### DOSSIER

CHALLENGES FOR AN ARCHITECTURE TO COME Andrés Mignucci

### INTRODUCTION

Dealing with a topic such as "the architecture to come" compels one to reflect on the complex interrelationship between culture and society, and the role that architecture plays in it. Formal discourses that reduce architecture to a self-referenced discipline, dominated by the creation of object-buildings isolated from their context and users, are of little help for formulating a framework for the design of buildings in the 21st century. The media culture surrounding the star architect, in turn, may be attractive for a small percentage of architecture magazine aficionados, but it is of little consequence for the production of the built environment in most of the world.

The collapse of the global economy during the past decade and the subsequent increase in the poverty levels, along with the growing polarization of social classes and the compromised environmental health of the planet, present extraordinary challenges for new generations. Likewise, it is important to take into consideration that, by the year 2050, more than 75% of the world's population will live in cities. This is why, when looking toward the future, to re-think architecture requires to rethink our cities and the way we build in them. Central to the pairing architecture-city, it is necessary to consider both citizens, along with their collective dimension as citizenry and the way in which architecture and urbanism result in the quality of their built environment.

This article outlines five topics to consider as part of an agenda for an architecture to come. We describe them as follows: 1 The dimension of time in architecture; 2 Tradition and innovation: typology as temporal continuity; 3 To dwell in the ruins: building over what is built as a sustainability strategy; 4 The civic building as a narrative of place; and 5 Public space as democratic space.

Of course, other important topics should form part of a broad agenda on architecture and urbanism for the 21st-century: mobility and collective transport networks, the infrastructural capacity of our cities, appropriate density and land-use management, and the development and incorporation of sustainable technologies and strategies for responsibly managing energy and natural resources, among many. Together, these form a design-based set of topics in the face of the challenges presented by the current state of our cities and realms of action.

### 1. THE DIMENSION OF TIME IN ARCHITECTURE

Time has always been architects' enemy. Viewed as a threat to the artistic integrity of their architectural work, architects as creators view with contempt any outside modification or intervention. This could not be any further from the reality of how the everyday built environment works. Change and transformation are a natural part of the evolution of our society, in physical, social, economic, and cultural terms. Throughout the life of a building, changes in use, in the profile of its inhabitants, in the state of the economy, and in technological advances of the time, to mention only a few, serve as motors of change. With every act of building, we enact change.

It is worth asking whether the buildings we design are prepared to readily accept changes in use, in their form, in their layout, or, posed more directly, in the way we inhabit them? The axiom form follows function reaches its limit the moment the function changes. At that moment—what happens to form? In addition to the variety of uses, there is also a variety of users. In considering "the way we inhabit"—what involvement do users have in the design process of their environment? The imposition of an architecture fossilized at a given point in time has resulted in obsolete buildings, unable to be effectively adapted in the face of change.

One of the basic strategies for tackling the topic of time is to divide physical interventions into different spheres of control according to hierarchical levels of permanence. The two clearest spheres are that of the primary structure-the main support building or container-and that of the interior elements, of a more ephemeral and changing nature. Formalized in the theories of John Habraken at the beginning of the 1960s, the division into distinct spheres or levels of intervention has transformed the manner in which office buildings and shopping centers are built. In these, the structure is conceived as an autonomous support structure with its interior outfitted and finished by different entities at the service of particular tenants. Each segment of interior space is treated as an intervention parcel, independent from the adjacent neighbors on the floor. Despite the fact that this form of development, design, and construction is commonplace in office and commercial projects, in housing, the topics of change, transformation, and user involvement continue to be a challenge.

In housing, the use of different spheres of intervention has been limited to projects of an experimental nature, whether they are classics such as the Weissenhof 1, 2, 3, and 4 by Mies van der Rohe designed in 1927, Molenvliet by Frans van der Werf in Papendrecht, Holland (1974), or more recent designs such as Next 21 (1993) in Osaka, Japan. Some treat the support as an unfinished container to be transformed by a subsequent intervention by the user. These, such as Zero-Plus Housing (1945) by Henry Klumb in Puerto Rico, Diagoon Housing (1969-71)

by Herman Hertzberger en Delft, or Quinta Monroy (2003-05) by Alejandro Aravena in Iquique, Chile, bank on this strategy as a way of incorporating user participation as an active part of the design and construction process.

