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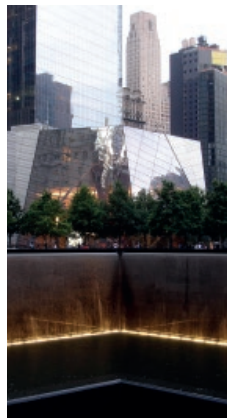
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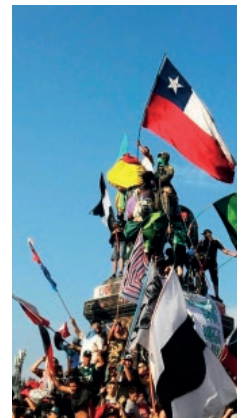
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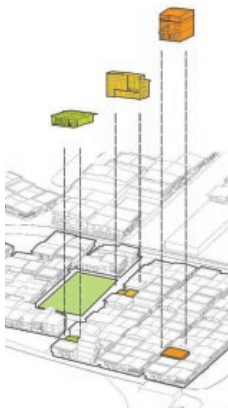


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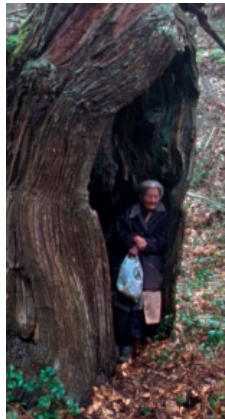
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NUEVOS PARADIGMAS ¿NUEVA ARQUITECTURA?

Paradigma es el término que identifica a una teoría o el conjunto de ellas cuyo centro o eje, es aceptado sin cuestión, y en consecuencia ofrece la base y el modelo para zanjar problemas y progresar en el conocimiento.

Hasta ahora, el origen de los paradigmas, esa génesis aparentemente perfecta, redonda y simple, parecía inevitablemente asida a unas determinantes históricamente justificadas que siempre pertenecían a tiempos pasados. De ese modo, la distancia temporal para su examen no ofrecía cuestionamientos sobre su nacimiento y sus causas; dicho de otra manera, el paradigma ya existía, nosotros llegamos después a examinarlo.

2020 se mostró como un año cero. Es cuando los corredores están en la línea de salida expectantes ante el disparo que haga oportuna la partida. La pandemia del covid 19 en el ámbito mundial, y el estallido social de 2019 en Chile, son hechos que dibujan un espacio-tiempo que se asimilan a un devenir eterno. En nuestro caso, incluso, todo indica que la evolución de uno depende del progreso del otro. La espera quieta, se hace insoportable; la esperanza segura, inalcanzable. Ambos hechos están a la espera de comenzar una carrera incierta que promete cambios, giros y vuelcos de los que sólo esperamos beneficios.

En el horizonte, una mirada reposada indica que, como contraparte de una cultura oficial, irrumpe una cultura híbrida y mestiza. Las palabras de Venturi, dichas hacen ya casi 60 años, cobran renovada vigencia.

Defiendo la riqueza de significados en vez de la claridad de significados; la función implícita a la vez que la explícita. Prefiero 'esto y lo otro' a 'o eso o lo otro', el blanco y el negro, y algunas veces el gris, al negro o al blanco. Una arquitectura válida evoca muchos niveles de significados y se centra en muchos puntos: su espacio y sus elementos se leen y funcionan de varias maneras a la vez. (Venturi, 1962).¹

En lo más simple –que no lo es–, el espacio doméstico, acaso hoy el lugar de uso más inmediato, ha aumentado su polifuncionalidad y, consecuentemente, su percepción. La realidad advertida parece una vista fragmentada que se atisba más allá de la ventana, que, por lo mismo, muestra menos que lo que oculta. El encierro, imprescindible para la sobrevivencia, parece demandar nuevos significados del verbo habitar y una revisión del sustantivo habitación. Hasta hace poco, el espacio público había demandado toda la atención para corregir unos modos segregados, empobrecidos, periféricos. Hoy el espacio interior exige esmero, cuidado y diligencia. Si el primero expone, el segundo protege.

Una mirada disciplinar implica que nuevos cruces, mixturas, combinaciones, obliguen a nuevas lecturas. Es así como, por una parte, los espacios aislados ahora están atentos a mejores soluciones; y por otra, los espacios naturales abiertos, parques y campos, son ensoñados como un ambiente sano e inmune.

Arquitecturas del Sur se abre a indagar, y acaso descubrir esos nuevos mundos, que van acompañados por fenómenos socioculturales como la incorporación equivalente de la mujer, hasta el respeto por la diversidad; desde los nuevos modos de trabajo –cada vez más colectivos y participativos–, hasta el respeto por el patrimonio y la biodiversidad. La sustentabilidad, la equidad social, el progreso tecnológico, le democratización de los géneros, son fenómenos que emergen a la espera de ser acogidos por nuevas formas. Proponemos detectar aquellos nuevos paradigmas y examinar su traducción a nuevos lenguajes; escudriñar el futuro para atisbar nuevos derroteros. En este marco, la arquitectura está frente a nuevas preguntas, relatos y reinterpretaciones, y por ello cabe preguntar: ¿tendrá nuevas respuestas?, ¿cuáles son aquellos nuevos paradigmas y cuáles aquellas obras que los interpretan y traducen?

1 VENTURI, Robert, *Complexity and Contradiction in Architecture*, Gustavo Gili, Barcelona, 1972, (1962).

NEW PARADIGMS, NEW ARCHITECTURE?

Paradigm is the term that identifies a theory or set of theories whose core or axis are unquestionably accepted, and consequently offers the basis and model for solving problems and progressing in knowledge.

Until now, the origin of paradigms, that apparently perfect, rounded, and simple genesis, seemed inevitably tied to historically justified determining factors that always belonged to past times. Thus, the temporal distance for their examination did not offer questions about their emergence and causes; in other words, the paradigm already existed, we arrived later to examine it.

2020 showed itself to be a year zero. It is when the runners are at the starting line, waiting for the gun to set off. The covid-19 pandemic on a global scale, and the 2019 social uprising in Chile, are events that draw a space-time that can be assimilated to an eternal becoming. Even in our case, everything indicates that the evolution of one depends on the progress of the other. Calmly waiting becomes unbearable, certain hope, unattainable. Both facts are waiting to begin an uncertain race that promises changes, twists and turns from which we only hope for benefits.

On the horizon, a calm look indicates that, as a counterpart to an official culture, a hybrid and mestizo culture is bursting forth. Venturi's words, spoken almost 60 years ago, have renewed relevance.

I advocate richness of meaning, rather than clarity of meaning; implicit rather than explicit role. I prefer 'this and that' to 'that or the other', black and white, and sometimes grey, to black or white. A valid architecture evokes many levels of meaning and focuses on many points: their space and elements are read and work in several ways at the same time. (Venturi, 1962).¹

At the simplest level, the domestic case, although there is nothing simple about it, perhaps today the place of most immediate use, has increased its polyfunctionality and, therefore, its perception. The reality seems like a fragmented view that is visualized beyond the window, which, by the same token, shows less than it hides. Lockdown, essential for survival, seems to demand new meanings of the verb "to inhabit" and a revision of the noun "room". Until recently, public space had demanded all the attention to correct some segregated, impoverished, peripheral modes. Today, indoor space demands care, attention and diligence. If the former exposes, the latter protects.

A disciplinary view implies that new crossings, mixtures, combinations, force new readings. This is how, on one hand, isolated spaces are now attentive to better solutions; and on the other, natural open spaces, parks and fields, are yearned for as a healthy and immune environment.

Arquitecturas del Sur is open to investigate and perhaps discover these new worlds, which are accompanied by socio-cultural phenomena such as the equivalent incorporation of women, to the respect for diversity; from new ways of working -increasingly collective and participative- to the respect for heritage and biodiversity. Sustainability, social equity, technological progress, gender democratization, are phenomena that are emerging and waiting to be embraced in new ways. We propose detecting these new paradigms and examining their translation into new languages; to scrutinise the future in order to glimpse new directions. In this framework, architecture faces new questions, narratives and reinterpretations, and therefore it is worth asking: will it have new answers, what are those new paradigms, and what are the works that interpret and translate them?

NOVOS PARADIGMAS, NOVA ARQUITETURA?

Paradigma é o termo que identifica uma teoria ou conjunto de teorias cujo centro ou eixo é aceito sem questionar e que, conseqüentemente, oferece a base e o modelo para resolver problemas e progredir no conhecimento.

Até agora, a origem dos paradigmas, uma gênese aparentemente perfeita, redonda e simples, parecia inevitavelmente ligada a determinantes historicamente justificados que sempre pertenceram a tempos passados. Assim, a distância temporal para o seu exame não implicava questionamentos sobre seu nascimento e suas causas; em outras palavras, o paradigma já existia e chegamos, posteriormente, para examiná-lo.

2020 revelou-se como um ano zero. É quando os corredores estão na linha de partida à espera do tiro que fará com que a partida seja oportuna. A pandemia de covid-19 no mundo e a explosão social de 2019 no Chile são fatos que desenham um espaço-tempo que se assimila a um devir eterno. Em nosso caso, aliás, tudo indica que a evolução de um depende do progresso do outro. A espera tranquila torna-se insuportável; a esperança e a certeza, inalcançáveis. Ambos os fatos aguardam o início de uma corrida incerta que promete mudanças e reviravoltas das quais apenas esperamos benefícios.

No horizonte, um olhar calmo indica que, como contrapartida a uma cultura oficial, irrompe uma cultura híbrida e miscigenada. As palavras de Venturi, proferidas há quase 60 anos, têm sua relevância renovada.

Defendo a riqueza de significados em vez da clareza de significados; a função implícita em paralelo à explícita. Prefiro "isto e aquilo" a "ou isto ou aquilo", o preto e o branco, e por vezes o cinza, ao preto ou branco. Uma arquitetura válida evoca muitos níveis de significado e concentra-se em muitos pontos: seu espaço e seus elementos são lidos e funcionam de várias maneiras ao mesmo tempo. (Venturi, 1962).¹

Na sua forma mais simples –que não o é–, o espaço doméstico, talvez hoje o local de utilização mais imediata, aumentou sua polifuncionalidade e, conseqüentemente, sua percepção. A realidade vista parece uma visão fragmentada que se entevê para além da janela e que, pela mesma razão, mostra menos do que oculta. O confinamento, imprescindível para a sobrevivência, parece exigir novos significados do verbo "habitar" e uma revisão do substantivo "habitação". Até há pouco, o espaço público exigia toda a atenção para corrigir os modos segregados, empobrecidos e periféricos. Atualmente, o espaço interior exige esmero, cuidado e diligência. Se o primeiro expõe, o segundo protege.

Um olhar disciplinar implica que novos cruzamentos, misturas e combinações forcem novas leituras. É assim que, por um lado, os espaços isolados estão agora atentos a melhores soluções; e, por outro, os espaços abertos naturais, parques e campos, são sonhados como um ambiente saudável e imune.

Arquitecturas del Sur abre-se para investigar e talvez descobrir esses novos mundos, que são acompanhados por fenômenos socioculturais que vão da incorporação equivalente das mulheres até o respeito pela diversidade; das novas formas de trabalho –cada vez mais coletivas e participativas– até o respeito pelo patrimônio e pela biodiversidade. Sustentabilidade, equidade social, progresso tecnológico, democratização dos gêneros, são fenômenos que emergem à espera de serem abraçados por novas formas. Propomos detectar estes novos paradigmas e examinar sua tradução a novas linguagens; ponderar o futuro de modo a vislumbrar novas rotas. Neste sentido, a arquitetura enfrenta novas questões, narrativas e reinterpretações, pelo que vale a pena perguntar: terá novas respostas, quais são esses novos paradigmas e quais são as obras que os interpretam e traduzem?

HISTORICAL REVISIONISM ON ARCHITECTURE AT THE INTERSTICE OF THE 20TH AND 21ST CENTURIES: VINDICATION, RESCUE OR DENIAL OF MEMORY

Revisionismo histórico en arquitectura en el intersticio de los siglos XX y XXI:
Reivindicar, rescatar o negar una memoria

Revisionismo histórico na arquitetura no interstício dos séculos XX e XXI: reivindicar, resgatar ou negar uma memória



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Negative image -
Memory, Peace and
Reconciliation
Centre - Bogotá.
Architect Juan
Pablo Ortiz.
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William García R.

ABSTRACT

Historical revisionism, a phenomenon typical of social and political sciences, has been consolidated at the start of the 21st century as one of the paradigmatic strategies in architecture, with the purpose of rewriting -or erasing- historical memories of the city. In this context, the objective of the research presented here was to investigate the relationship between different convergent social and political situations on the issue of memory and the demolition/construction of architectures, as a strategy to question events from the past and the official narratives. As this is a historiographic research, the methodology used a cross analysis between the discourses on which several socio-political issues around memory, that occurred in different countries, have been based, and the architectural projects built or demolished because of these issues. The conclusions, insofar as a research contribution, allowed detecting three lines of historical revisionism in architecture, starting from its use -and abuse- regarding the historiography of the facts: vindication, rescue, and denial of memory.

Keywords: Historical revisionism, architecture critique, demolition, history of architecture, memory

RESUMEN

El revisionismo histórico, fenómeno propio de las ciencias sociales y políticas, se ha venido consolidando a comienzos del siglo XXI como una de las estrategias paradigmáticas en arquitectura, con el propósito de rescribir (o borrar) memorias históricas de la ciudad. En ese contexto, el objetivo de la investigación aquí expuesta fue indagar sobre la relación entre distintas coyunturas sociales y políticas convergentes en el tema de la memoria y la demolición / construcción de arquitecturas, como estrategia para interrogar hechos del pasado y cuestionar las narrativas oficiales. Tratándose de una investigación historiográfica, la metodología se sustentó en un análisis cruzado entre los discursos con los que se han argumentado distintas problemáticas sociopolíticas en torno a la memoria, acontecidas en diferentes países, y los proyectos arquitectónicos construidos o demolidos a propósito de tales problemáticas. Las conclusiones, en tanto aporte de la investigación, permitieron detectar tres vertientes del revisionismo histórico en arquitectura, a partir de su uso (y abuso) en relación con la historiografía de los hechos: reivindicación, rescate y negación de la memoria.

