Wall Housing: Three Prototypes for the Post-Industrial City

BRIAN D. ANDREWS Syracuse University

W. JUDE LeBLANC Georgia Institute of Technology

INTRODUCTION

I 10 the Gulf State States

Macro and Micro Thinking and Living. This proposal is part of a larger project of research and speculation which we've named, "I 10—The Gulf Coast States." This body of work explores the question of how to better create an architecture that has the capacity to respond to particular cultural circumstances. Interstate 10, the east/west highway which links the Gulf Coast states, provides the framework, both literally and figuratively, which organizes these proposals. All of the projects are thematically related in support of a single thesis. This thesis explores the obligation of architecture to contribute to particular geographic places. In the words of Flannery O'Connor, that meticulous craftsman of the short story, "Someplace is better than anyplace."

The Existing Field. The diminishment of species diversity in the natural environment has its corollary in the built environment. Current building continues to result in loss, as building practices diminish desirable differences and nuances in neighborhoods and cities as well as natural environments across the globe. Building construction in the United States, over the last several decades, has tended to level differences across geographic locales. Numerous factors such as gains in global production, distribution and information have resulted in a building industry characterized by these strong generalizing trends. Kenneth Frampton has identified economic and political conditions which continue to frame the field of current architectural practice:

As far as architecture is concerned, there seems to be little chance today that large-scale undertakings will yield works of cultural significance. This is partly due to fundamental changes in methods of financing. I am alluding to the direct line that exists today between surplus insurance capital and various forms of transcontinental and intercontinental development. The vast size of these works tends to create an overall drive towards optimization, that is, towards the reduction of building to the maximizing of economic criteria and to the adoption of normative plans and construction methods reducing architecture to the provision of an aesthetic skin—the packaging, in fact, of nothing more than a large commodity in order to facilitate its marketing.

Among the disturbing structural changes taking place is the ever-expanding power of the multinational corporations; we should not deceive ourselves for a moment as to the relative indifference of these conglomerates to the welfare of the society in which they happen to be based. Under their hegemony, patriotism is transformed into an absurdity and

regional differentiation is a factor to be eliminated. What they value most is a universal, undifferentiated abacus upon which the ebb and flow of value-free exchange and profit can be facilitated and maintained. Such issues may appear to be remote from the immediate practice of architecture, but massive material and psycho-societal changes such as these have a wide impact.

How might the existing system of building production be improved in its capacity to qualitatively respond to different places? The answer to such a question immediately transcends most spheres of architectural practice to include issues more directly the province of economics and politics. For example, at the turn of the century in the U.S., several factors indicated that the public good would be served by anti-trust legislation. Trusts proved too large to administer effectively, they ignored inventions and improvements in order to avoid reorganization costs, and as a highly centralized system they wasted the initiative and talents of minor officers. What might be today's response to the increasing scale and power of multi-national corporations? What is the desired relation of such entities to nationstates? How do they affect the common good and notions of justice? These political questions will ultimately affect the environment more than architectural proposals. Still, critical architectural proposals promise to affect change by demonstrating in physical form precisely how some things might be better than they are.

We submit that the building industry in the United States is flawed in its capacity to produce quality environments and that this situation can be improved by a critical response to local geographies. We propose an architecture that resists the various leveling tendencies associated with modern building in favor of an architecture which is sensitive to particular locales.

We maintain that architecture should remain a generalist field and we are testing the capacity of a design methodology to synthesize the most disparate information.

Why the South. Population trends currently show increases in the southern states. These increases are most acute in the southwest, with large gains in Texas. But the Gulf Coast states are also growing rapidly with the percentage increase in Florida's population matching that of Texas. Many of the nation's elderly choose to relocate in Florida and there is a trend of reverse migration of African Americans born in the southern states returning there. New construction will continue to threaten and overwhelm the indigenous environments.