In all of them, the "function" of the building is substituted as a determining form-producing criterion by the concept of the "capacity" of the building to accommodate and sustain various forms of inhabitation. The idea of undetermined programming points to the end of labeling spaces with fixed and singular functions, to new ways of conceiving the planning of buildings, and even to the end of the traditional use-zoning in favor of more open, inclusive, and integrative codes and regulations.

# 2. TRADITION AND INNOVATION: TYPOLOGY AS TEMPORAL CONTINUITY

Let us consider for a moment the following architectural buildings: the House of the Faun in Pompeii (79 A.D.); the Palazzo Medici Riccardi (1445-60) in Florence; the Hôtel de Sully (1624-29) as an example of a Parisian hôtel particulier; the Casa del Libro (18th century) in Old San Juan; La Pedrera (1906-12) by Gaudí in Barcelona; the Casa Calderón (1955) by Toro y Ferrer in the Condado neighborhood of San Juan; the Azuma House (1976) by Tadao Ando in Osaka, and the Casa Guna (2012) by Pezo Von Ellrichshausen in San Pedro, Chile.

All these works, developed over the course of 1,000 years, are constructed around a patio as type. While recognizing that time's dimension in architecture entails incorporating change and transformation, it also requires considering those elements that endow it with continuity and transcendence.

Type, as shared schema, a set of properties in the organization of form common to a number of spaces or buildings, transcends distinctions of origin, authorship, style, place, and time. Broken down to their basic essence as an archetype, they have the capacity to be adapted to new technological and construction advances. At the same time, typological elements play a central role in defining the architectural culture of a place. We can mention the colonnades of Havana, the balconies of Old San Juan, the patios of Sevilla, the stoops of Amsterdam, or the bay windows of Boston as examples. We cannot think of these cities without the distinctive character that their typological elements bestow upon them in our recognition of their city image.

Type has been the subject of study since the classics by Quatremère de Quincy , M. Laugier , and J.N.L. Durand , the Italian school of Saverio Muratori in the mid-20th century to contemporary academics such as Rafael Moneo and Anthony Vidler . Considering the role that type and typology play in 21st-century architecture will be of great importance in defining the architecture to come within a fra-

mework of collective identity that transcends individual flairs of creativity in design. Particularly in the everyday architecture of the city, the idea of type will play a delicate balance between the continuity of tradition and innovation accelerated by technological changes, the development of new materials, and new forms of inhabiting space.

The El 22 project in Lima, Peru (2010) by JSa-Lima, recurs to two traditional typological elements, the patio and the screened gallery, the galería apersianada, as central elements of a housing project that combines traditional elements with a contemporary spatial organization. In section, the design intensifies the topographical characteristics of the site, creating a spatial narrative where the user's experience, views, and movement through the project play a key role. As part of this narrative, the larger landscape of Lima's Pacific coast, becomes a major subject. Its spatial sequence is enriched through the use of zones of transition, thresholds that mark the exchange between the public and the private, the inside and the outside, light and shade, as well as what is above and what is below. In it, the patio, as the spatial center of the house, and the screened gallery, as a filter of light and air, anchor the project in time and place while at the same time bridging tradition with innovation.

## 3. TO DWELL IN THE RUINS: BUILDING OVER WHAT IS BUILT AS A SUSTAINABILITY STRATEGY

Although a support structure - the primary container may be newly manufactured - ruins, abandoned or unused buildings may also be used as a starting point for an architectural intervention. The recycling and reuse of buildings has always formed part of the history of architecture and urbanism. This idea challenges the vision of tabula rasa as a process, considering the built environment as a multi-layered series of interventions over time. The notion of the architect as the sole creator of an architectural work is suppressed in the presence of the idea of multiple authors. Some anonymous, others recognized to a greater or lesser degree, the author, as suggested by Julia Kristeva, forms part of an intertext that transcends time and space. Today, the recycling of buildings and reshaping their purpose is central to a sustainable vision of the environment. Aside from issues of safety in structural terms, demolishing on a whim or building on rural land when urban land has yet to be efficiently occupied is an unsustainable stance in the face of demands from a society with compromised resources and land area. Moving beyond heritage conservation and historical restorations, giving new life to the urban fabric of the everyday environment is an unavoidable task of the new architecture.