Palabras Clave: Revisionismo histórico, crítica de la arquitectura, demolición, historia de la arquitectura, memoria

RESUMO

O revisionismo histórico, fenômeno típico das ciências sociais e políticas, vem se consolidando no início do século XXI como uma das estratégias paradigmáticas da arquitetura, com o propósito de reescrever (ou apagar) memórias históricas da cidade. Nesse contexto, o objetivo da pesquisa aqui apresentada foi investigar a relação entre diferentes conjunturas sociais e políticas convergentes sobre o tema da memória e a demolição / construção de arquiteturas como estratégia para interrogar acontecimentos do passado e questionar narrativas oficiais. Por se tratar de uma pesquisa historiográfica, a metodologia baseou-se no cruzamento dos discursos com os quais têm sido discutidos diversos problemas sociopolíticos em torno da memória, ocorridos em vários países, com os projetos arquitetônicos construídos ou demolidos como consequência desses debates. As conclusões, como contribuição da pesquisa, permitiram detectar três tendências do revisionismo histórico na arquitetura, a partir de seu uso (e abuso) no que tange à historiografia dos fatos: reivindicação, resgate e negação da memória.

Palavras-Chave: Revisionismo histórico, crítica da arquitetura, demolição, história da arquitetura, memória

INTRODUCTION

In open defiance of the confinement paradigm, which international society was suddenly subject to in 2020, a large part of society decided to risk their own health, to head out onto the streets to protest about events which had unveiled injustice. From the protests against racism, led by the *Black Lives Matter* movement in the United States, to the repudiation of slavery in Europe, one of the most visible strategies is related to revisionist actions, where statues and monuments in public spaces, have been brought down as a kind of social and political trial of figures from the past. It would seem that confinement, lockdown, the impossibility of looking outside, has led people to introspection, to question themselves, examine themselves, to see in the city spaces, what has always been there, and examine it in greater depth. The city has become not just a territory of arguments and protest, but a field of dispute of existing narratives that, through art and architecture, tell a story, a truth. Parks and buildings which, as pages of a book, have begun to be re-read and questioned.

Latin America has not been an exception. On September 16th, 2020, after summary proceedings, people with Misak origins decided to bring down the statue of the Spanish conquistador, Sebastián de Belalcázar, in the city of Popayan, Colombia. The action divided opinion, both in favor and against, as while some acknowledged it as an act of justice, others bemoaned the damage of a piece of art that for decades had formed part of the city's public space, opening the question about how to value these works. In this regard, it is worth considering the case of the *Valley of the Fallen*, a work led by and built during the dictatorship of Francisco Franco. There, the law determined "... the removal of personal or collective shields, insignia, plaques and other objects or commemorative mentions praising the military uprising, the Civil War and the repression of the Dictatorship...", with the exception of the removal and concealment of these works, in two specific cases: "when the mentions are of a strictly private memory, not praising those in conflict, or when artistic, architectonic or artistic-religious reasons protected by law, are involved" (Government of Spain, 2017, Art. 15).

Thus, the historic revisionism considered in this law weighs ideological matters over artistic and architectonic aspects, and solomonically rules to value the objects and buildings using their physical qualities, not just through their ideological connotation or meaning.

In principle, it can be asserted that all historiographic exercise implies an act of revisionism, as every historical topic is subject to being reconsidered in light of the interests of every historian to build a given narrative. Yet, John Morrill contextualizes this phenomenon more accurately in the field of history:

Revisionism was a revolt against materialist or determinist histories and historiographies, and most periods and schools of history have had their revisionist moment. In many cases, it was straightforwardly a revolt against Marxist historiographies (as in the case of France); or against nationalist historiographies (as in Ireland); or against Whig histories, with their strong teleologies and grand narratives of progress ... (Morrill, 2015, p.577).

In this way, revisionism arises as a healthy distrust against the possibility of a totalitarian historiography which, in its absolutist thirst, could omit events that go against the uniformity a determinist historiography asserts. In these terms, the essential logic behind revisionism, lies in a permanent state of suspicion, and not necessarily as a critique of a specific vision of history.

In architecture, the revisionist attitude is played out indistinctively of whether this is a hegemonic discourse or not, as its attitude is not so much critical as it is comprehensive of the values that today have consensus in a society;

values that promote, through architecture, the vindication and rescue of memory, although also in some cases an eagerness to negate said memory.

Therefore, the field of action of Revisionism is situated, in the field of memory, as it is in past events where it is possible to recover and validate a series of historiographic narratives as a manifestation of invisible, perhaps forgotten, and for this reason ignored, social, cultural and political positions. Nevertheless, memory is also a flexible mechanism that allows permanent querying and questioning: "Memory insofar as *Ars* (art) is seen as a repertory of knowledge where information can be stored and, likewise as a capacity to evoke it once more" (Erl, 2012, p. 41). In this way, historic memory is both the source of answers and the reason behind questions that debate these. This is why "The road to memory is a slippery slope, especially in countries where history has been suppressed or buried for more than a generation" (Von Henneberg, 2004, p. 41)¹. But memory does not just lie in archives and libraries, but rather in people, it is because of this that memory insofar as *Agere* (doing), derives from the act of bringing about, of "effecting", in the "capacity of the subject to generate critical non-hegemonic spaces of enunciation of the 'I', and from the collective, that challenge standard and/or hegemonic visions of history" (Museo Reina Sofia – Subplots).

In this way, the area of memory constitutes a cyclical field, a sort of *ouroboros* where memory and omission are intertwined in constant dispute, where memory wins sometimes, and omission in others. In architecture, this *ouroboros* is located in the successive construction and demolition of buildings as a natural condition of the growth of cities, disregarding that architecture also contributes to writing, but also to erasing the memory of cities. In this regard, Montaner and Muxi state that:

...starting from the 1990s, this concept -of memory- has been deconstructed in two opposite directions. On one hand, by the productive system, the mechanisms to erase and substitute memory have been reinforced and, on the other, social movements have been vindicating the diversity of memories in every city, defending their visibility, and unveiling how they coexist and how some are imposed over others (Montaner & Muxi, 2011, p. 70)².

It is actually this last aspect, how some memories are imposed over others in architecture, that is one of the guiding questions for this research, as almost unanimously, the precept has been accepted where the cities and their architecture are a *palimpsest*, an overlapping of built events that are successively mixed and mingled with one another, without considering what the implications would be for history and, therefore, for the future of a city, implying that the light goes out on some memories, to shine upon other new ones.

Because of this, the cities understood as *palimpsests* offer an unusual field for architectonic intervention from its *pentimento*, that is to say, from generally regretful events, of a social, political or cultural nature, that have been obscured. Historical revisionism of these *pentimento*, of these hidden errors has, on occasion, led to judging them as failed acts, which is why it is in these failures where an opportunity for intervention emerges, that corrects and repairs them by means of an architectonic intervention. Said failings do just allude to mistakes of a material nature –destruction of urban or architectonic heritage–, but also to their acceptance as rulings -sentences and judgments where violence, injustice or silencing is detected-. This is why, starting from these material and social mistakes, is where the actions of architecture trigger the vindication and/or rescue of these losses.

The case of the raising -and fall- of the Berlin Wall is just one of the examples in which this condition of activating and deactivating a memory is seen.

1 Free translation.

2 Idem.

An exercise of power that implied raising a wall that divided an entire city, creating an artificial border; to later be brought down, in a counter-exercise of power, as a resignification of a physical act that signified a series of openly anti-democratic values. Nevertheless, it is significantly notorious that, years later, in 1998, the "Berlin Wall Association" was founded, through a Senate project, promoting not just a documentation center, but the *Gedenkstätte Berliner Mauer* (Berlin Wall Memorial), with the purpose of recovering the spatial experience the former wall once had. As can be seen, building, demolishing and rebuilding the Berlin Wall has shaped a specific cycle which shows that, in historical revisionism, architecture not only has "remorse" but also "reverse".

The use of the term "revisionism", within the field of architecture, is nothing new, although its use is related to the context of architecture history. This is the case of the text titled "The revisionist and organic architecture in the United States", where González (Capital, 1997), celebrates architects like Paul Rudolph or Eero Saarinen, on daring, through their work, to break down the hegemony of the modern movement, opening alternative lines to the main narrative. Here, revisionism is understood as a rebellious or anarchical attitude against the paradigm of the modern movement, but also as the overcoming of an orthodoxy.

In summary, the start of the 21st century, has been characterized by opening up the discussion in architecture on revisionism, a phenomenon that has, for some time now, been happening in an apparently isolated and local way, but that, as a whole, reveals a broader and more generalized trend. One that contextualizes the main hypothesis of this research: the emergence of historic revisionism in architecture, as a strategy that affirms a future vision of cities, not in a positivist sense, but rather through a revision of their past, based on vindication, rescue or denial, of a specific memory.

METHODOLOGY

On this being a historiographic research, the methodology used is of a descriptive analytical nature, focusing on the goal of corroborating the aforementioned hypothesis, by developing 5 phases that seek to explain how historic revisionism has been manifested in and through architecture.

- PHASE 1: Outlining the topic. Given that the issue of historic revisionism is contextualized in a historic juncture shared by several international nations, the boom of memory, started with the identification of the reasons behind this international juncture, as criteria that allow screening the sampling of the architectural works being analyzed, reasons that according to Aguilar-Forero (2018) can be summarized into: the demand for truth; the search for roots; and the quest for identity.
- PHASE 2: Collection and systematization of information referring to historic high impact junctures in society, in the context of the criteria laid out by Aguilar-Forero (2018), that took place from the 20th century to today.
- PHASE 3: Collection and systematization of information referring to architectonic and urban projects, where a re-reading of historic events and memory in the cities is seen.
- PHASE 4: Analysis of the projects -collected in phase 3- in the historic context the architectonic projects emerge within.
- PHASE 5: Preparation of conclusions from the lines of historic revisionism detected in architecture, regarding the historic junctures in which they have been contextualized, bearing in mind the hypothesis laid out in the research.

Figure 1

9/11 Memorial – New York, USA.
Source: Photograph by the author.



RESULTS

HISTORIC REVISIONISM AS VINDICATION OF MEMORY THROUGH ARCHITECTURE

This line falls within what has been called the “boom of memory”, a proclivity towards the past [Figure 1]:

... that bursting out everywhere in the boom of the historic novel and the biographical tales, the retro fashion in architecture and clothing, the enthusiasm for commemorations, the boom of antique shops, the growth and expansion of museums in the past three decades, the aesthetic restoration of old urban centers, the video as a device of memorialization and, even the converting of the world's past into a databank (Martín Barbero, 2010, p. 17).³

In a narrower context, this is a historic revisionism that aims at vindicating the social, political and/or cultural rights that citizens have been deprived of, by state agencies and/or organizations, almost illegally, according to what is put forward by Aguilar-Forero (2018).

Given that “omission takes place, or has ‘a’ place, but one where nobody actually seems to be sure, except for the empty trail it leaves behind” (Klein, 2010, p. 209), it is necessary for this vindication of rights, to provide a physical place to house omission: The Museum of Memory. Place where society goes to remember, to look at itself through the mirror of its past.

The commemoration of these *puncta dolentia* in different parts of the world has contributed towards consolidating one of the typologies that most characterizes the panorama of contemporary architecture: Museums of Memory. This is an architecture that is generally State backed, arising from events of war, conflicts or holocausts. In countries like Colombia, this backing has been the result of two key events in its recent history: The celebration of the Bicentenary of its Independence (2019), and the signing of the Havana Accords (2016). In both the former and the latter, architecture is officially called upon, as a strategy of reparation and commemoration in the acknowledgement of a past, as through the architecture of the museum, the “musealizing” of memory, that is to say, “a particular way of building and legitimizing the collective memory” (Jaramillo & Del Cairo, 2013, p. 76), is sought.

In this way, the architecture of the museum is reconfigured beyond its traditional role as a temple for the arts, to take on the challenge of becoming

3 Free translation.

Table 1

Historic revisionism as vindication of a memory in architecture.
Source: Preparation by the author.

HISTORIC REVISIONISM AS A VINDICATION OF A MEMORY THROUGH ARCHITECTURE				
Year	Project	Architecture narrative relationship	Architect	City - country
2017	National Holocaust Monument	Public Space – Univocal Narrative	Daniel Libeskind	Ottawa – Canada
2016	House of Memory and Community Space	Museum Space – Plural Narrative	Taller Síntesis	Turbo – Colombia
2014	Canadian Museum for Human Rights	Museum Space – Plural Narrative	Antoine Predock	Winnipeg - Canada
2014	National September 11th Memorial – Memorial Plaza	Public Space – Univocal Narrative	Michael Arad & Peter Walker (Memorial Plaza)	New York, USA
2014	National September 11th Memorial Museum – Pavilion	Museum Space – Plural Narrative	Davis Brody Bond (Museum) / Snohetta (Pavilion)	New York, USA
2014	Place of Memory, Tolerance and Social Inclusion (LUM)	Museum Space – Plural Narrative	Sandra Barclay & Jean Pierre Crousse	Lima-Peru
2012	Casa del pueblo. El Salado	Museum Space – Plural Narrative	Simón Hosie	El Salado – Colombia
2011	Memory House Museum	Museum Space – Plural Narrative	Juan David Botero	Medellín - Colombia
2011	Bundeswehr Military History Museum	Museum Space – Plural Narrative	Daniel Libeskind	Dresden – Germany
2010	Memory and Tolerance Museum	Museum Space – Plural Narrative	Arditti + RDT	Mexico City – Mexico
2009	Andalusia's Museum of Memory	Museum Space – Plural Narrative	Alberto Campo Baeza	Granada – Spain
2009	Museum of Memory and Human Rights	Museum Space – Plural Narrative	Mario Figueroa, Lucas Fehr & Carlos Diaz	Santiago de Chile - Chile
2007	Jewish Museum Munich	Museum Space – Plural Narrative	Wandel Hoefler Lorch & Hirsh	Munich – Germany
2005	Hinzert Memorial Monument	Museum Space – Plural Narrative	Wandel Lorch Architects	The Netherlands
2005	Holocaust Monument	Public Space – Univocal Narrative	Peter Eisenman	Berlin – German
2003	The Mauthausen Memorial	Museum Space – Plural Narrative	Werkhof Architekten	Mauthausen – Austria
2003	The Museum of Jewish Heritage	Museum Space – Plural Narrative	KRJDA - Architects	New York – USA
2003	The Danish Jewish Museum	Museum Space – Plural Narrative	Daniel Libeskind	Copenhagen – Denmark
2002	Imperial War Museum North	Museum Space – Plural Narrative	Daniel Libeskind	Manchester – England
2001	Apartheid Museum	Public Space – Univocal Narrative	Mashabane Rose Associates	Johannesburg – South Africa
1999	Jewish Museum Berlin	Museum Space – Plural Narrative	Daniel Libeskind	Berlin-Germany
1998	Remembrance Park	Public Space – Univocal Narrative	Varas, Lestard, Baudizzone & Ferrari	Buenos Aires-Argentina
1981	Vietnam Veterans' Memorial	Public Space – Univocal Narrative	Maya Lin	Washington D.C – USA
1960	Monument to the Dead of World War II	Public Space – Univocal Narrative	Marcos Konder Netto	Río de Janeiro-Brazil
1955	Hiroshima Peace Memorial Park – Commemorative Sculptures	Public Space – Univocal Narrative	Kenzo Tange	Hiroshima-Japan
1955	Hiroshima Peace Memorial Park, Museum Building	Museum Space – Plural Narrative	Kenzo Tange	Hiroshima-Japan

a "formal stage of new collective narratives" (Fernández-Galiano, 2009, p. 3). An architecture that has the challenge, not just of presenting facts, but of recreating the experience of these facts, to produce an effect of memory and recognition and, in the long term, an effect of forgiveness and healing. In this sense, this is architecture, whose projected strategy aims at materializing memory, through the experiential design of paths and spaces of reflection, to tell and teach its visitors a different history. It is from this position, that the sense of museums of memory is pedagogical, and although all learning processes imply a principle of imitating that learned, in this type of museums, the opposite occurs, since these are museums that teach what must never be repeated.