This threat has two roots. The first is the most unfortunate characteristic of early modernist architecture ideology, a belligerent attitude towards context. Modern architectural planning was often gratuitously ahistorical and it typically acted in contempt of traditional or existing building fabric. The second threat to existing

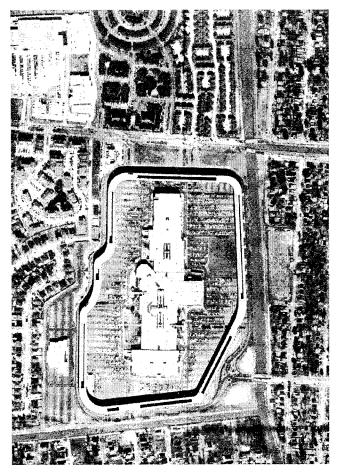


Fig. 1. Site plan.

physical settlements and habitats are the late capitalist economic and political pressures described by Kenneth Frampton in the preceding passages, concentrations of power and capital in the form of huge multi-national corporate entities.

Given current demographic trends, revived and often uncritical, modernistic leanings, and the power and scale of current development, the Gulf Coast region is a timely subject for study. The charge to develop new attitudes of building in relation to existing structures assumes an activist imperative if what is precious in the built and natural environment is not to be lost. We propose revision over the modernistic and post-modern call for revolution. Our projects attempt to demonstrate a model for building which will promote change while preserving what is delicate and desirable in existing neighborhoods, towns and cities.

We are not suggesting that individual designers should practice in tightly prescribed locales. Given the realities of today's national and international design practices, the question is how one might meaningfully respond to varied cultural particulars. Cultural Geography and Story Telling.

There is a certain embarrassment about being a storyteller in these times when stories are considered not quite as satisfying as statements and statements not quite as satisfying as statistics; but in the long run, a people is known, not by its statements or statistics, but by the stories it tells.

- Flannery O'Connor, "In the Protestant South"

We imagine our design projects as contributions to the evolving life of the cultural geographies of particular settlements. To the degree that settlements are understood historically, architecture may be understood as a component of narrative construction. The particular disposition of a settlement in time is a cross section of its history, or histories, a static diagram of the ongoing construction of its stories.

Given that the process of analysis begins, allows, and limits the process of design, what might be new ways to understand particular cultural geographies, the fullness of environments that humans construct and inhabit? Paul Ricoeur, in Time and Place, has argued for a middle ground between scientific understanding and interpretive understanding.

THREE HOUSING PROPOSALS

Experimental propositions to locate new sites for building. 'Wall Housing' in its three renditions, Perimeter, Mask, and Highway, looks to the expressway and/or to shopping malls, infrastructure and quasi-public space, respectively, as a site for architectural speculation. The choice of such generic, non-place specific contexts is a test of our thesis that architecture might respond deeply to particular locales.

These prototypes offer new territories as sites, the utilization of which will decrease suburban sprawl. These housing strategies would be accessible to automobile traffic and would also sponsor small scale pedestrian districts.

While not replicating the form of traditional urban spaces, these housing types used individually or in combination, would result in social overlaps common to denser urban environments. Similar ends, the invention of new spaces coupled with the resurrection of lost desirable social and environmental characteristics, are sought at all scales. The hope is that such short term palliative strategies would over time promote organic urban links. Acknowledgment of local precedent and spatial types, careful proportions, and indigenous planting in the landscape design, are common to all three proposals.

WALL HOUSING/PERIMETER TYPE

This housing aggregate is to be located at the surrounding perimeter of shopping center parking lots. It consists of two thin buildings which frame and follow a linear garden. The garden space is a habitable zone which extends the interior space of each dwelling while providing a privacy screen from neighbors across the way. The resultant double wall configuration is a dense and relatively efficient housing aggregation.

The contemporary suburban shopping mall is characterized by a large apron of parking which admits of no easy proximate building of the type which might allow pedestrian connections. Shopping mall parking lots in the U.S. are typically over sized. Most of the year they are underutilized, being filled to capacity only during the Christmas shopping season, if ever.

While this proposal to ring a shopping center parking lot with housing may, at first, seem unusual, it is little more than an unveiling of existing circumstance. Numerous apartment and housing developments are located in extreme proximity to shopping malls. Planners of these communities, do not typically exploit this adjacency, assuming it to be a marketing detriment.

There already exists a trend to ring the perimeter of these parking lots with other buildings. These are building usually tied to the automobile such as service stations, fast food restaurants, and strip shopping annexes or boutiques.

