

# Design Methodologies From a Periphery That Is No More

## Endorsing Pseudo, Quasi or Neo Architecture in the Caribbean

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I am a practicing architect whose involvement with academia is a spin-off from concerns related to the profession, matured and developed in everyday situations at both office and building sites. Early as a student, I sought means to complement my education by taking part in what eventually turned out to be local high-profile research projects, concurrently working as an intern with some of my teachers, most of them practitioners. In addition, I had the privilege of the best possible training and education at one of the nation's topmost institutions. Contrary to what might have been expected, my exposure to first-rate debates and theoretical questioning proved to be instrumental in my decision to return to Puerto Rico and becoming part of a long heritage of what I call "alternate" architects: designers of regional weight and consequence, who understand that traditional academic principles and the latest trends, can serve as referential frame to validate architectural work, rather than a one-way road to take.

The possibility of producing contemporary architecture related to both an academic tradition and to local cultural expressions seems to be relevant these days, when rhetoric sometimes attempts to replace meaning itself. As of today, I have had the opportunity to teach at each of the three architecture programs in Puerto Rico, and occasionally serve as visiting professor at the University of Miami, Rice University, Cornell and two schools in the Dominican Republic. Practice, research and teaching have been intricately related in all work I have undertaken since my first exposure to Architecture as a student. As a practitioner, the three realms continuously validate each other. Contrary to what is conventionally understood, when combining teaching and practice, teaching enjoys an edge of reality, while practice remains related to the principles. Retrospectively, I must attest to my greatest satisfaction: whatever I learned in school turned out to be instrumental in the way I chose to confront the "real world" practice.

Most architects, once out of college, simply adhere to whatever precepts the building industry is embracing at the time and are quick to concede what was learned in school as having little value in actual practice. The disjunction be-

tween what seems valuable to academia and what practice purports, signals a divorce between how architecture is taught and what most architects end up contributing to society. For most recent graduates, what was learned at school does not address directly the skills the professional world expects from them. This problem might be dismissed as an ever-present one, but in the last thirty five years, undoubtedly, it seems to be true more than ever before.

The focus of architectural education has shifted from the 60's *pragmatic* approach, to a seemingly *theory-obsessed* procedure in the 90's. The final stage of this transition seems to have occurred during the eighties, when the original postmodern stance of *Architecture as Discipline* was challenged by an introspective cosmology that questioned form, meaning and order. The *so-called* universal values of Architecture were no longer accepted as dogma, but merely as parameters for endless exploration. Regardless of the stance one chooses to assume, an obsession with theory—whether liberally or conservatively biased—has overwhelmed many issues pertaining design process and methodology. To some extent, the intellectual procedures involved in the process of design seem to be so firmly controlled by theoretical considerations, that the end has been forgotten amidst the rage around the means. This skewed attitude toward the pedagogy of the design process is very much responsible for the distressed role that young architects are facing nowadays. A revision on the teaching of the design process might prove to be a key to solve that rupture which is rendering architects as the only professionals in the construction industry lacking not only practical purpose but, ironically, also philosophical conviction.

Mainstream's philosophical oscillations regarding the establishment of the discipline have consistently failed to produce a theory for the architecture of our days. It seems convenient to propose a mid-point resolution where paradoxically enough, a set of basic rules is acknowledged as valid, yet always subject to be contested and revised. For the first time in many years, architecture could be acknowledged as a self-standing discipline capable of nurturing its own theories and appeal to different philosophies, but not neces-

sarily based upon these. The current lack of a label for the latest architectural production is a remarkable first in the history of architecture, at least from today's immediate perspective. This truce in the quest for the latest avant garde, opens a window for architects to attest what their culture understands as valid; a considerable challenge for any experimented architect, yet a premature goal for students, usually stunned with an array of contradictory theories, unsupported philosophies and the complexity of the design process itself.

Customarily, architects concerned with the avant garde are overwhelmed by the pressure imposed by trends, fashions and styles which must be followed in order to be part of the latest convention. In adopting these specific conventions, architects however preclude any other possibilities concerning composition, expression and materials. Besides, designers who recklessly follow the latest trends, obliterate the social, urban and economical consequences of their fashionable interventions. Since these conventions are reached and approved within First-World conditions, they are inexorably exclusive of any scenario unable to play to its standards. Their application in marginal societies is always diluted and modified, and as such disdained. The marginal attitude towards the avant-garde is by definition referential and by necessity all-inclusive, it nevertheless avoids replication (*Fig. 1*).