The balance between symbolism and monumentality gives museums of memory this necessary balance between intimacy and evocation for reflection on painful events; spaces of public access whose atmosphere invites commemorating victims and, in particular, vindicating a series of events whose unveiled or partly revealed facets are shown. For this reason, a museum of memory can be defined as a *space* where a *time* is vindicated.

In Table I below, a relationship of the main vindicated places of memory, built in the world since the 1950s until now, is presented. A reading of the argumentative discourses of these projects reveals how the architectonic design is connected to the narrative that a memory looks to vindicate. Thus, the more open and public projects, like the Holocaust Monument (Peter Eisenman – Berlin), vindicate the memory of the victims through a univocal narrative based on the idea of monument. On the contrary, the projects built in buildings, and with limited public access, present a plural narrative and, in general, one that is open to permanent revision, despite having a preset museographic script.

HISTORIC REVISIONISM AS A RESCUE OF MEMORY THROUGH ARCHITECTURE

Throughout history, some architects, perhaps unintentionally, have gone against the city through their architectonic interventions, whose consequences, in terms of historic memory, are regretted today. This is why revisionism, as a rescue of memory, implies the act of recapturing lost and invisible memories of the city, through interventions in the space. These are projects that seek to recover a memory of the city, as a result of works made in the past, which today, without a doubt, are judged as unsuitable, even though they were considered appropriate at the time. An example of this revisionist line is found in the hundreds of kilometers of raised overpasses and highways that have been demolished in different cities around the world, to provide, no longer to the automobile, the condition of the private, but to the pedestrian, the condition of the public. Multimillion investments, that in their time, were considered a great achievement and a sign of magnificent progress, today are seen as aggressive interventions that alter the landscape and quality of life. However, revisionism as a rescue of memory, goes beyond the demolition of overpasses, but as the urban-architectonic interventions where the basic principles behind the memories and origins of the city are recovered, in tune with contemporary values like environmental sustainability and the respect for history. From this point of view, actions like rescuing the memory of water, erasing urban boundaries and/or valuing the pedestrian over the automobile, characterize the sense that this type of historic revisionism mobilized in the times of the 20th and 21st centuries, and constitute a means of understanding the contemporary city starting from the transformative power that memory triggers.

RESCUE OF MEMORY THROUGH URBAN INTERVENTIONS

RESCUING MEMORY. ARCHITECTONIC INTERVENTIONS

Figure 2

Environmental promenade – Bogota – Colombia.
Source: Photograph by the author.



During the 1940s, the city of Bogotá, following the hygienist movement guidelines, and with the goal of making a modern city, uprooted one of the most characteristic landscape traits of its historic hub: the San Francisco River. This led to its channeling and paving over its surface. For almost half a century, the river ran silently under the pavements, until in 1990, the architects, Salmons and Kopec projected a pedestrian promenade where the presence of the river would be regained through successive channels, along the route the old river had previously had [Figure 2]. In the words of Salmons: “the tarmacked curves of Avenida Jiménez de Quesada silently invoked the buried San Francisco river, or as the first inhabitants of Bogotá (the Muiscas) called it, Viracachá, meaning water glittering in the darkness” (Fundación Rogelio Salmons, 2020).

Under these terms, the built project recovers the silenced and hidden memory of the river, caused by its channeling. From this perspective, “looking back”, becomes an opportunity for redemption for cities that have erased chapters of their history. This is the case of the vast projects in international cities like Boston (BIG DIG), Madrid (Madrid Río), and Sao Paulo (Anhangabau Park).

In Germany, the Berlin Royal Palace, Berliner Schloss, was the result of an architectonic palimpsest that intertwined the typology of a medieval castle and a Renaissance Palace. It had driven Frederick III (1657-1713), the King of Prussia, to hire the architect Andreas Schlüter, to transform this building considering the Baroque ideals of the time. By the 20th century, during the Second World War, a large part of the palace was destroyed by a fire in 1945, and was ultimately demolished in 1950 on the order of the then German Democratic Republic, whose authorities, skeptical of wanting to conserve a testimony of Prussian imperialism right in the heart of the city, opted to build in its stead, the so-called Palace of the Republic. This project, by the architect Heinz Graffunder, was conceived as:

a palace for the people, housing theaters, art galleries and cafés; and, although its architectonic style was a clear repudiation of the elitism of its predecessor, it became the stage for all the great celebrations and banquets of the communist elite⁴. (Burchard, 10th March, 2016).

In this way, an architectonic icon of monarchy was erased and replaced by another, this time of communism. In an act that, under the argument of reinstating the role of the people –and not the monarchy–, as the leader of the nation, it superimposed the writing of one historical narrative over another: an exercise of historic revisionism that bordered on denialism. Now, after the German reunification in 1989, the Palace of the Republic was closed to the public because of asbestos used in its construction, a closure that led to intense extensive debates about the future of the building, leading the German Parliament, in 2003, to take the unheard of decision of rebuilding the stereometry and facades of the former Berliner Schloss, now reconfigured functionally to work as a museum, through the architecture tender called in 2008, won by the architect, Franco Stella.

In this regard, it is necessary to ask “How the interpretations of the past and the new memory practices define individual, local, and national narratives?” (Luthar, 2013, p. 883)⁵. In the case of Berliner Schloss, just as in the examples mentioned below [Table 2], it is clear how these “new memory practices” have been predetermining factors in the rescue of a narrative, of a memory that was thought lost, and where architecture has become both an instrument of “erasure”, and as a tool for the recovery of memories.

In the analysis of the argumentative discourses of these projects [Table 2], it can be seen that the common intention is not *commemorating an event*, but rather remembering a space. In this sense, the memory that is rescued is not a

4 Free translation.

5 Idem.

result of a conflict, a war or a violent act, but rather a product of a self-critique that society and its leaders make of themselves, in order to recover a physical space that was considered lost in the city. It is worth noting that, from the revisionist lines studied in this research, this is the only one that appeals to the dismantling and disappearance of a work as a strategy to build a new one, that evokes a space and a memory made invisible, in the city.

Table 2
Historic revisionism as a means of rescue of memory in architecture.
Source: Preparation by the author.

HISTORIC REVISIONISM AS A MEANS OF RESCUE OF MEMORY THROUGH ARCHITECTURE					
Year	Project	Nature of the Recovered Memory	Architect	City-Country	Case Summary
2020	Berlin Palace	Architectonic Memory	Franco Stella	Berlín - Alemania	The project seeks to correct the decision made by the German Democratic Republic to demolish the old Berlin Royal Palace and replace it for a new one. The memory of the original palace is rebuilt.
2019	Medellin River Parks	Environmental urban memory	Latitud Taller de Arquitectura	Medellín - Colombia	This project seeks to recover the memory and presence of the Medellín River, which was isolated by the construction of Regional Avenue alongside the river. A significant part of this highway has already been put underground, which has allowed recovering the relationship of the city with the river.
2014	Puerto Maravilla – Mauá Square – Museum of Tomorrow	Puerto Maravilla – Mauá Square – Museum of Tomorrow	Puerto Maravilla – Mauá Square – Museum of Tomorrow	Río de Janeiro - Brazil	Recovery of the memory of the old Gamboa Port, through the demolition of the roads and areas that separate the city, the port, and the sea; the construction of a tunnel capable of handling the road traffic and, finally, the construction of squares and pedestrian promenades.
2013	Boulevard del Río – Cali	Landscape urban memory	Elly Burckhardt & Juan Manuel Echeverri	Cali - Colombia	The isolation of the Cali River from the historic hub of the city is corrected. This was produced by the construction of Colombia Avenue around 1940, thus recovering part of the pedestrian promenades there have existed since Pre-Colombian times alongside the river, leading to the sea.
2006	Big Dig	Landscape urban memory	CA-T	Boston – USA	The decision of supporting vehicle over pedestrian traffic through the I-93 as an overpass, with a great impact on the city's historic center, is reversed. The highway is demolished and put underground, recovering the memory of the public space there was before the overpass' construction.
2005	Madrid Río	Environmental urban memory	West 8, Burgos & Garrido, Porras la Casta, Rubio A. Sala	Madrid - España	The isolation of the Manzanares River around the city, caused by the building of the M30 Highway around 1960 is adjusted, recovering, in this way, the memory of the river as a key part of the city of Madrid
2005	Parque Cheonggyecheon	Memoria Urbano paisajística	Gobierno de Seúl	Seoul - Corea	This is the regeneration of the landscape and restoration of the memory of the Cheonggyecheon River, through the restructuring of urban connections, which implied the demolition of major highways built during the 1960s.
2000	Environmental heart	Environment urban memory	Rogelio Salmona & Louis Kopec	Bogotá - Colombia	The decision of having taken the San Francisco River underground is reversed, returning the memory of the river to the surface as an essential element in the life of the urban center.
1991	Anhangabau Park	Landscape urban memory	Jorge Wilhem	Sao Paulo - Brazil	The decision of giving preference to the automobile through the building of an avenue in the 1990s, is reversed. Now the decision is made to take the avenue underground and regain the memory of the public space.
1989	Restoration of Pamplona Cathedral Belltower	Architectonic memory	Jaime Salcedo	Pamplona - Colombia	The original cathedral building dates from 1797, which was intervened in 1913 and 1926 to take on the 19th century stylistic expectations of the time. A later historic study revealed the typological importance of the original building, as such the new project of 1988 focused on correcting the intervention of 1926, in order to recover the typological memory of the original building, represented, in a great extent, by its belltower.

DISCUSSION

DENIALISM

In what is known as historic revisionism, two senses of the term “revisionism” are juxtaposed. One, which applies to the typical process of examining something with the idea of improving it or correcting its possible mistakes and, another, that refers to the building of an alternative historic narrative, refuting the other (Chiaromonte, 2013, p. 26).

This third acceptance of “revisionism”, reviewed here, can also be confirmed in the field of architecture: an alternative in the use of memory, that neither vindicates nor rescues it, but rather, deliberately tries to deny the memory of a past that is considered particularly toxic and/or shameful for societies. Denialism presents the challenges of erasing, hiding, removing, suppressing events or characters through an urban architectural project.

This is the case of Adolf Hitler's birthplace in Austria. A 19th century dwelling, which in the 20th century had become a symbol of an ideology and of a perpetrator, where attempts were made to make his memory disappear, considering the atrocities he represented. In this regard, the Austrian Government initially decided, through Minister Wolfgang Sobotka, that “Hitler's house will be demolished. The basement can remain, but a new building will be built on top” (BBC, October 17th, 2016).

However, this decision was later reconsidered: “After further debate, we have decided not to demolish it”, so there is no risk of accusations of wanting “to make an uncomfortable chapter of history disappear”, said the Governor, Josef Purhinger. In any case, the building “[can] no longer be identified from the outside” and will be used to house an administrative or social institution” (Infobae, December 15th, 2016). Despite these intentions, the “new” projected building, will be just like the original on its first two floors. This, despite the tender terms and conditions, made for this purpose, specifying that the outside remodeling of the current building had “to remove the memory of the national-socialist period” (Landsberg, July 2nd, 2020).

In this architectonic project [Figures 3 and 4], there is a double denial: on one hand, trying to hide the memory of the perpetrator; the discussion exclusively revolved around this memory, without considering that there is no perpetrator without victims, that the memory debated here, is not just that of

Figures 3 and 4

Birthplace of Adolf Hitler – Braunau am Inn (Austria) and Police Station Project.
Fuente: BBC (October 17th, 2016) and <https://worldarchitecture.org/article-links/efeeh/marte-marte-architekten-selected-to-convert-hitler-s-birthplace-into-a-police-station-in-austria.html>



the dictator; but of the entire conflict, as this architecture does not represent the place where a person was born, but rather the place where a fight was.

Something similar has happened in Medellín (Colombia), with the *Tender for the design of a space of memory and reflection* being built at the site of the home of one of the main drug lords, the modern world has seen: Pablo Escobar. The purpose of the tender was: "... selecting the generation proposal of the public space that best presents the materialization of a place for memory, that allows reflecting about the past and rendering solemn homage to the brave..." (Sociedad Colombiana de Arquitectos, 2018, p. 10).

