mario Botta and teh Ticino School,” *Oppositions 14* (Fall 1978).


Nines, James, of SITE. *Highrise For Homes* Rizzoli, N.Y. (1982).