#### THE LESSON OF PERIPHERAL ARCHITECTURE

From the standpoint of peripheral societies, interpretation, transformation and adaptation have customarily proven to be the vehicle by which academia's willful dictums are internalized, even if far away from their point of origin. These processes made viable British buildings in India, French architecture in Southeast Asia, and Spanish constructions in Latin America. Examination of such processes renders architecture's potential for *blurring the edges* between what is *central* and what is *marginal*. The tension between center and periphery is most clearly stated in John Stilgoe's "Along-shore:"

"...what happens in the marginal zone is exactly what is important, intrinsic, essential, that which illuminates not only larger issues of landscape, of environmental presentiments, but whole components of American culture."

The radical change in theoretical focus observed over the last thirty-five years, from pragmatism to formalism, to neither, to whatever, has yielded a neutralizing sense of confusion at the turn of this century. These days, the lessons learned from this century's past approaches are being reviewed in a series of eclectic efforts, drawing images and resources from the different developmental stages of modern architecture that brought us where we are now. This easy-handed merging of various design philosophies, requiring great design skills and some distance from any particular theoretical approach, has been the traditional ways of periph-

eral architects, who disregarding the seduction of the latest trends, maintained a strong devotion for architecture's unavoidable essentials: construction, composition and convenience, your layman's version of Vitruvius' often quoted triptych.

The indifference towards adherence to any recognizable theory, and the bold and free handling of what has been learned and disseminated so far, may prove to be either new and refreshing (or dull and imitative) from mainstream optics, but it has always been standard procedure for the architects of the periphery. Along the years, architectural production in peripheral regions has been prone to revise and adapt the lessons of mainstream architecture in order to gauge it to regional socio-economical possibilities. International recognition has consistently been denied to architects endorsing this parallel history of architecture, and yet they are noteworthy in making an architecture adequate to their culture, region and possibilities. Although these professionals usually enjoyed the best possible training of their day, for whatever the reason, they paid less attention to mainstream commitments, commonly disregarding these as stylistic

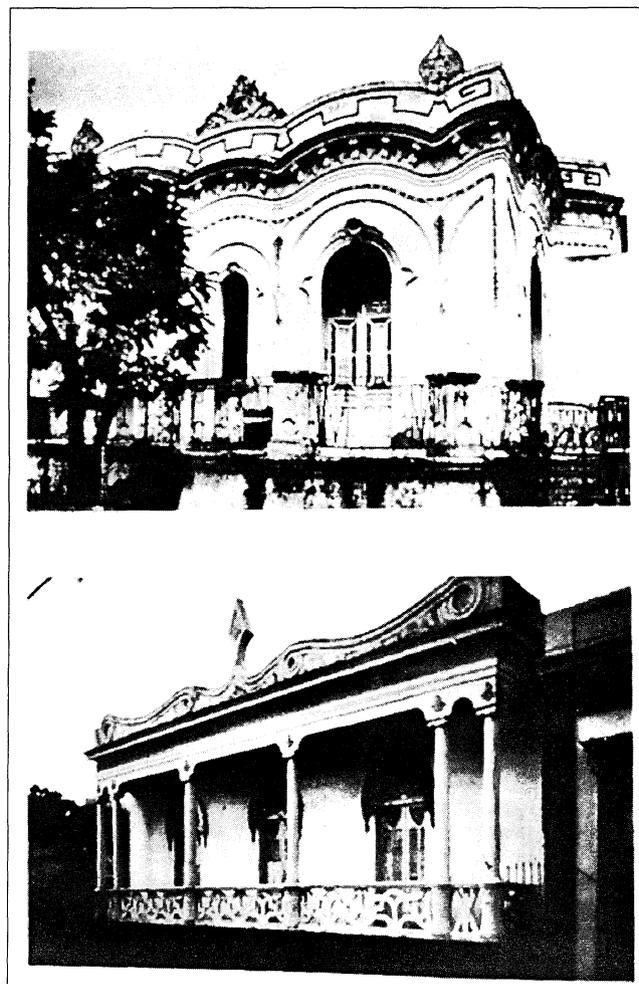


Fig. 1. Free style eclecticism exhibited within most orthodox compositional principles in Caribbean Architecture.

possibilities. There is a lesson to be learned from the ways of these lesser known designers, whose training basically become a process of familiarization with options rather than givens.