Although it mentions that it must be a place "to reflect about the past", the determining factors to develop the tender proposal, avoid at all costs, alluding to that past.

DETERMINING FACTORS FOR PROPOSAL DEVELOPMENT

Actually, the local population and the policymakers want to transform this dark past, that is part of the history of Medellín, building in this way, a comprehensive narrative that acknowledges and values the memory of the victims for the symbolic reparation and reconciliation.

This decision of rewriting history and facing the paradigms of the so-called "Narco culture", with its fictional narrative and false heroes (films, series, novels), tries to build a collective narrative of what really happened, highlighting other stand out characters that bring an end to eulogizing crime and violence, to generate a culture with values that promote solidarity, transparency, and trust in one another. (Sociedad Colombiana de Arquitectos, 2018, p. 50).

That is to say, what is important in this tender was not building a place of memory, but rather a place where a distortion of history is materialized in light of a series of values, to bring an "end to eulogizing crime and violence", ignoring that all historic facts have causes and results, that focusing the narrative on just one of them, automatically promotes the denial of the other.

The basic principle, memory spaces are based on, is counteracting omission, at the same time narratives become more complex and the victims and their families are acknowledged. However, in this tender, omission is promoted, slicing away parts of the narrative, prohibiting them, forgetting that there are no victims without a perpetrator; that throughout history, the consequences of the events are related to a cause, that omitting these causes, creates a vacuum in the process giving sense to the story, because, above all, memory is a process, not an event. In the words of Maurice Halbwachs: "... the key to the city does not lie on memory as permanence, but rather on history as a flow" (Gorelik, August 31st, 2009, p.17).

On the other hand, it is important to state, that within the tender, a citizen participation process was opened, which voted on 25 alternatives. From these 25 ideas, only one proposal involved conserving the building structure (proposal 12, that received 3% of the votes). The proposal with the highest vote (Proposal 6 – Public space: Park, 16% of the votes), was chosen, in a healthy logic. This consultation mechanism, justifies in principle, the intervention project in the place. However, the question asked here, is about the pertinence of referendum type consultations in matters that involve variables as complex as the narratives that the identity notions of cities imply. The plebiscite made on the peace accords in Colombia (2016) or the referendum made on Brexit (2015), are just some of the main examples that question the suitability of an indiscriminate use of this type of consultation, which predetermined, in the case of the Medellín tender, that the result was not one of a space of memory, as

had initially been foreseen, but rather a space of commemoration, that is to say, of the memory of an event through a State led univocal and partial narrative.

From this approach, the tender project prepared by *Taller Síntesis arquitectos* [Figure 5] is worth highlighting, acknowledging the denialism bias that entails the narration of a half-hearted story, which proposed maintaining the structural skeleton of the building as a ghostly presence in the new project. In this regard, Taller Síntesis argued that:

The efforts of the city to build a new narrative that distances itself from having been labeled as “the most violent city in the world”, that it had at some point in history, are noticeable. However, this has also practically implied making the recent past a taboo...

Hiding this history, means ignoring the misfortune of the more than one hundred and thirty thousand people affected, who between 1980 and 2014 were direct victims of the conflict in the city..., hiding the reasons behind why the city went through its darkest times and the reasons why today, drug-related activities continue in the city. Hiding this history means removing the content from the places where the events took place, erasing the voices of the victims, their resistance and capacity, not just of surviving, but of transforming their reality. (Taller Síntesis, 2018).

This unawarded proposal illustrates, in an open contradiction to the terms and conditions set out by the government, the need of acknowledging all the parties in the conflict, avoiding centering the view of a single side of the history of the drug trade, that of the victims, through an architectonic project that shows the tensions that characterized this drama in Colombia, represented in the park, a place of memory, and the ruins of the Monaco building, an eloquent footprint of what it can never be again.

Finally, a relationship of projects is presented, where denialism characterizes the sense of these works, as the line of action of the historic revisionism, that tends to deny, through architecture, one memory in particular [Table 3] The crossed reading between the projects and their justifying discourses allowed detecting a common factor in these denialist projects, since they are interventions ordered from a hegemonic power—a government, the church, a city council—which place themselves above the decision of another equally hegemonic power, with the goal of imposing a vision of history in the city, and therefore, within the citizenry.



Figure 5
Tender proposal.
Fuente: Taller
Síntesis (2018).

Table 3

Historic revisionism as denial of memory through architecture.
Source: Preparation by the author.

HISTORIC REVISIONISM AS DENIAL OF MEMORY THROUGH ARCHITECTUREARQUITECTURA					
Year	Project	Nature Of The Denied Memory	Architect	City-Country	Case Summary
2019	Inflexion Memorial Park – Memory Space Tender 1983-1994 – Monaco Building	Social Memory	Taller Alterno, Small Scale Architecture & Luis Felipe Zapata Flórez.	Medellin - Colombia	On awarding the tender to a proposal that erases the memory of the perpetrator, following the guidelines outlined in the tender, memory is being denied, making this project, not a place of memory, but rather one of commemoration.
2019	Hitler's birthplace tender	Political Memory	Marte.Marte Architects (modification)	Salzburg - Austria	The idea is to hide the memory of the house where Adolf Hitler was born; only the memory of the perpetrator is considered, avoiding mentioning the victims'.
2008	San Luis Potosi Prison / Arts Center	Heritage Memory	Carlos Suárez (original project) Alejandro Sánchez (modification)	San Luis Potosi - Mexico	The memory of the historic building is erased, as all reference to the original use as a prison is "cleansed", looking to just conserve those historic aspects of the building, that allude to a cultural condition in its now new role, as an Arts Center.
1998	Alfonso Reyes Echandía Palace of Justice	Political Memory	Roberto Londoño	Bogota - Colombia	The memory of the holocaust of 1985 is erased, on avoiding any resemblance and allusion to the first version of the Palace, and the historic event that took place there.
1976	Palace of the Republic (GDR)	Political Memory	Heinz Graffunder	Berlin – Germany	The memory of the Prussian Empire, which went against the communist principles of the German Democratic Republic, is erased, on demolishing the Baroque Royal Palace and projecting the Palace of the Republic in the same place.
1948	Bogota Civic Center Project	Heritage Memory	Le Corbusier	Bogota - Colombia	The intention is to erase the urban memory of the city, superimposing a "modern" morphology to the grid morphology of the foundational structure of the city, from which, just 9 historic foundational blocks would be kept.
1948	The Bogota Panoptic / National Museum of Colombia	Heritage Memory	Thomas Reed (original project) Jorge Camacho (modification)	Bogota - Colombia	The memory of the prison site is eliminated, suppressing all architectonic traces alluding to its function and opening the spaces up to house the collection of the National Museum of Colombia.
1438	Templo - 1538 Iglesia	Heritage Memory	N.A.	Lima - Peru	Inca Temple dedicated to sun-worshipping, looted in 1534 during the colonization process, which led to the construction of Santo Domingo Church, by the Dominican Community, on the foundations of the former Inca Temple.
c.a. 1524	Aztec ceremonial center / Historic heart of Mexico City	Heritage Memory	(Foreman) Alonso García (modification)	Mexico City – Mexico	The attempt is made to erase the memory of the Aztec Empire, when the Spanish decide to destroy the ceremonial center and found part of the new city center on it.
785	Mosque - 1236 Cathedral	Heritage Memory	Hernan Ruiz et al. (Cathedral)	Cordoba - Spain	The Christian Church dedicated to Vincent of Saragossa, demolished by Abd-al Rahman I for the construction of the new Mosque of Cordoba after the Islamic conquest of the Iberian Peninsula (711-726 AD) and reconverted, more than 5 centuries later into the Cathedral of Our Lady of the Assumption; The Mosque-Cathedral of Cordoba is a case study that does not just have a successive spatial transformation, but an unsuccessful attempt to deny a memory that for centuries characterized the citizens of Andalusia.

CONCLUSIONS

As a tip of the iceberg that shows a much greater phenomenon than can apparently be seen, architecture is revealed in cities, inasmuch as a visible manifestation, as a sum of processes, invisible at first sight. Thus, historic revisionism in architecture is set out, as the revision of this "submerged iceberg", of this city formed not just by architecture, but by events, decisions, agreements, and conflicts that, together form the memory of a city. Therefore, we are before the appearance, not of a new phenomenon, but of an unusual process of awareness and sensitization of the different phenomena that we have accumulated over time. A revisionism whose particular traits lie on what does not come from historians, academia, or from any hegemonic power, but from sectors of society whose revisionist actions in the city, reveal a way of seeing the past of the city and a way of thinking, at the same time, of the past and future of society.

The search for and activation of silenced memories is a sign of recent times, that led to the question of the research presented here: how to do it? How do some memories impose themselves over others in architecture? Searching for them is a task that, for some time now, has been done from areas like history, sociology, and anthropology. In architecture, the challenge is not just critically historiographing these memories, as this is a task that has already been started, in part, by positions like decolonialism. The challenge has to do with the ways architecture is used to activate a memory, a materialization that not only gives way to aestheticism or the consolidation of univocal narratives, but rather, on the contrary, one that gives way to the generation of plural memories, in permanent construction, that contribute in part, to breaking down a world as polarized as the one we live in today. Architecture for the vindication and rescue of memory, shows two of these ways of activating silenced memories. A third way, denialism, shows the most radical path for imposing one memory over others.

The paradox is that, the more architecture is produced to vindicate or rescue a memory, more data and information will continue being discovered and remembered, which generates in these architectures, a permanent effort to create mechanisms and spaces to remember and to not forget anything, like a *Funes el memorioso*, whose permanent effort to remember everything, always kept him anchored in a past that impeded thinking about a future.

Facing the weight of a history built up over centuries of existence, current cities and societies are no longer projected from a positivist point of view, but from a retrospective view that allows them to come through and face the weight of their past. This vision of a "retrospective future" has led to an alternate form of city development, starting from a critical revision of their history, where the architects can, with their interventions, make architecture an instrument for the vindication and/or rescue of memory. Thus, it is confirmed how historic revisionism, inasmuch as a characteristic position of the contemporary world, has transcended the social sciences and passed onto architecture, as a physical materialization of a critical reflection of society about its own past, a revisionism that reiterates to architecture as a writing tool of cities, but also as an instrument to suppress their history.

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MODERN COLLECTIVE HOUSING OF MODERNITY IN TIMES OF COVID-19. CONTRIBUTIONS OF THE HOUSING PARADIGM

La vivienda colectiva de la modernidad en tiempos de covid19. Aportaciones del paradigma habitacional

A habitação coletiva da modernidade em tempos de covid19. Contribuições do paradigma habitacional

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Views from the apartment blocks of the Centro Urbano Presidente Alemán (CUPA) apartment complex. It is possible to appreciate the inner gardens of the complex, as well as panoramic views of Mexico City.

Source: Photograph by the author, April 2021.

ABSTRACT

Modern collective housing generated an urban-architectural design paradigm, which incorporated spaces whose design promoted, following modern architects, health and hygiene through the circulation of clean air, natural lighting and ventilation inside dwellings, as well as in the shared spaces and those where people move around, characteristic of this housing typology. These design elements seem to be useful to reduce the spread of the SarsCov2 virus, that is currently affecting the entire world. Field and online work was carried out with the inhabitants of the CUPA, a housing complex representative of modern architecture in Mexico City, to verify this assumption. Using volumetric reconstructions and online questionnaires, the design elements that embody modern ideals, aimed at ensuring healthy indoor and outdoor spaces, were analysed. The usefulness of the collective facilities, public spaces and the design of the four housing typologies found within the, were assessed. The results of the study and the absence of COVID-19 cases in CUPA help to prove the validity that modern architecture has regained during the global pandemic, as well as the importance of the lessons from the past to integrate new design paradigms for a post-Covid architecture.

Keywords: Modernity, hygiene, community facilities, housing complexes, green areas

RESUMEN

La habitación colectiva de la modernidad generó un paradigma de diseño urbano-arquitectónico, que incorporaba espacios cuyo diseño fomentaba, de acuerdo con los arquitectos de la modernidad, salud e higiene mediante la circulación de aire puro, iluminación y ventilación naturales al interior de las viviendas, al igual que en los espacios compartidos y de circulación característicos de esa tipología habitacional. Esos elementos de diseño parecen ser útiles en la reducción de contagios del virus SarsCov2 y que actualmente afecta al mundo entero. Para verificar este supuesto, se realizó un trabajo de campo y en línea con habitantes del Centro Urbano Presidente Alemán (CUPA), conjunto representativo de la modernidad arquitectónica en la Ciudad de México. Mediante reconstrucciones volumétricas y cuestionarios en línea se analizaron los elementos de diseño que materializan los ideales modernos orientados a garantizar espacios exteriores e interiores sanos; se evaluó la utilidad de los equipamientos colectivos, espacios de circulación y el diseño de las cuatro tipologías de vivienda que tiene el conjunto. Los resultados del estudio y la ausencia de casos de COVID19 en el CUPA, ayudan a demostrar la validez que recobra la arquitectura moderna en la pandemia mundial, así como la importancia de las lecciones del pasado para integrar nuevos paradigmas de diseño para una arquitectura post-Covid.

Palabras Clave: Modernidad, higiene, equipamiento comunitario, conjuntos habitacionales, áreas verdes

RESUMO

A habitação coletiva da modernidade gerou um paradigma de desenho urbano-arquitetônico que incorporava espaços cujo design promovia, de acordo com os arquitetos da modernidade, saúde e higiene por meio da circulação de ar puro, iluminação e ventilação naturais no interior das casas, bem como nos espaços compartilhados e de circulação característicos desta tipologia habitacional. Esses elementos de design parecem ser úteis na redução da disseminação do vírus SarsCov2, que atualmente afeta o mundo inteiro. Para verificar esta hipótese, realizou-se um trabalho de campo e on-line com moradores do Centro Urbano Presidente Alemán (CUPA), um conjunto representativo da modernidade arquitetônica localizado na Cidade do México. Mediante reconstruções volumétricas e questionários on-line, foram analisados os elementos de design que incorporam os ideais modernos que visam garantir espaços exteriores e interiores saudáveis; Foi avaliada a utilidade dos equipamentos coletivos, dos espaços de circulação e do desenho dos quatro tipos de habitação existentes no conjunto. Os resultados do estudo e a ausência de casos de COVID19 no CUPA ajudam a demonstrar a legitimidade que a arquitetura moderna recupera durante esta pandemia de escala global, bem como a importância das lições do passado para integrar novos paradigmas de design em uma arquitetura pós-Covid.