A possible route to follow is that of architects such as Carlo Scarpa in the Olivetti showroom (1957) in Venice or Peter Zumthor in his museum Kolumba (2007) in Cologne fifty years later, where they treat architecture like a palimpsest that evidences the different layers of intervention over the years. Both projects highlighted in the dossier, the Casa en Alenquer by Aires Mateus and the Nave 16 at the Centro de Creación Contemporánea Matadero Madrid by Iñaqui Carnicero, display a more minimalist, restrained yet no less powerful approach. These projects tackle the issue of recycling ruins on different scales.

At the scale of the house, the Casa en Alenquer in Portugal by Aires Mateus consists of a contemporary intervention within a compound of old ruins. Anonymous and mundane, these ruins may symbolically portray the extraordinary amount of unused buildings awaiting a new purpose and design.

Instead of demolishing the ruins of the old stone house situated on a hill, the architects place a new nucleus of construction within the space set off by the walls of the old settlement. Although they physically form a whole, the design strategy systematically and visually distinguishes the stages of the building's construction. The walls of both systems, the new and the old, are stuccoed and painted white in the spirit of the vernacular architecture of southern Portugal. The ruins as a container, however, serve as the initial system that houses and gives meaning to the second, of a contemporary make and character. A dialogue exists between the two systems based on their juxtaposition: the old stone walls, of a stereotomic nature, express the direct flow of the structural forces to the ground. By contrast, the contemporary design, in reinforced concrete, expresses the structural power of that material through its large cantilevers. The old walls in the perimeter and the contemporary nucleus never touch, emphasizing their difference and the constructive and spatial tension between the new and the old.

Conversely, at a civic level, the transformation of the former slaughterhouse in Madrid into the Centro de Creación Contemporánea beginning in 2007, exemplifies the idea of ruins as a large-scale container re-purposed to hold new uses of a civic and cultural nature.

In his book Presentes y Futuros , Ignacio de Solá Morales identifies the presence of a particular type of urban fabric in our cities – the terrain vague as Solá Morales calls it, as large urban void possessing the potential for urban regeneration. The terrain vague, obsolete in their use, vacant, and often with abandoned or underused structures, are lots or structures devalued due to their condition yet situated in central, strategically located areas or enclaves within a city fabric.

The slaughterhouse in Madrid, as a large collection of abandoned industrial containers, represents a terrain vague that has undergone an intervention to repurpose it to the benefit of the cultural sector.

Matadero Madrid is a collection of 48 buildings and industrial vessels originally used as a slaughterhouse and livestock market. This collection of structures has been converted into a cultural space geared toward a wide range of artistic disciplines and temporary exhibits. The slaughterhouse is located on Paseo de la Chopera along the banks of the Manzanares River in the Arganzuela district of Madrid. Designed by Luis Bellido and constructed between 1911 and 1925, its architecture is of a Mudejar style, typical of Spanish industrial architecture at the beginning of the 20th century. It was built in what was then an unpopulated area of Madrid as a response to the demographic growth of the city and as a replacement for the old slaughterhouse at the Puerta de Toledo.

After seventy years of operation, it was closed in 1996 when its operations were transferred to Mercamadrid. In 1997, it was included in the listing of protected heritage buildings by the Municipality of Madrid, and ten years later, its reconversion was begun using its designation as the permanent seat of the Fundación ARCO, the National Dance Company, and the National Ballet of Spain as a catapult.

The new Centro de Creación Contemporánea Matadero Madrid now provides more than one hundred thousand square meters devoted to artistic creation. The various interventions, by different architects, keep the traces of the past intact by incorporating the exterior of Luis Bellido's original architecture as a unifying and containing structure. Inside, the architects have intervened with minimal prominence, thereby reinforcing the experimental character of the new institutions the space houses and the broad range of needs of the center's extensive program. Interventions like Matadero Madrid's Nave 16 clearly benefit from the a-temporal duet between Bellido's 1925 support structure and Iñaqui Carnicero's subtle yet powerful contemporary infill elements, crafting an architecture which is dynamic, pertinent and current.

### 4. CIVIC BUILDINGS AS A NARRATIVE OF PLACE

Shifts in world politics following the fall of the Berlin Wall in 1989, and more recently, the Arab Spring of 2011, when a wave of protests in Tunisia, Egypt, Libya, and Yemen culminated in the toppling of their governments, suggest the possibility of reexamining the role played by civic-government buildings, traditionally closed off and controlled, as part of a narrative of place and a newfound spirit of openness, diversity, and integration with cities and their citizens.