Past and present architectural examples of the Caribbean Region—drawn from both practice and academia—attest to this kind of “global” architecture (because it is optative); one in which *the material meets the imagined* in multiple ways relevant to contemporary international debate, even if not fully acknowledged as such. In spite of aiming recurrently at metropolitan emulation, the Caribbean has always been defiant of stylistic standards, opting instead for the “pseudo,” “quasi,” or “neo” prefixes in its building grammar.

However inventive and resourceful, Caribbean architecture acknowledges the wider worth of the discipline as the grammar of design. As with any grammar, some rules and restrictions must be accepted in order to achieve meaning. But grammar never refrains a language from evolution or renewal as the variety of possible messages that can be carried through within the grammatical rule is virtually endless. This necessarily means that there are certain combinations which, for whatever reason, fail to abide the grammar codes and therefore carry no interpretable meaning. In order to acquire freedom of mind in the design process, one must command knowledge of the discipline of design as well as the ways which fail to communicate. While it is true that there is not one single procedure over any design problem, there is indeed the absolute wrong. As obvious as this seems, addressing the absolute wrong is consistently avoided. All adequate design solutions—regardless how different they might be—are always set within the reference margins of the discipline. For when they claim not to be, the reference margins necessarily become personal, subjective and, ultimately, whimsical. Such stances cannot be endorsed as befitting the responsibilities of an architect, or for that matter a teacher.

### ARCHITECTURE AS TEXT

Architecture as text requires the acknowledgment of the discipline’s capacity and responsibility to convey meaning so that it can be opportunely interpreted by others. To consider buildings as texts, is to understand the whole history of architecture as an inexhaustible library whose contents (ideas)—not just the jackets (appearances)—can be read and interpreted in many different ways over and over. Once a designer learns how to “read” any given building design, the criteria for its evaluation, along with all its possibilities for future development will surface at once. A variety of meanings can be read from a single building; whether these are spatial, compositional, functional, constructive or stylistic. Since multiple readings can be obtained from any given design, comparative analysis between different buildings, and also within any complex design is a possible strategy for studying and learning the fundamentals. To pursue knowledge through conscious comparison seems a sound proce-

cedure if, as Marc Bloch has stated, “all knowledge is after all, based on comparative experiences.”

But to go about this extensive volume of possibilities requires tools to manage, classify and usefully handle all the breadth of information. Such “indexing” device **has to be essential to the very nature of the building design, so that it remains true at most levels of meaning.** The principles of formal typology as proposed by Quatremère de Quincy (doomed to be incomplete as design is not entirely a matter of science) might yet prove useful as a starting point for this purpose. (*Figure 2.*) The building type can be conceived as the quintessential sketch that allows no further analysis without losing vital information about the actual subject of study. This diagram of the idea ruling a building’s organization—in the best examples—remains true, and, as semiotics in the case of a text, it controls most levels of meaning, becoming essential for the understanding of the building.

The enthusiasm over typology boasted by the formalists trend of the eighties, we acknowledge, is still remembered as ill-conceived since the all-inclusive nature of the design process cannot possibly be reduced to a formula for standardized application. However, interest over the topic was too soon discarded as these theories were branded—along with anything pertaining form—as conservative, revivalist and to some, fascist. If it is true that typological abstraction is not the automatic solution to any design problem, it remains, however an essential tool in the design process. Whether consciously or unconsciously, typological considerations lie at the very marrow of the design process. To ignore this virtue of typological thought will burden the design process with hesitation and mischief to ultimately arrive at the same conclusion. A great deal of effort is wasted if we prefer to ignore what cannot be avoided.