Palavras-Chave: Modernidade, higiene, equipamentos comunitários, conjuntos habitacionais, áreas verdes

INTRODUCTION

Collective modern housing is a legacy of the discussions of the International Congresses of Modern Architecture, CIAM, on housing and the development of cities using housing conceived as their basic cell (CIAM, 1933). These contributions, that provided solutions from architecture and urbanism to the urban issues of the time, were outlined in the 1933 Athens Charter.

The Charter proposed grouping dwellings in high-rise towers, taking advantage of land available to develop extensive green areas, commercial establishments, amenities, sports areas, schools, playschools, and even maternity hospitals, to look after the children. Thus, the inhabitants would have no need to move to other areas of the city for their essential activities. The housing cells, just like the collective spaces, would have to guarantee, from their design, the entry of sunlight and fresh air; thus generating healthy, clean, ventilated, transparent spaces that sought to cut the spread of diseases which, back then, were part of the slums. The paradigm of the super housing block was being born.

These design precepts throughout the world, were praised by Le Corbusier, and were materialized in his famous Marseille Unité d'habitation which, on being testimony of modern thinking, was added in 2016, along with another 16 works of the Swiss architect, to the World Heritage List as an exceptional contribution to the Modern Movement (UNESCO, 2020), under eligibility criteria (i), (ii) and (vi) of the Cultural and World Heritage Convention, leading to the declaration of its Exceptional Universal Value (UNESCO, 1972; 2008).

Latin America was the recipient of the largest number of these works, where large scale state-led examples were built, which nowadays stand out as landmarks in cities around the region. The governments of mid-20th century Latin American republics found, in the paradigm of the super housing block, an ideal tool for their social acceptance and legitimization (Sambricio, 2012).

In Mexico, the first housing unit built under these design assumptions was the Centro Urbano Presidente Alemán (CUPA). Located to the south of the Mexican capital, it was designed by the architect Mario Pani, and built between 1947 and 1949 with the support of the General Civil Pensions Direction, today the Social Services and Security Institute for State Workers (ISSSTE, in its Spanish acronym). It was built on a site of 40,000 m², where only 20% is occupied at the subgrade area by the built property, while the remaining 80% is destined to sports areas and gardens. Meanwhile, the commercial establishments and services are located on the first floors of the buildings.



Figure 1
Picture windows of the apartments in CUPA's 12-story towers.
Source: Photograph by the author (2020).

The complex has 1,080 dwellings, grouped into six 12-story towers and six, smaller 3-story buildings (Pani, 1950, pg. 268-269). It has four different housing typologies (Pani, 1952, pg 27.24), where the modern ideals of transparency and hygiene are materialized (Muxi, 2020, p. 7), with sliding windows that allow sunlight to enter each housing cell [Figure 1].

At the start of the 1970s, this housing model revealed problems in its management (Villavicencio, 2006), and in the coexistence among its inhabitants. While the demolition of Minuro Yamasaki's Pruitt Iggoe complex in St. Louis, Missouri, in 1972, led Charles Jeckens to state that, with this act, the movement had died (Montaner, 2015, pg. 158-159). However, the current pandemic has forced redefining architectonic design, as well as analyzing, and even revisiting, design paradigms inherited from the past, that intended, among other things, to promote healthy and clean spaces through ventilation, air circulation, and the entry of sunlight.

In this vein, this article analyzes the hypothetical usefulness of a representative case study of modernity, namely CUPA in Mexico. Authors like Morawska, have presented studies that show that the most efficient means to transmit viruses, are the aerosols we exhale on speaking, airborne ones that survive in enclosed unventilated spaces. However, in open ventilated spaces, the possibilities of infection are considerably reduced (Morawska & Cao, 2020).

METHODOLOGY

To assess the possible usefulness of the super housing block design in the reduction of the airborne COVID-19 infection, by using the analysis of a paradigmatic case study like CUPA, 3D models of the entire complex, and of each one of its four housing typologies were made, using the original plans published in the book, *Los multifamiliares de pensiones* (Pani, 1952, pg 27-34) and the magazine, *Arquitectura México* (Pani, 1950, pg. 268-269), verifying the information with onsite visits. The 3D modeling of the complex considered the first floor commercial establishments, gardens, and green areas that surround the apartments buildings set out on the redan site (De Garay, 2004).

The spatial analysis was complemented and compared with questionnaires given to the inhabitants. The questions were designed to evaluate the efficiency of the architectonic design attributes that, hypothetically, help to reduce airborne infection chains in collectively used spaces and inside dwellings. To determine the survey's target population, the populational profiles indicated in the National Housing Inventory (INEGI, 2016) were examined. This showed that the prevailing population sector has an age range fluctuating between 30 and 59 [Table 1].

This sector has the economically active population, so a set of questions evaluated the compatibility of work-based and domestic activities for those who can work from home. As the members of this population segment are also regular social media users, which the neighbors use to communicate with each other, it was possible to carry out a survey on two Google forms. The digital platform allows graphing results in real-time. It also avoids physical interaction and possible infections, when answering the questionnaires.

The first questionnaire focused on the commercial establishments and collective spaces. It addressed the usefulness of the products offered there, to identify whether these are sufficient to supply the basic supplies for the inhabitants, or if they need to leave the complex for supplies. To recognize the types of establishments and include them in the survey, economic and commercial activity data of the housing inventory (INEGI, 2016) was revised, information which was verified through fieldwork. The lines of business available on the first floor of CUPA are: laundromat, minimarket, butchers,

Table 1

CUPA population groups, by age range. The group with the highest number of people is highlighted.
Source. Preparation by the author using data from the National Housing Inventory (INEGI, 2016) (<https://www.inegi.org.mx/app/mapa/inv/>)

Grupos de población	N° personas	%
Población de 0 a 14 años	245	11,10607434
Población de 15 a 29 años	462	20,94288305
Población de 30 a 59 años	900	40,79782412
Población de 60 y más años	440	19,9456029
Población con discapacidad	152	6,890299184
TOTAL	2199	99,68268359

Table 2

Survey questions given to CUPA's inhabitants about the common areas and commercial establishments.

Source: Preparation by the author (2020).

Habitar el CUPA durante COVID (tiendas y jardines)	
Comercios y abastos	
1. Have the products sold in CUPA's stores allowed you to cover basic supplies during the pandemic?	a. Yes
	b. No
	Why? (open answer)
2. Have you had to leave CUPA during the pandemic to buy basic products such as food, medicine, paper?	a. Sí
	b. No
	Why? (open answer)
3. Which type of store has been most useful for you during the pandemic?	a. Laundromat
	b. Market
	c. Butchers
	d. Grocery Store
	e. Pharmacy
	f. Bakers
	g. Pharmacy
	h. Tortilla shop
	i. Shoe store
	j. Restaurants
	k. Stationers
	l. Cakes (Don Polo)
	m. Dry cleaners
	n. All the above
Green areas	
1. Have you used CUPA's gardens for recreational purposes during the	a. Yes
	b. No
	Why? (open answer)
2. When you walk around CUPA's gardens, do you feel scared of catching COVID?	a. Sí
	b. No
	Why? (open answer)
What type of apartment do you live in?	a. Corridor (in tower)
	b. Corner (in tower)
	c. Building B, D or F (in tower)
	d. The small little ones
Perimeter corridors in the towers	
1. Have you used CUPA's corridors for recreational purposes during the pandemic (not just to enter your home)?	a. Yes
	b. No
	Why?
2. When you walk along CUPA's corridors, are you scared of catching COVID?	c. Yes
	d. No
	Why? (open answer)
COVID cases in CUPA	
1. Have you heard of any COVID case or infection in CUPA?	a. Yes
	b. No
	c. I'd rather not say

grocery store, pharmacy, bakers, tortilla shop, shoe store, restaurant (selling prepared meals), stationers, and dry cleaners.

In this same section, the inhabitants were asked about whether they had used the gardens around CUPA during the pandemic, and whether they felt safe walking around without the fear of getting infected. Similar questions were asked regarding the perimeter corridors to access the tower dwellings. The section was complemented on asking whether they had heard about COVID infections inside the housing unit [Table 2].

In the second questionnaire, questions related to the four different dwelling types were included, one for each type. In the texts and plans published by Pani, the apartment typologies are classified by letters, three are found in the 12-story buildings. These currently have colloquial names by which the inhabitants identify them [Table 3]. As such, the surveys respected these names.

The concepts addressed in the four questionnaires, correspond to conditions inside the dwelling, regarding typical modern design elements that materialize hygiene precepts, such as the usefulness of windows to ventilate and illuminate the entire dwelling, as well as the compatibility of work-related and typical every day activities, for those who can work from home [Table 4].

All the questionnaires were multiple-choice, although room was given for open answers so that respondents could mention any situation not considered in the questions. The questionnaire was open for 3 weeks, during which 291 answers were received. 145 were for the type A apartment (corridor); 58 for types B-C (corner); 36 for type D (north-south building); and 52 for type D (the small little one). Finally, records of COVID cases in CUPA were sought on the official page of the Mexico City Government, using interactive maps and the statistical data available per community. The official information obtained was then compared against the answers collected from the questionnaires.

Original Name	Number of apartments	Type of building	Colloquial name	M2	Floors in dwelling	Surveys made
Type A	672	Tower	Tower	48	2	145
Type B-C	192	Tower	Tower	80	1	58
Type D	72	Tower (north-south)	Tower (north-south)	110	2	36
Type E	144	Three-story building	Three-story building	57	1	52
Total	1080				Total	291

Table 3

Names and general characteristics of CUPA's four housing typologies. For the corner apartment (type B-C), the variation is minimal and has the possibility of having a small store, alongside the entrance to the apartment.

Source: Preparation by the author, based on Pani (1950, p. 268).

Tabla 4

Results of the questionnaire given to inhabitants to evaluate the usefulness of commercial establishments, gardens, and collective circulation areas in CUPA during the pandemic. The responses mentioned the most by the interviewees are highlighted, to aid their identification. *The comments of the open answers were incorporated in the presentation of the results.
Source: Preparation by the author (2021)

Living in CUPA during COVID (stores, gardens, and paths) - 291 questionnaires			
Shops and Grocery Stores		Answers chosen	Percentage
1. Have the products sold in CUPA's stores allowed you to cover basic supplies during the pandemic?	a. Yes	255	87,62886598
	b. No	36	12,37113402
2. Have you had to leave CUPA during the pandemic to buy basic products such as food, medicine, paper?	a. Yes	36	12,37113402
	b. No	255	87,62886598
3. Which type of store has been most useful for you during the pandemic?	a) Laundromat	5	1,718213058
	b) Market	73	25,08591065
	c) Butchers	8	2,749140893
	d) Grocery Store	86	29,5532646
	e) Pharmacy	63	21,64948454
	f) Bakers	2	0,687285223
	g) Tortilla shop	23	7,903780069
	h) Shoe store	2	0,687285223
	i) Restaurants	10	3,436426117
	j) Stationers	6	2,06185567
	k) Cakes (Don Polo)	11	3,780068729
l) Dry cleaners	2	0,687285223	
Green areas		Answers chosen	Percentage
1. Have you used CUPA's gardens for recreational purposes during the pandemic?	a. Yes	263	90,37800687
	b. No	28	9,621993127
2. When you walk around CUPA's gardens, do you feel scared of catching COVID? *	a. Yes	9	3,09278351
	b. No	282	96,9072165
What type of apartment do you live in?	Corridor (in tower)	145	49,82817869
	Corner (in tower)	58	19,93127148
	Building B, D or F (in tower)	36	12,37113402
	The small little one	52	17,86941581
Perimeter corridors in the towers		Answers chosen	Percentages
1. Have you used CUPA's corridors for recreational purposes during the pandemic (not just to enter your home)?	a. Yes	264	90,72164948
	b. No	27	9,278350515
2. When you walk along CUPA's corridors, are you scared of catching COVID?	c. Yes	25	8,591065292
	d. No	266	91,40893471
COVID cases in CUPA		Answers chosen	Percentages
1. Have you heard of any COVID case or infection in CUPA	a. Yes	1	0,343642612
	b. No	290	99,65635739
	c. I'd prefer not to say	0	0

RESULTS

COMMON AREAS

Figure 2

Volumetry of Centro Urbano Presidente Alemán. The gardens that surround the apartment towers and fill most of the subgrade area, can be seen in green. Preparation by Jorge Rendón, using the plans shown in *Arquitectura México* (Pani, 1952, p. 265), and field trips made by the author.

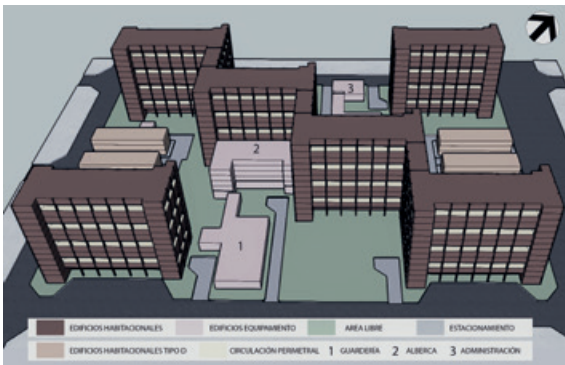
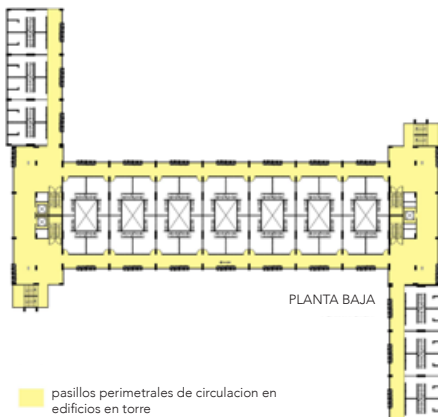


Figure 3

Perimeter corridors to access tower dwellings. Source: Photograph by the author.