Driving Working Shopping Living. Several forces including the rapid proliferation of personal computers have resulted in growing interest in the possibilities of dispersed work places and home offices. The Perimeter prototype provides typical lease office space as well as housing which can accommodate home offices. The linear configuration of contiguous housing is broken at intervals by leasable office space. Gateways which permit transverse traffic may be located at these office locations. The resulting configuration offers a mix of housing, retail, and office space which offers organic

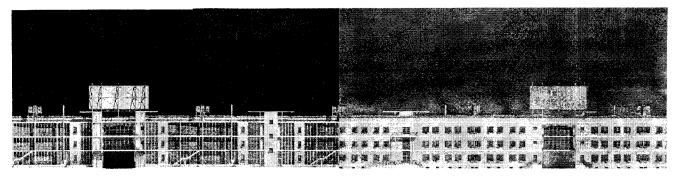


Fig. 2. Elevation to interior garden mews. Elevation to exterior and parking.

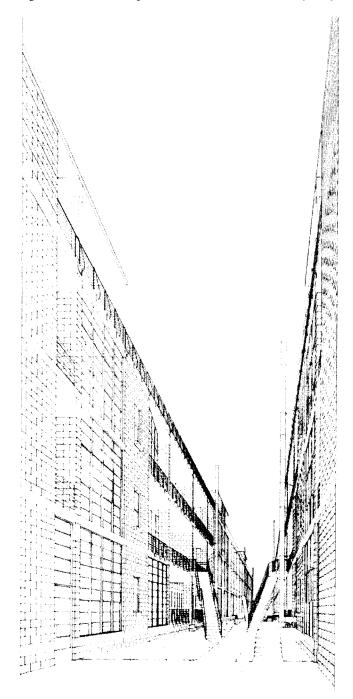


Fig. 3 Linear garden mews.



Fig. 4. Site plan.

connections with each other and with the larger environmental surrounds and communities.

WALL HOUSING/MASK TYPE

This is an aggregate strategy which consists of lining the massive blank exterior walls of a shopping mall with a 24' garden mews. Apartments lining this mews would then be open to this linear semiprivate garden

The gallerias of France and Europe as well as the linear bazaars of the Middle East developed as organic pedestrian links within larger networks of urban passages. The contemporary shopping mall operates internally as such a pedestrian network. It differs from the European model in that it is usually cut off from the city because of the scale of the parking lot, and because all of the programmed interior spaces turn exclusively to this internal system.

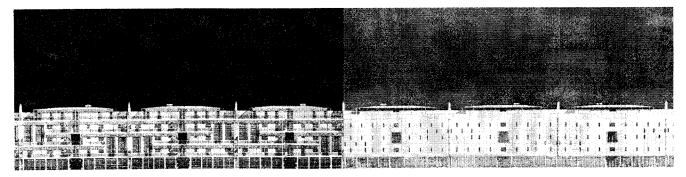


Fig. 5. Elevation to interior garden mews.

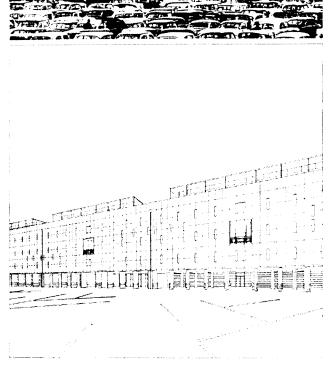


Fig. 6. View from parking.

This logic of shopping mall configuration results in a characteristic typical to much of today's large buildings, long mute facades. The wall housing prototype exploits the blank wall as an enclosure for a semi-private linear mews. The linear space of this green belt is repeated in an adjacent layer of thin contiguous dwelling units. The scale of the units is reflected in the new facade which is punctuated at intervals by large portals to the shopping mall. The facade which fronts the parking lot is composed of relatively small punch windows while the facade which faces the green "lungs" of the garden is composed of large expanses of glazing.

Construction. A poured in place platform on columns supports frame construction above. The front facade and the penthouse roofs are finished in copper while the garden facade is sheathed in galvanized steal.

Parking. Parking is accommodated at the base of the building. A steel ivy-covered trellis located at the rear wall both secures and screens the garden beyond.

Section. The principal dwellings are duplexes, one and one-half rooms deep. They are organized to accommodate a number of use scenarios. Spatial precedents for these unit configurations include the Narkomfin Apartments by Ginzburg and Milinis, the Unite

d'Habitation by Le Corbusier, and the vernacular dog trot house.