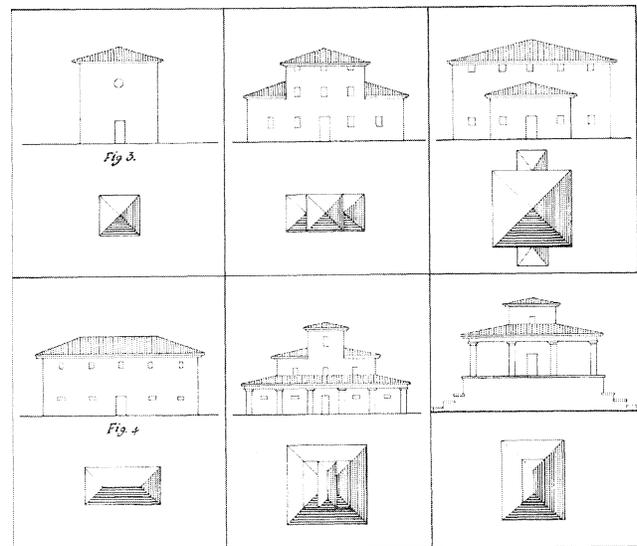


Fig. 2. Classifications of the elements of architecture based on formal typology by J.N.L. Durand. Following Quatremère’s typological principles, this was a deliberate attempt to reduce architectural design to composition with pre-determined forms.

The importance of this level of fundamental abstraction cannot be overemphasized, as these diagrams are not only essential to any given building under study, but they can also be the generative part of a new design. Through this methodology of abstraction and transformation, typology is understood as a semiotic phenomenon. The overall structure of any design can be conceived as its meaning. As such, it will be the portion of any design which will ultimately endure superficial changes in style, scale, and program. Permanence is the most important value of formal typology and—paradoxically enough—this permanence is due to the flexibility of a formal diagram for adaptation and transformation under functional considerations. Said approach makes all the information in the library of the history of architecture, incredibly useful.

### SEMIOTICS AND GRAMMAR APPLIED TO THE PRACTICE AND TEACHING OF ARCHITECTURAL DESIGN

In Puerto Rico, recent projects by architects and students in our recently created school, embrace this creative process, customarily frowned upon without much rumination. They include built projects and proposals influenced by pioneer investigations undertaken in several cities on the Hispanic Caribbean along an eight-year span. Widely disseminated, most of this research was carried out in the 80's by U.S.-trained designers which subsequently have had a chance to implement their findings in built work at home. Their buildings, having received less public exposure so far, understand the region's built heritage not just as legacy, but as a laboratory for reassessing architecture as text.

In an example drawn from my own professional practice, a small intervention provided room for experimentation within the possibilities of architecture as text. The message of this building design was inspired from recurrences identified in traditional architecture. Design nurtured from architectural procedures regarded as typical by our culture occurs at two levels: literally, as some distinctive architectural features from traditional examples are re-interpreted with careful composition, assembly and proportions, and also analytically, as the underlying design principles in the proposed design solution, are based on interpretative stances regarding the compositional ways of typical Caribbean architecture.

The project was an addition to already existing law offices building set on corner lot in the Financial District of San Juan. The portion we were to build displayed an obviously larger face to a main street and a shorter surface to another other street of secondary importance. As a corner façade problem, we proposed a set of overlapping symmetries, a common procedure in Puerto Rican versions of Beaux Art architecture of the turn of the century. Traditional corners display three consecutive façades; one for each of the two streets meeting at the corner and another for a slanted (or curved) plane developed where the building volume chamfers. If the elevation is analyzed by “unfolding” it (as it was

drawn at the time), an analysis of its local symmetries make evident how shared compositional elements among all three façades bind them together into a cohesive, overlapping whole, achieving a pleasant sense of continuity, both within the building volume and along the streetscape. (Figure 3).

A particular problem made difficult a literal quotation from the past: the emphasis (axis) established by the original entrance of the pre-existent structure at the larger façade over the main street was placed off-centered. This condition precluded the possibility of perfect symmetry, characteristic of traditional corners. We developed a multi-layered wall; another traditional strategy from typical architecture, yet handled with renewed purpose. A “strong” compositional figure was established as a “theme” through the association of a door with a canopied balcony, set against a perfect square surface at the deepest layer of the wall. This composition was displayed at both sides of the corner façade component, yet the off-centered axis was re-centered through some variations from the theme allowed on the façade over the main street. These deviations from the original theme are very much unnoticeable due to the strength of the compositional figure of the canopied balcony. To the left of the main entrance, the remaining portion of wall is not enough to balance that of the right portion into a symmetrical composition as the *esquina ponceña* scheme required. In turn, the perfect square figure “slides” behind the foreground layer to create the illusion of a symmetrical arrangement, at least between the perfect squares at either side of the main axis. (Figure 4.)