The data shown in Table 4 allows identifying that the commercial establishments and services within the complex have been enough to guarantee the supply of basic products for the residents. At the same time, supermarkets nearby have become an option to buy groceries, although these are less frequently used by the 291 respondents. The most useful stores have been those that sell food (grocers and mini-markets), followed by pharmacies that offer medication, personal hygiene products, and non-perishable food.

The gardens, which cover most of the site [Figure 2], have become necessary spaces for recreation and relief from confinement during the pandemic, on being natural and offering fresh air, so, in terms of airborne transmission, these are spaces with a lower risk of infection [Table 4]. These are also extensions of the dwelling itself.

The results referring to the perimeter corridors, which provide access to the tower dwellings [Table 4], aside from their inherent role for access and circulation, were shown to have been used by most of those surveyed, for walking during breaks from work, for those working from home. The panoramic views from these, towards CUPA's gardens and the city, are qualities that significantly improve the recreational experience in these circulation areas [Figure 3].

The surveys also reveal that the dimensions of these corridors allow keeping a healthy distance between users. Once again, it is seen that by using the spatial setup, it is possible to define spaces with a lower risk for airborne transmission. The safety open spaces provide [Figure 3], is reinforced by the users wearing masks. An aspect that was confirmed during the field trips.

The search for COVID-19 cases on the local government's official platform, showed that no infections have been identified in CUPA, either on the interactive map, or in the graphs per community (Mexico City Government, 2020). Likewise, most of the 291 respondents mentioned not knowing about any infection inside the complex, despite being located in front of 20 de Noviembre Hospital, which attends COVID patients and creates the fear of possible infection among some inhabitants, according to the comments received in the surveys.

Those who mentioned they worked outside their home, said that on returning to CUPA, they have the feeling of being protected from the virus, because the spaces to enter their homes are open, allowing air to circulate [Table 4]. Those indicating otherwise argued that the fear comes from being close to the hospital: They say that there is a risk of infection, but also mentioned the cleanliness of the gardens, which are used by other neighbors, to walk their dogs to relieve themselves, but whose owners do not pick what they leave behind, an aspect that refers to a complex neighborhood coexistence, typical of this urban habitat (Duahu & Giglia, 2008, p. 294), and the management issues that this complex has had after the changes in the internal property arrangements (Gómez, 2020).



DWELLINGS

Figure 4
Drawing with the architecture floorplan and volumetry of apartment type A. Source: Preparation by Raúl Cerezo (2021)

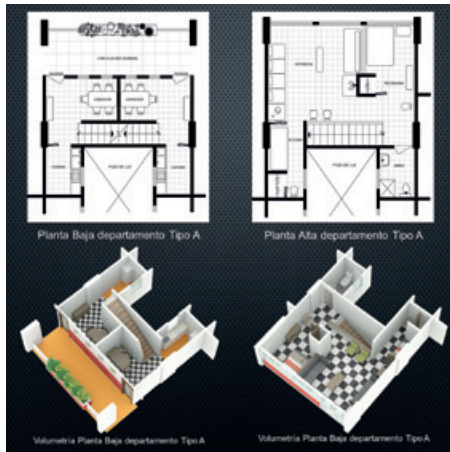


Figure 5
Drawing with the architecture floorplan and volumetry of apartment type B-C. Source: Preparation by Raúl Cerezo (2021)



Figure 6
Drawing with the architecture floorplan and volumetry of apartment type D. Source: Preparation by Raúl Cerezo (2021).

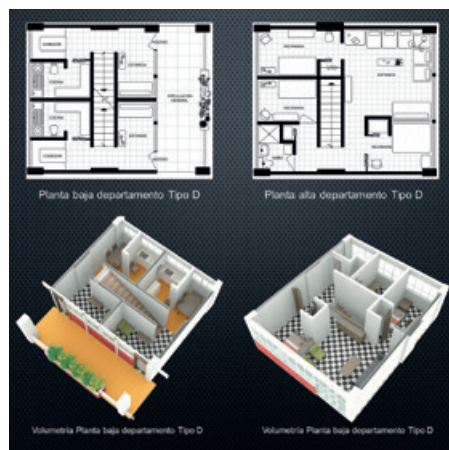
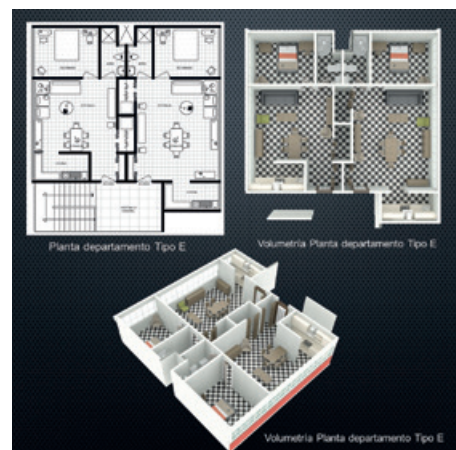


Figure 7
Drawing with the architecture floorplan and volumetry of apartment type E. Source: Preparation by Raúl Cerezo (2021).



Apartment type A is located in the 12-story towers. It is called “corridor”, because it is accessed through an open perimeter corridor [Figure 3], that leads to the elevators which rise from the first floor of CUPA. It has an area of 48m² and is built on two levels. On the entrance level, there is a dining room and kitchen, while the next holds the bathroom, living room and bedrooms [Figure 4]. The picture windows on the façade allow entry of sunlight and fresh air into the entire house.

The survey results [Table 5], and their comparison with the distribution of this first typology, reveal that the window design and size help to reduce the indoor transmission of the virus. They also provide panoramic views of the city and CUPA's interior gardens, as the towers are tall enough to get these views [Figure 8]. Likewise, on having two levels in this type of dwelling, it is possible for more than one person to work from home.

Apartment type B – C, is located in the 12-story buildings. It has a surface area of 80m² and is known as “corner”, because it is located on the corner of the corridors, next to the elevators. It has a staircase that connects the dwelling with the access corridor, and is built on just one level, where all the stores are [Figure 5]. The survey results [Table 5] and their comparison, reveal that this typology has the same indoor qualities as type A: lighting, ventilation, and views. However, on being built on just one level, the separation between work activities and household chores is not as clear as in the previous case.

Apartment type D is colloquially known as “B, D or F”. It is located in the north-south facing apartment towers. They link, as bridges, the four east-west facing towers, generating a kind of zig-zag and *Redan* layout, characteristic of the complex [Figure 2]. This typology is 110m² in size and is built on two levels. On the first level, it has a dining room, kitchen and a living room, while on the following level, there is a bathroom, sitting room and three bedrooms [Figure 6].

The survey results [Table 5] and their comparison with the dwelling's design, show that this type of apartment has the same design qualities as type A. In addition, on having a considerably greater size, it is possible to more easily separate the area that will be destined as an office inside the home.

Finally, apartment type E is the only housing prototype that is built in a 3-story building, this is why the inhabitants colloquially call it “the small little one”, alluding to the size of the property. Unlike the towers, here there are no elevators or corridors. The scale of the buildings is visibly smaller. These apartments have a surface area of 57m² and are built on a single level [Figure 7].

Table 5

Tabulation of answers collected to evaluate the possible interior design elements to reduce the airborne COVID transmission in CUPA's four dwelling typologies. The options that were mentioned the most by the respondents, are highlighted for their identification. Source: Preparation by the author

The survey results [Table 5], and their comparison with the volumetric design of the dwelling, show that in this apartment type, the sliding window of the façade permanently allows the entry of sunlight and fresh air, just like in the rest of the dwelling typologies. However, on being in a low-rise building, it is not possible to see the gardens, and much less the city. Its development on a single level, prevents separating the activities, just as occurs in typologies A and D.

Living in CUPA during Covid		Dwelling type A (146 questionnaires)		Dwelling type B-C (58 questionnaires)		Dwelling type D (36 questionnaires)		Dwelling type E (52 questionnaires)	
Inside the four dwelling typologies		Answ.	%	Answ.	%	Answ.	%	Answ.	%
1. Do the windows in your apartment allow ventilating all the rooms?	a. Yes	131	90,34482759	51	87,93103448	34	94,44444444	50	96,15384615
	b. No	14	9,655172414	7	12,06896552	2	5,555555556	2	3,846153846
2. What have the windows of your home meant for you during the confinement?	a. They have allowed me to stay relaxed	32	22,06896552	12	20,68965517	6	16,66666667	12	23,07692308
	b. They allow me to concentrate more while I work	21	14,48275862	10	17,24137931	2	5,555555556	0	0
	c. I feel lucky to have these windows with views to the city or CUPA's gardens	89	61,37931034	36	62,06896552	28	77,77777778	8	15,38461538
	d. They bother me because I don't have privacy	3	2,068965517	0	0	0	0	28	53,84615385
	e. Nothing really	0	0	0	0	0	0	4	7,692307692
3. Do you have to work from home?	a. Yes	80	55,17241379	41	70,68965517	22	61,11111111	31	59,61538462
	b. No	65	44,82758621	17	29,31034483	14	38,88888889	21	40,38461538
If you work from home									
1. Have you had to make changes in your home to work from there?	a. Sí	26	17,93103448	16	27,5862069	2	5,555555556	14	26,92307692
	b. No	119	82,06896552	42	72,4137931	34	94,44444444	38	73,07692308
2. What type of changes have you made?	a. Only changes in the furniture	79	54,48275862	48	82,75862069	25	69,44444444	35	67,30769231
	b. New rooms	3	2,068965517	3	5,172413793	0	0	2	3,846153846
	c. Redistribute rooms inside the home	6	4,137931034	0	0	11	30,55555556	5	9,615384615
	d. None	57	39,31034483	7	12,06896552	0	0	10	19,23076923
3. Does the distribution of your apartment let you to do all your work activities from your home?	a. Yes	118	81,37931034	18	31,03448276	34	94,44444444	14	26,92307692
	b. No	27	18,62068966	40	68,96551724	2	5,555555556	38	73,07692308
4. Can you keep doing the activities you did at home before the pandemic?	a. Yes	118	81,37931034	21	36,20689655	34	94,44444444	14	26,92307692
	b. No	27	18,62068966	37	63,79310345	2	5,555555556	38	73,07692308

DISCUSSION

The commercial establishments available in the CUPA that currently bear witness of the design principles that identify collective housing superblocks, have been enough to supply basic products during the pandemic, among the inhabitants surveyed. They have become a viable supply option that has guaranteed the supply of food and medicine. As such, there is no need to go outside the complex, to distant areas of the city, to buy them.

The common spaces help to reduce work stress caused by living and working in the same place. In the same way, the perimeter access corridors to tower dwellings have been useful, not just because of their role of connection and circulation, but also because they have become spaces where people can freely walk for pleasure without fear of infection. On being open, they allow air circulation and, at the same time, the height of the buildings allows enjoying the views they offer towards the city or the gardens of the unit [Figure 8]. The gardens are places where, despite the neighborhood pet walking issues, it is possible to move around without the risk of infection that enclosed, unventilated collective spaces have. The green areas have gradually been revalued by the inhabitants as necessary extensions of their home during the obligatory confinement the pandemic has caused.

Regarding the four dwelling types analyzed, it can be said that the conditions are variable. However, the materialization of modern design principles in large picture windows that allow the entry of sunlight and fresh air, acting as picture frames in the towers for the landscape elements - panoramic views of the city and gardens-, generating architectonic design qualities that are clearly acknowledged by the inhabitants.

On comparing the results shown in Table 5 with the design of the dwelling typologies, it is seen that all department types have natural ventilation inside all their rooms. The physical barriers needed to separate work, family, and living activities are provided for in the two-level apartment typologies, although the two apartment types built on one level, implies mixing activities within the dwelling.

Figure 8
Views from the perimeter corridors of CUPA.
Source: Photograph by the author (2020).



CONCLUSIONS

Modern collective housing formed a living paradigm that, during the current pandemic, has regained validity from its design, one which is useful to reduce the airborne transmission of a virus. The results of the research presented here, show that the modern ideal of forming healthy, hygienic and ventilated spaces, must be revisited considering the usefulness that cases like CUPA have shown up until now.

The complex studied has a high population density. However, according to official Mexico City government data, it has not had infections since March 2020, when the pandemic broke out in Mexico, despite being in front of a hospital attending COVID-19 cases. It is located in a privileged area of the city, with access to supermarkets, parks, services, malls, work and all the public transportation systems, qualities that, along with the amenities that CUPA has, have been determining factors in reducing non-essential movement for its inhabitants and, therefore, contributing towards reducing infection.

This prodigious housing complex, paradigmatic in Latin America, once again shows the virtues of its urban-architectonic design, now from a post-COVID vision. Its collective and circulation spaces are open; hence they are permanently ventilated. Its size naturally promotes the needed physical distancing that allows avoiding crowding in shared spaces. Its gardens, which occupy 80% of the subgrade area around the buildings, provide generous panoramic views from the homes [Figure 8] and are also, safe spaces for the recreation and circulation of the inhabitants.

CIAM's interest, particularly that of 1933, to plan the city using housing superblocks, one that pushed for a hygienic dwelling, with natural ventilation and sunlight to reduce infection of diseases, like tuberculosis, must be revisited, to form part of the response that architecture and urbanism generates looking to establish new design paradigms, focused on reducing the airborne transmission chains of Covid-19.

Lessons from the past are useful in setting new paths for the design of healthy spaces, amid a normalcy that may have arrived to stay. CUPA shows that it is possible to revisit these lessons and contribute towards forming the design paradigms needed today as an obligatory response to the pandemic from architecture and urbanism.

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SOCIAL UPRISING IN CHILE AND PATRIMONIALIZATION PROCESSES: A RESIGNIFICATION PARADIGM OF MEMORIES

Estallido social en Chile y procesos de patrimonialización:
un paradigma de resignificación de las memorias

Explosão social no Chile e processos patrimoniais:
um paradigma para a resignificação das memórias

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Communication taken from the line of research: "Key aspects of new patrimonialization processes in the historic city and the architecture of Chile", developed from 2020 onwards within the Institute of History and Heritage of the Faculty of Architecture and Urbanism, Universidad de Chile.