Few projects exemplify this opportunity as does the Constitutional Court building founded following the collapse of the apartheid system in South Africa in 1994.

The Constitutional Court building was designed by

way of an international competition held in 1997. The winners of the competition, South Africans Janina Masojada, Andrew Makin, and Paul Wygers were commissioned with the project.

The project is based on two fundamental principles—reflecting the sense of transparency, openness, and democratic diversity laid out in the Constitution and the use of construction materials, landscape, art, and craftwork typical of South Africa.

The project, situated on Constitution Hill, is flanked by another two hills-Hillbrow and Braamfontein-in the city of Johannesburg. The site devoted to the Court houses a group of prisons—among them Fort Prison, Section 4 and Section 5, the Women's Jail, and the Pre-trial Holding Cells. Imprisoned at Fort Prison were Mahatma Gandhi, on four occasions between 1906 and 1913, and Nelson Mandela from 1956 to 1961, as well as many victims of political persecution and racial discrimination under the apartheid system, including the children arrested as a result of the Soweto Uprising in 1976. The prisons on Constitution Hill were, therefore, deeply etched in the collective memory of the general population as places representative of the apartheid system in the city of Johannesburg.

Today, the Constitutional Court houses the Human Rights Commission and the Commission for Gender Equality, a number of museums and cultural facilities, offices, stores, and restaurants. The design of the project has substituted the closed-off and isolated massiveness of the original group of buildings with an intricate fine-grained fabric, deliberately fragmented and interconnected with its urban context through public spaces, covered connectors, and pedestrian landscapes. Incorporating an ample public art plan, the building opens itself up to the general public with a diverse hybrid program that defies the traditional conceptualizations of government buildings.

The new compound of the Constitutional Court is integrated into the city without denying the weight of the history it houses, neither past nor present. Entirely to the contrary—the site's design constructs a narrative of place by intertwining memories of tragedy and discrimination with hope, projecting a shift in social, civic, and political paradigm onward into the future.

### 5. PUBLIC SPACE AS DEMOCRATIC SPACE

In the intervention strategy for the Constitutional Court of South Africa, public space, its continuity, and openness played a central role. Within our own context in Puerto Rico, recent events have challenged the idea regarding how public public space actually is. If public space is the place of convergence for the citizenry, it must be democratic space par excellence—that of daily social interaction and exchange both in celebrations as well as in protests.

Extending it to the streets, sidewalks, parks, plazas, and gardens, public space cannot yield to the privatizing impulse and neoliberal concepts of administration of the public by the private sector. Much less can the public sector give up its responsibility to manage public assets.

Nevertheless, public space cannot revitalize a city on its own. Interconnection, diverse planning, and joint action on projects is required, whether they be cultural in nature such as the Matadero in Madrid or civic, as is the case with the Constitutional Court in Johannesburg. The conjunction of public space with mobility systems is paramount to creating a vital and accessible city. The great challenge lies in how to insert public space infrastructure into cities capable of linking isolated interventions as part of a broad-scale urban fields and networks.

The five points discussed here represent a list of topics of action for architecture in the 21st century. They suggests that the great challenge still lies in the construction of the everyday environment where architecture and public space serve as settings for an urban culture. They also suggest that buildings and spaces are part and product of cultural processes that overlap through time. The construction of the everyday brings people to the forefront as the subject and purpose of architecture, both in their individual term as citizens, as well as in their collective term as citizenry. The city does not exist without the experience and presence of its people. In the words of Catalonian Jordi Borja, "the city is simultaneously personal living and collective action." For Boria, the city is a metaphor of democracy, in which the public space, as the seat of the everyday, plays a central role. It is through our experience of being residents of the city that we construct our collective memory. Time, change, transformation, the role of type and the narrative of place as experience all contribute toward building our sense of place.

Above all, the city as a metaphor of democracy invites us to reflect on the possibility of a future in which public spaces are seen as places of inclusion and diversity, where the city is made and citizenship is forged; places for varied, rich, intense interaction where meaning and quality are given to daily life.

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# REUSING THE CITY, OCCUPYING URBAN SKELETONS. Santiago Cirugeda

Numerous buildings, both public and private, remain empty and unused in Spain, especially in our inner cities. The uses that gave them meaning, now obsolete, or urban processes of very different problems brought about the causes of