In the interest of linking contemporary design to the broader tradition of the architectural discipline, the solution relates to local precedents, again, literal appropriation of details and elements from Spanish colonial architecture such

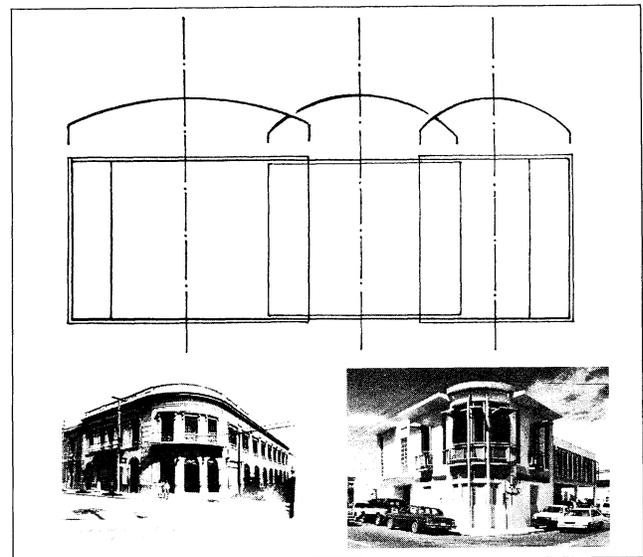


Fig. 3. Typical compositional procedure of a corner façade in Ponce, Puerto Rico. Three consecutive façades are transparently overlapped to emphasize the corner. Photograph of typical example and contemporary application of these principles.

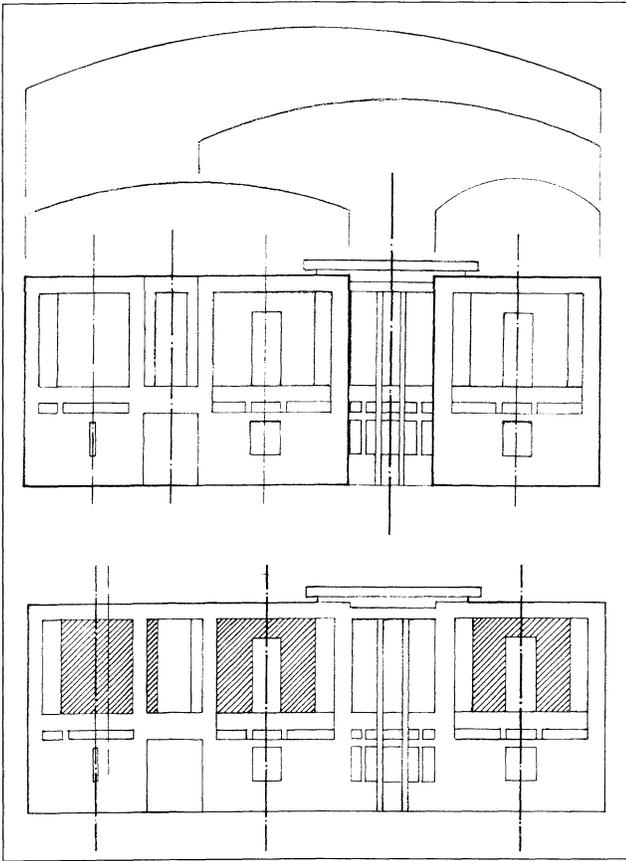


Fig. 4. Analytical drawings on different compositional subjects of the proposed façade design.

as delicate wooden elements contrasting against the massive masonry walls, serve as direct reference to particular features on the newly proposed design at the steel balconies and overhangs set against the thick concrete walls.