The Law School of Universidad de Chile, building from 1938, projected by the architect Juan Martínez Gutiérrez and declared as a Historic Monument in 2014. Located to the north of Plaza Italia, in Santiago de Chile, it represents one of the national heritage symbols affected by the events of the "social uprising" in Chile (October 18th, 2019). Source: Unpublished photograph of the architect, Fernando Dowling Leal (2019).

ABSTRACT

In recent years, both globally and locally, a profound change in the paradigm has been seen with respect to what has been traditionally accepted as a manifestation of heritage. In part, this conceptual and methodological transformation is due to the emergence of patrimonialization processes, driven by social conflicts that go against the institutionalized discourses of heritage. This results in resignifications of the stories and memories in the territory, the city and the architecture, associated with new categories of heritage that need to be addressed. This work is about this new paradigm, taking as a case the so-called 'social uprising, which has affected Chile since October 18th, 2019. Beyond being perceived as a destructive phenomenon, which initially targets aspects of a socio-political nature, the presence of the conflict in Chilean society points to a sharp criticism of the heritage representation system. In its spatio-temporal trajectory, new socio-spatial practices arise that satisfy the memory expectations of the communities regarding a transforming reality. The article aims to contribute to the field of architecture and the built environment, insofar as it allows reflecting on the transformation of meanings and values of heritage that emerges in the daily reality of our cities. Using a descriptive methodology, based on recent media documents, some emblematic situations of the problem are addressed, manifested in the consolidated urban areas of La Serena, Valparaíso, Santiago, Concepción, Temuco, and Punta Arenas. In them, the patrimonialization operations make visible the contrasts between the discourses of the State and those produced by social organizations, the resignification of elements of traditional heritage and the emergence of the city as a space for negotiation of memories. From all this, the renewal of the values and attributes, traditionally assigned to monuments, is inferred, whether in their objectual, architectural or urban condition, as well as the potentiality of heritage, as a channel for dialogue, coexistence, and cohesion in the ongoing debate about conflicting stories and memories.

Keywords: social conflict, patrimonialization processes, discourses, memories, social uprising in Chile

RESUMEN

En los últimos años, a nivel mundial y local, asistimos a un cambio profundo del paradigma respecto de lo que tradicionalmente hemos asumido como manifestación del patrimonio. En parte, esta transformación conceptual y metodológica se debe a la emergencia de los procesos de patrimonialización, motivados por conflictos sociales que operan en contra de los discursos institucionalizados del patrimonio. De ello resultan resignificaciones de las historias y las memorias en el territorio, la ciudad y la arquitectura, asociadas a nuevas categorías de patrimonio que es necesario atender. El presente trabajo aborda este nuevo paradigma, tomando como caso el denominado "estallido social", que afecta a Chile desde el 18 de octubre de 2019 y que se extiende hasta la actualidad. Más allá de percibirse como un fenómeno destructivo, que inicialmente apunta a aspectos de carácter sociopolítico, la presencia del conflicto en la sociedad nacional señala una aguda crítica al sistema de representación del patrimonio. En su trayectoria espacio-temporal surgen nuevas prácticas socio-espaciales que satisfacen las expectativas de memoria de las comunidades respecto de una realidad en transformación. El artículo pretende aportar al ámbito de la arquitectura y el ambiente construido, en cuanto permite reflexionar sobre la transformación de los significados y valores de los patrimonios que emergen en la realidad cotidiana de nuestras ciudades. Mediante una metodología descriptiva, basada en documentos de prensa recientes, se abordan algunas situaciones emblemáticas del problema, manifestadas en las áreas urbanas consolidadas de La Serena, Valparaíso, Santiago, Concepción, Temuco y Punta Arenas. En ellas, las operaciones de patrimonialización visibilizan los contrastes entre los discursos del Estado y los producidos por organizaciones sociales, la resignificación de elementos del patrimonio tradicional y la emergencia de la ciudad como espacio de negociación de las memorias. De lo anterior, se infiere la renovación de los valores y atributos tradicionalmente asignados a los monumentos, ya sea en su condición objetual, arquitectónica o urbana, así como también se detecta la potencialidad del patrimonio, como canalizador de diálogo, convivencia y cohesión en el continuo debate por las historias y las memorias en conflicto.

Palabras Clave: conflicto social, procesos de patrimonialización, discursos, memorias, estallido social en Chile

RESUMO

Nos últimos anos, global e localmente, assistimos a uma mudança profunda no paradigma relativo àquilo que tradicionalmente assumimos como uma manifestação do patrimônio. Em parte, esta transformação conceptual e metodológica deve-se à emergência de processos de patrimonialização, motivados por conflitos sociais que operam contra os discursos institucionalizados do patrimônio. Isto resulta em ressignificações das histórias e memórias no território, na cidade e na arquitetura, associadas a novas categorias do patrimônio que precisam de ser abordadas. Este trabalho aborda esse novo paradigma, tomando como caso de estudo a chamada "explosão social" (estallido social, em espanhol), que tem afetado o Chile desde 18 de outubro de 2019 e que continua até os dias de hoje. Muito além de uma visão dessa "explosão" como um fenômeno destrutivo, que aponta inicialmente a aspectos de natureza sociopolítica, a presença do conflito na sociedade nacional é um indicador de uma forte crítica ao sistema de representação do patrimônio. Em sua trajetória espaço-temporal, surgem novas práticas sócio-espaciais que satisfazem as expectativas de memória das comunidades com respeito a uma realidade em transformação. O artigo pretende contribuir para o campo da arquitetura e do ambiente construído, na medida em que nos permite refletir sobre a transformação dos significados e valores dos patrimônios que emergem na realidade cotidiana das nossas cidades. Por meio de uma metodologia descritiva, baseada em documentos de imprensa recentes, são abordadas algumas situações emblemáticas do problema, manifestadas nas zonas urbanas consolidadas de La Serena, Valparaíso, Santiago, Concepción, Temuco e Punta Arenas. Nelas, as operações de patrimonialização tornam visíveis os contrastes entre os discursos do Estado e os produzidos pelas organizações sociais, a ressignificação de elementos do patrimônio tradicional e a emergência da cidade como espaço de negociação de memórias. De tudo isto, infere-se a renovação dos valores e atributos tradicionalmente atribuídos aos monumentos, seja na sua condição objetual, arquitetônica ou urbana, bem como a potencialidade do patrimônio como canal de diálogo, convívio e coesão no debate contínuo das histórias e memórias em conflito.

Palavras-Chave: conflito social, processos de patrimonialização, discursos, memórias, explosão social no Chile

INTRODUCTION

FROM SOCIAL CONFLICT TO PATRIMONIALIZATION PROCESSES

The social conflict that has been in place in Chile since 2019, is a kind of socialization, destined to seek a relative social cohesion, through "reciprocal actions" between different individuals and groups that struggle to spatially and temporally coexist (Simmel, 2014, p. 103). The subjective experience the social conflict has, leads to a certain way of perceiving the real problems. It is discovered that the conflicts not only question or alter orders in the short-term, but, above all, change the collective mentalities in the long-term, developing epistemic views, intellectual twists, and social behavior unheard of before the social movement (Lorenzo Cadarzo, 2001, p. 250).

Behind the social conflicts, powerful patrimonialization processes are created, where different points of view, and interests in play are detected, led by heterogeneous social groups, which have as a result, a critique of the "authorized" discourses that are exercised when the social crisis unfurled. However, as García Canclini states, the growing inequalities in the processes of formation and appropriation of cultural heritage, demand studying this "as a space of material struggle among the classes, ethnicities and the groups of contemporary societies" (1999, p. 18). Following Ballart, the value of heritage, is a relative concept, not inherent to the things that it designates, and which depends on human perception and behavior, provided with historical, intellectual, cultural and psychological references (1996, p. 218). In these processes, the cultural and natural elements are chosen and reworked in response to new social uses (Roigé & Frigolé, 2010, p. 12), and the inherited traditional norms and models are questioned, challenged and subverted, specifically from the moment in which a new categorization of understanding the present emerges (Davallon, 2006, p. 95).

According to Iniesta (2009, p. 479), this process comprises four phases: a) identification, through evidence, of the elements that a social collective considers significant; b) their validation by a socially legitimized institution; c) their proclamation and marking to make the values of these elements visible; and d) the transmission and activation for the preservation of the integrity of the resulting heritage, to keep it in the production circuits of knowledge, imagery, and memories. This implies that civil society, immersed in the conflict, does not just take part in some phases of the heritage value chain, but in the entire process (Sánchez Carretero, 2017, p. 196-197). Throughout, what is vindicated in the social conflict and heritage formation relationship, is the right to a social memory that aims at being collective. The activation of heritage that emerges in this way is, as Prats indicates (2005, p. 18-19), the result of a fundamentally political activity, where the individuals and collectives appear as a place of materialization of social practices and, they themselves are producers and reflections of their own representations (Larraín, 2010, p. 49).

The resignification of heritage values corresponds to a spatial-temporal process that emerges alongside a crisis of its condition of representativity, in the complex framework of the conflictive relationships that the different social players star in [Figure 1]. All this explains why heritage objects, be these public spaces, architecture, or objects of remembrance, may be, in a given moment of history, subject to veneration by groups of power, to become, in another moment, subjects of criticism and reworking of meanings. On the other hand, the monument and document tension come together in this phenomenon, where the first would not have historic existence without its transformation in a documental testimony of time, or said in another way, in a bearer and anchor of discourses about an interpretation interested in the past. The conversion of a monument into a document brings with it, the testimonial need of a reading of history and a form of discourse, born at the heart of a group that controls the power and the associated knowledge.

Figure 1

Protest of "Heritage is all of us" social groups, Santiago de Chile, 2014.
 Fuente: Radio Cooperativa (24 mayo 2014) (<https://www.cooperativa.cl/noticias/cultura/patrimonio-cultural/cerca-de-4-mil-personas-marcharon-por-el-patrimonio-de-chile-ensantiago/2014-05-24/195400.html>)



As Riegel claimed in 1903, the monumental role of heritage asserts its ability to represent meanings and values in the present, through a citizen awareness that tries to gather a sense of contemporaneity from its historic past, to, in one way or another, be driven to an idea or project of the future (1987, p. 23). In this measure, the structure of the space itself, its architecture and monuments, act as a mirror that reflects these historic absences, but also voices and memories that are updated with the clamor of the social demands.

The crisis of representation of heritage and its monuments-documents, is something that affects the image of the matter, or the matter of the image. In this historic process, the dynamics of obsolescence of meanings and values of the elements considered as heritage emerges, which is the result of the weakening of discourses that were strong in one era, due to the hegemony exercised by some groups of power over others. Thus, a crisis of heritage representation appears, where the "absence of the presence" is experienced, that is to say, when new senses are produced in response to the historicity of socio-cultural changes occurring in a community. In an unceasing movement of presences and absences, the represented reality of heritage, does not accurately or statically reflect the primary nature of the daily and natural life of human beings (Lefebvre, 2006, p. 30).

METHODOLOGY

REPRESENTATIONAL ANALYSIS OF HERITAGE THROUGH ITS DISCOURSES, HISTORIES AND MEMORIES

Due to the complexity of the issues that arise in the patrimonialization process, which come from the Chilean social conflict, an approach has been used that understands heritage as a system of social representations, that comprises two dialogic natures. The first of these is determined by its physical-material presence, through the diverse categories of heritage worth conserving and regulating: territories, urban constructs, architecture, objects, etc. On the other hand, the second nature, is representational, the image that we have of the first, which is acquired and transmitted socially through the act of language, produced intellectually, whose ingredients are the memories, recollections and imagery (Lefebvre, 2006, p. 30).

Looking to characterize the patrimonialization process that is currently occurring as an effect of the social uprising in Chile, as an example, the re-

levant cases that took place in some urban areas of the country have been used, like La Serena, Valparaíso, Santiago, Concepción, Temuco and Punta Arenas. These were chosen on being monuments and/or public spaces that are present in the national and/or local memory, where there has been a permanent questioning regarding the meanings attributed to them, through major physical and spatial changes. The intention here is not to evaluate the entire national heritage, nor to develop an exhaustive analysis of the situations mentioned, but rather to establish the presence of the phenomenon in those examples that has been matter of public opinion, trying to present their similarities and differences.

The documental material used consists of specialized bibliographical references and recent documents, comprising iconographs, photographs and news stories. Through their investigation, it is possible to detect the conflicting voices, social imageries, and the new types of heritage that would be emerging in the process. The patrimonialization mentioned, is faced using three perspectives: a) the preparation of conflicting discourses between the State and social collectives; b) the resignification of spaces and objects of heritage memory, given by monuments, urban spaces and, renowned architecture; and c) the activation of practices in the city, as a space for the negotiation of memories.

ANALYSIS

SOCIAL UPRISING IN CHILE: TRIGGER OF A NEW CULTURAL HERITAGE VALUATION PARADIGM

a) From the new discourses to the activation of contradictory memories of heritage

On October 18th, 2019, the so-called "social uprising"¹ broke out in Chile, an event with cross-sectional protests and claims that had not been seen since the time of the civic-military dictatorship (1973-1989). The phenomenon, not exempt of violence, has laid bare a fracture in Chilean society, that transcends the ideological and party-based positions. Along with the demand of conditions for a dignified and equalitarian life, the level of representation of the institutions and of the authorized elements of the national cultural heritage have been questioned. From this moment forth, a true revolution in public spaces and monuments in the country's main cities was let loose. Social media based calls to marches and urban occupation, have become a constant ritual [Figure 2].

In cities like La Serena, Valparaíso, Santiago, Concepción, Temuco and Punta Arenas, the heritage involved has been the unprecedented appearance of spatial and use practices, with attempts to resignify the symbols of the national historic memory. The conflict has essentially unfolded on the discursive plane, between the traditional institutions of the Republic and the State, and the social organizations immersed in the conflict. An important percentage of the social critique aims at the authorized discourse of heritage, systematized by the State, the elites, and academia. This has led to heritage protected by legislation, works as a tactical device of rejection, not because of their intrinsic qualities, but rather because of the discourses of cultural hegemony these embody. To give visibility to the discourses marginalized by the traditional system, public spaces, places of memory, traditional architecture, and public monuments have been intervened.