Home/Office. Each duplex apartment has three entries which allow various use scenarios. These include a major entry to a foyer leading to the main living spaces, an entry leading to a room which could serve as a home office, and a service entrance to the kitchen.

Housing for the Elderly. The penthouse units are designed in response to a growing elderly population. The dwellings are conceived and would be experienced as aerial iterations of detached houses. These flats are accessible by elevator. They are organized along a rooftop linear sidewalk which connects the private garden terraces of each dwelling.

Housing communities designed for the unique desires and needs of the elderly is a new development type which is currently being tested in the market. Such new communities for retirement age residents include recreation and health care facilities. Unfortunately as with the current phenomenon of "gated" suburban housing proposals, such communities for the elderly often result in isolated homogenized constituencies.

This proposal can accommodate the particular needs of the elderly without the social impoverishment of total segregation. The mall itself offers a social outlet and a place for walking and exercise. Health care facilities located in or near the mall could serve the elderly as well as the larger community.

WALL HOUSING/HIGHWAY TYPE

This consists of two thin walls of dwellings positioned under or near the open space surrounding a highway overpass. This strategy has the advantage of utilizing land not ordinarily considered buildable.

What happened to all that talk a few years ago about repairing the American "infrastructure"—getting people out to rebuild the roads and bridges that are falling apart? A lot of good ideas just seem to fade away.

- America, 1985, Andy Warhol

Description. Highway Housing consists of dwelling units sited in proximity to an overpass. The construction is of light steel frame and steel stud. The dwellings are sheathed in galvanized sheet metal with standing seams. The south elevation is protected by a bleached cypress bris soliel. Elevated entry terraces are made of poured in place concrete and are designed to support cypress trees. The dwellings are silver-gray monochrome. In the instance of the Gulfgate application the dwellings are supported by long span trusses with tension ring connections, fitted with heavy spring dampeners, at the existing concrete columns. In other applications the dwellings would be elevated and supported by pilotis.

The units are disposed to create front doors which face either a street or a common yard, and rear doors which face semi-public alleyways with parking. The common yard includes a swimming pool and a community house. The site plan includes drop off points

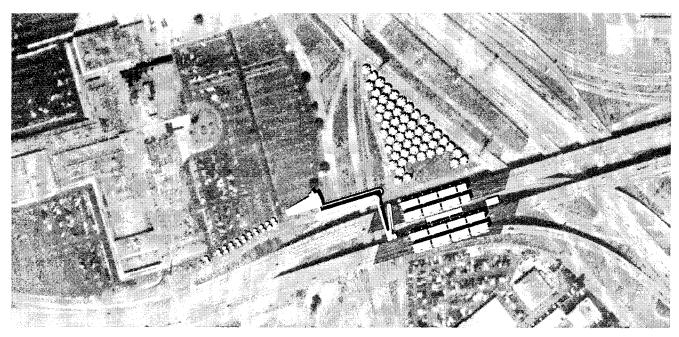


Fig. 7. Site plan.



Fig. 8. Southern elevation.

for recycling, a community garden and a grove of cypress trees, which in one hundred years time could be used to replace the large south facing bris soliel.

Flexible housing plans which can accommodate new social realities and a variety of occupational usages. The floor plans are configured in response to current changes in households and the evolving idea of what constitutes a family or family life. Each unit has two entries, a primary entry off of a street or a common lawn and a secondary entry off of a semi-public alley way. Each unit has two equal sized bedrooms on the top floor and a bathroom which can be compartmentalized and used by several persons at once. Located on the main floor, in addition to the living area and kitchen, is a studio-type area which can be used as a home-office, a bedroom, or a semi-autonomous dwelling for another family mem-



Fig. 9. View from below the 610 Loop.

ber or family group.

Towards a sustainable environment. The practical obstacles to a proposal such as this are numerous but solutions are possible. Noise near freeways is problematic but the most quiet areas around an elevated roadway is the area directly beneath it.

The air born toxins produced by automobile exhaust is probably the most serious obstacle. Housing types such as this one, which attempt to claim dormant land in areas already populated may have to wait until the inevitable mandate of less environmentally destructive vehicles, such as the electric car.

The harsh tropical climate of Houston results in massive air conditioning usage nearly all year round. If air conditioning could be produced by photo-voltaic panels, charcoal filters could result in a clean interior environment.