With student projects at the Polytechnic University of Puerto Rico, the previously mentioned methodologies are promoted for exploration, as they significantly feed the first year design curriculum in an effort to contest, early in training, the cultural vantage points and “margins” from which the architecture discipline has been so far understood. The goals our school has set to achieve will not come easy. Nevertheless, we are focused and aware of our regional assets and possibilities, as we strive to train our students to recognize the architectural wealth they have inherited, to gain consciousness of their position as Puerto Rican architects at these times, and to resourcefully take advantage of it all. To fulfill these targets students are exposed, even at the freshman design sequence, with wide-scoped projects that pursue complex, yet integrated, critical aspects of pedagogy by underlining overlapping processes: analysis and interpretation of appropriate international examples; explorations on typological flexibility; adequacy of the local heritage to the problem at hand, and the re-use and adaptability of compositional principles to the specific demands of a new site, program, scale and culture.

Akin with the curriculum’s philosophy, a first year, end-term project pursues to expose students to a simultaneous overview of several dimensions of the design experience and how they interrelate. The principles and procedures identified through an analytical process are later synthesized into a design proposal considering material, programmatic and contextual constraints. A famous precedent is assigned to each student to analyze at many levels, arriving ultimately at a diagram of its formal structure. This diagram, in turn, is further scrutinized to obtain a typological diagram, one shared by several of the models under study by the rest of the class. The typological diagram, as the final stage in the analytical process, shall now serve as the base point for a new design to be developed within specific site and program conditions. Each student must work at a fundamental level in order to apply a new design intention to the base diagram. Such “intention” diagram will lead the decision-making process, so that the final outcome remains true to the initial commitments, to the typological precedent and yet, has a different purpose, scale, context and expression. (Figure 5).

The models for analysis are purposely selected so that they look dissimilar and yet share a common typological diagram. Once the typical diagram linking the models is identified, students pursue a new design—with new restraints and requirements—based on the shared typological diagram. Ultimately, each diagram has yielded several different projects considering both the analyzed models and the student proposals. Through comparison of different results obtained out of shared precedents, students learn, early in training, that formal types are not established upon their formal qualities but rather as a response to functional convenience. Whatever is typical is established once its convenience for a specific purpose is proven over time. Its repetitive use is not what is important, as much as a manifestation of its importance as an adequate resolution between form and

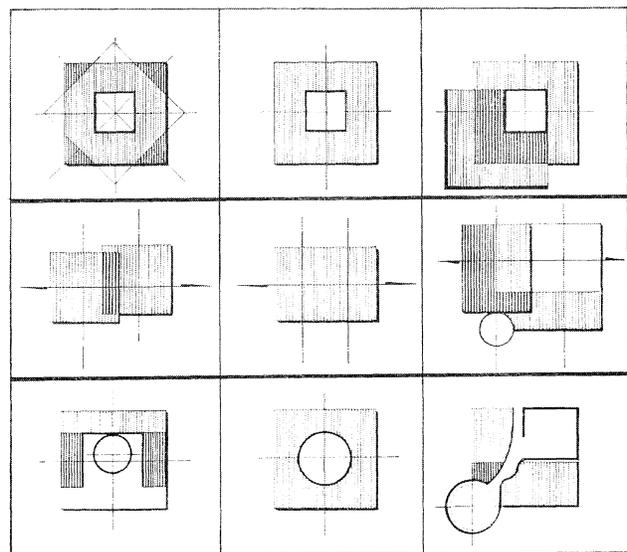


Fig. 5. First year student project exemplifying design process based on typological transformation.

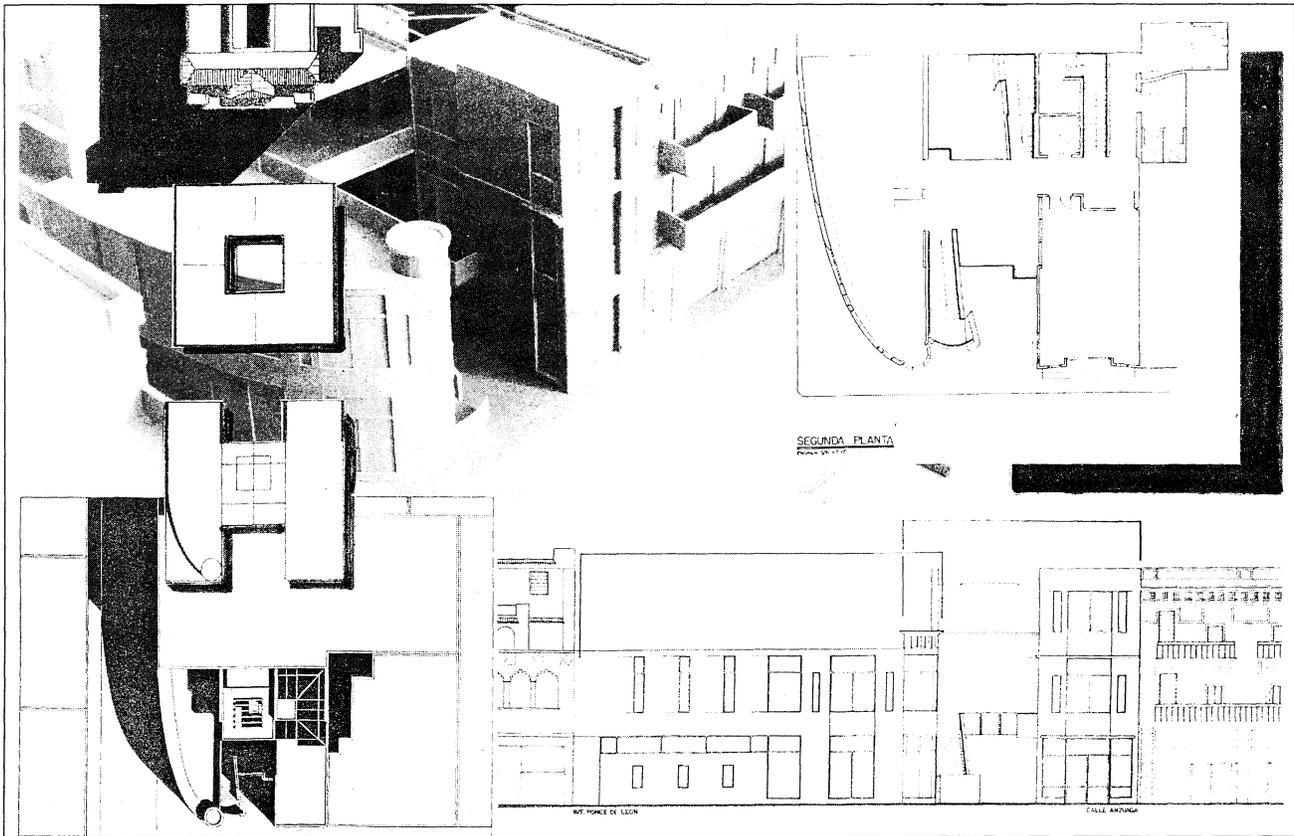


Fig. 6. First year analytical studies on historical references (from top to bottom at left column: Kahn's Exeter library, Le Corbusier's Villa Stein and Stirling's Stuttgart Staatsgalerie) are reduced to a typological diagram (center) to serve as the base for new design intentions (right column).

function. The usefulness of the typological diagram relies on its flexibility for different applications. Students analyze buildings of different size, purpose and historic period, to learn how they share a common formal typology. (Figure 6.)

This is not being proposed as a design process but rather as a practical exercise on how to use an intellectual device that can assist that process. To learn about typological abstraction and how to use it, grants a leading edge to students, who can then focus on conscious intentions to lead their decisions. It is essential for any designer to master this level of abstraction and analysis. To recognize the wealth within typological flexibility allows access to history as a dynamic tool and also to interpret meaning through the reference of discipline in our own work. By acknowledging

typology's semiotic value as qualified here, students experiment on how theory can be effectively put to work in the design board. Students ascertain design procedures that can be—as their teachers prove on their own—effectively used in real practice. What they learn in school is ultimately meaningful.

In the so-called peripheral realm, this tool continues to enable architects and students to find meaning in our built heritage, customarily left outside debate and discussions. Current architectural work and pedagogy based on design strategies akin to the Caribbean, not just jointly aim at finding a suitable metaphor for our age, but also attest to the feasibility of ensuring an ongoing, vital and verifiable dialogue between research, schooling and practice.