Under this logic of confrontations, it is possible to identify two dimensions of the discourse, where different ways of perceiving and evaluating reality are revealed:

The first is the *institutionally authorized discourses*, born from the structures of power represented by State agencies, in particular by the Ministry of Culture, Arts and Heritage, as well as the political and economic decision groups, but also from academia and disciplinary communities. In a second group, there is

1 The chronology of the popular uprising is marked by the following milestones: October 4th, 2019, the Government announces 30-peso rise in urban transportation fares. On the 14th, secondary-school and university students collectively organize and call for a "widespread evasion" of these fares. On the 18th, the movement radicalized and, in just a week, the protests stepped up with the destruction of numerous stations and metro lines.

Figure 2

The persistent protests of the Chilean social uprising that took place in Plaza Italia in the historic heart of Santiago, later renamed by the groups as "Plaza de la Dignidad", or Dignity Square.
Source: Unpublished photograph by Fernando Dowling Leal (2020).

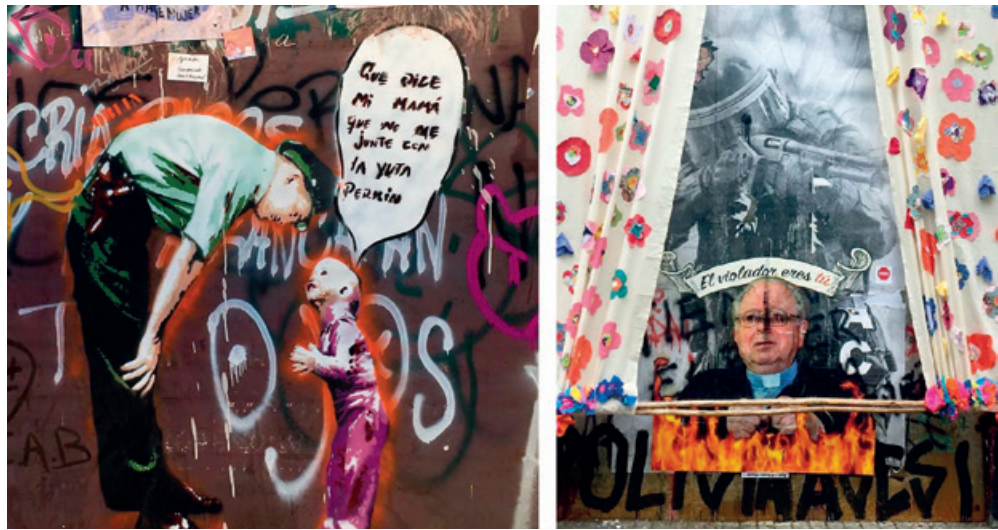


the flow of the *socially radicalized discourses*, ones of a more or less spontaneous emergence, represented by communities, social groups, ethnic groups, union and political entities who state being outside the traditional decision-making system.

In the institutionally authorized discourse, the social uprising is perceived as a threat to the historic and cultural heritage the Nation has managed to instill, through the National Monuments Law and the General Urbanism and Constructions Law. In this case, the supposedly shared memory, tends to close upon itself, becoming static and monolithic, ultimately becoming a powerful mechanism of denial and exclusion. In this case, the heritage discourse is dressed as a mythical character, and stands up as a sort of self-defensive strength. However, in the socially radicalized discourse, it is possible to see a tendency towards making the issue horizontal, and undermining the precept of the formal institutions. The discourses of the elite end up strange and unintelligible for the reality experienced by the petitioning social groups. A discourse that refutes and that, at the same time, exposes the erosion of the figure of the State, of the business entities and the juridical-legal structures. Social discourses reflect a true crisis of representation with an explicit questioning of the meanings and values of a set of heritage items that were unquestioned for many, many years [Figure 3 and 4].

In the reality of the conflict, a representative flow of what is understood as heritage is determined, through which, the relations between the ways society, its histories and collective memories exist, are redefined. It is confirmed that each representation of the identities annulled and/or marginalized from the institutionalized discourse, refers to others, in a timeline, until building a complex network of meanings that have not yet been stabilized (Castoriadis, 2013, p. 505). This is, for example, what explicitly appears in the field of memories demanded by indigenous peoples, especially the Mapuche, that tend to be visible and overlap the memories bequeathed by the Creole, demanding dignity in a public space that has historically been culturally and politically denied to them.

Both types of discourse are territorialized in the city, in public spaces and in architectonic devices, changing the static and reverential sense that they had had until then. The discourse flow is inserted in the current framework of the relevant legal changes, through which the tale of history that has led to the presence of the monuments and the space marked by



Figures 3 and 4

The new iconography of the socially radicalized discourses, accusers of the traditional institutions of the Republic: the State, the Catholic Church, the Armed Forces and the Police. Source: Unpublished photograph by Fernando Dowling Leal (2019).



the few, for the memory of the Nation, is under stress. These are the bills of the laws on Cultural Heritage, Social and Urban Integration, modernization of the Environmental Impact Assessment System (SEIA, in its acronym in Spanish), the amendments to the bills that create the Indigenous Peoples Ministry, the National Advisory Body and the Indigenous Peoples Advisory Body. For the detractors, these legal initiatives that affect culture and heritage, would only hide the goal of consolidating the presence of the market as the crux in decision-making, generating even more fragility than now. Particularly, the Cultural Heritage Bill, which would replace the current National Monuments Law, which dates back to 1970, has been the backdrop for the criticism of some social organizations outside the authorized discourse. In this regard, in March 2020, the “Community for Chilean Heritage” stated that the Government was acting in a simplistic and reactionary way, on connecting the deterioration of the monuments with the destruction caused with the social uprising. The criticism aimed at that the country “demands a profound reflection regarding the social and cultural transformation that are under dispute today, which we cannot reduce to the solely normative” (*El Mostrador*, March 11th, 2020).

b) Resignification of civic spaces and the objects of heritage memory.

In the social conflict, the urban spaces have been brutally affected by physical destruction, but they have been relieved in their role as places for rebuilding memories, entering in conflict with the authorized history of the city. In these places, the social protests, the imageries, and the identities are expanded to the traditional streets and squares that form the ramification of the resignified public space. The modern resignification of the monuments seen in Chile, is manifesting itself as a response to the socio-political context of a clearly defined social time. Unlike the commemorative role of intentional monuments, that were promoted by the erudite elites, in the case being analyzed, they are becoming the result of a subjective appropriation, where the social observer-subject is established as the central factor in the constitution process of values that are ever more relative when it comes to permanently changing points of view (Riegl, 1987, p. 25).

In Santiago, the circuit comprising Plaza Italia, starting from Alameda Bernardo O'Higgins, Parque Forestal, and Avenida Vicuña Mackenna, has been consolidated as a hotspot for new meanings and values attributed to a heritage that is being made. The current Plaza Italia was renamed as Plaza de la Dignidad (Dignity Square), which reflects the rejection of the injustice and lack of representativity of the most cross-sectional values of Chilean society. Unlike the mass-scale traditional actions that have taken place at Plaza Italia, here the national flag coexists with Mapuche flags and other symbols taken from social daily lives, accounting for the real existence of an ethnic, social, and ideological diversity, that has not been acknowledged in the multiculturalism of the national identity. The statue of General Manuel Baquedano, the work of the architect, Gustavo García del Postigo and the sculptor, Virgilio Arias Cruz, built at public expense and inaugurated in 1928 in commemoration of the battles of the Pacific War, was displayed for 98 years in the center of this square. On March 10th, 2021, the National Monuments Council decreed the removal of the monument and the building of a metal perimeter fence, aiming at performing preventive and restorative conservation works, as well as works to safeguard the stone plinth and the remains of the "unknown soldier", that rest there.

The monument to General Baquedano sums up the tensions experienced at Plaza Italia, as if this place treasured a profound density of historic meanings that require a reinterpretation in modern-day Chile. The figure of Baquedano "continues to be valid, and returns to life, it is not a dead monument, it is a living monument" (De Ramón, January 15th, 2020). Currently, and despite the international Covid-19 pandemic, Plaza Italia has continued to see confrontations, and the ever more attacked statue of Baquedano, has experienced attempts to forcibly cut the legs from the soldier's horse [Figure 5].

In Valparaíso, a standout case is represented by the area around the National Congress. Here, the claims against the symbols of political power are clear, as these occupy a large part of Avenida Argentina, Avenida Pedro Montt, Calle Victoria and Plaza O'Higgins. In this urban space, a visceral reaction is read against the elite and the normalized memory of their power. In the city, Plaza Aníbal Pinto was also rebaptized as Plaza de la Resistencia or Resistance Square on December 3rd, 2019, underlining the role as a trench this historic space has had during the protests. In both cases, a generalized rejection of an official history and memory embodied in the urban space, is seen. It is worth stating, that in this city, the phenomenon is doubly raw in nature, as a consequence of the endemic condition of poverty, abandonment, and deterioration that the public space, and architecture in general, and that of heritage in particular, has experienced. This fact, fosters that patrimonial-

Figure 5

Plaza Italia, the site of social transformations and reappropriations of the symbols of the Nation's historic and cultural heritage. At the heart of this urban space, the image of General Manuel Baquedano, turned into the spoils of war within as of yet established discursive flows and memories. Source: Unpublished photograph by Fernando Dowling Leal (2020).



Figure 6

Valparaíso. Occupation of Avenida España and the surroundings of the National Congress, in the "March of all marches" called in Valparaíso on October 28th, 2019. Source: Aranda (2020, p. 58).



Figure 7

Concepción. Gathering at the Plaza de Tribunales de Concepción, October 23rd, 2019. Televisión Universidad de Concepción (October 23rd, 2019) (<https://www.tvu.cl/prensa/tele-entrevista/2020/10/05/a-un-ano-del-estallido-social-que-son-las-demandas-ciudadanas-pendientes.html>)



zation actions, or those of transgression of the legally protected monuments have an urban and environmental scenario that is prone to the effervescent social claims [Figure 6].

Towards the south of Chile, the city of Concepción has seen its rhythms, rituals and images of daily life, changed. The radius of spatial action has comprised the Arch of Medicine of Universidad de Concepción, the civic center, Plaza Independencia, the Court sector, and the intersection of Avenida Bernardo O'Higgins and Paicaví [Figure 7]. In Concepción, the social uprising has presentified ephemeral places that denote overlapping layers of social meanings, that translate into a "great temporal project that symbolizes the struggles for rights and freedoms" (De Souza 2020, p. 160).

Meanwhile, the resignified objects of public memory have mainly been statues, busts and foundations that portray historic events, characters and

Figure 8

Public monuments act as devices of resignification of history and memories. The figures of the poet, Rubén Darío, and the sculptured works of Fuente Alemana, located in the historic hub of Santiago, are shown.

Source: Photographs by Francisco Ubilla (2020) (https://elpais.com/cultura/2020/01/23/actualidad/1579806166_111949.html)



Figure 9

Plaza Sotomayor, Monument to the Heroes of the Naval Battle of Iquique, located in the ceremonial civic center of Plaza Rafael Sotomayor, in the Port sector of Valparaíso. As a result of the constant attacks on the monument, the Chilean Navy reinforces the security of the site where the remains of Arturo Prat and other naval heroes rest. Source: Sebastián Cisternas, Aton Chile, 2020.



symbols revealed as reverences of memory by the elites at the end of the 19th century and the first decades of the 20th. According to a survey made by the National Monuments Council, between October 2019 and February 2020, 1,353 national monuments were damaged throughout the country. The main focal points of aggression are against representations of historic events, heroes and characters of the Spanish conquests of the 16th and 17th centuries, and the republican symbols of the 19th and 20th. In the monuments intervened, readings appear that place national pride against forgotten stories (Gaete, June 30th, 2020), expressing disgust for Eurocentrist symbols, that do not match the representation of indigenous peoples, the Mapuche, especially.

In Santiago, sculptural works of a great historic and artistic value, mostly from the Centenary of National Independence (1910), have succumbed to graffiti and being dragged from their perch by the enflamed crowds. Among many other cases, is the monument to Rubén Darío, inaugurator of literary modernism in Latin America [Figure 8] and the Fuente Alemana or German Fountain of Parque Forestal. On Alameda Bernardo O'Higgins, the outer walls of the Gabriela Mistral Cultural Center (formerly UNCTAD) have received popular interventions, ones which the Government tried to remove at the time, finding the ferocious opposition of their authors. In this operation of resignification, there was no real destruction, but rather a kind of overlapping of complex historical meanings.

In Valparaíso, the Monument to the Heroes of Iquique, raised in 1883 in commemoration of the Naval Battle, located in the heart of Plaza Sotomayor, has suffered constant graffiti [Figure 9]. The Chilean Navy, the institution that safeguards this national heritage site, while condemning this "cowardly attack", stated that "the damage affects the memory and history of all those



Figure 10

In the city of La Serena, the monument to Francisco de Aguirre, replaced by the figure of the Diaguita, Milanka. Source: Photographer Lautaro Carmona (2019) (<https://www.thematelevision.cl/2019/10/24/en-la-serena-instalan-torso-de-mujer-diaguita-donde-se-encontraba-la-estatuade-francisco-de-aguirre/>)



Figure 11

In the south of Chile, in the city of Temuco, the figure of the Mapuche toki, Caupolicán, holding the head of the statue of the Chilean aviator, Dagoberto Godoy, removed from its original site. The flag of the Mapuche people adorning the scene. Source: El desconcierto (29 noviembre 2019) (<https://www.eldesconcierto.cl/nacional/2019/11/29/temuco-mas-justicia-menos-monumentos.html>)

Figure 12

At the southernmost point of Chile, in the Plaza de Armas in Punta Arenas, the bust of the rancher José Menéndez was changed for a figure representing a Selk'nam hunter. Source: Crítica sur (7 noviembre 2019) (https://criticasur.com.ar/nota/21974/en-punta-arenas-derribaron-un-busto-de-menendez-y-en-su-lugar-colocaron-el-de-un-cazador-selk_039_nam)



born in this country (...). We will not allow that an act like this happens again and we will use all the resources the law grants us to protect the place where the nations heroes rest" (CNN, February 23rd, 2020).

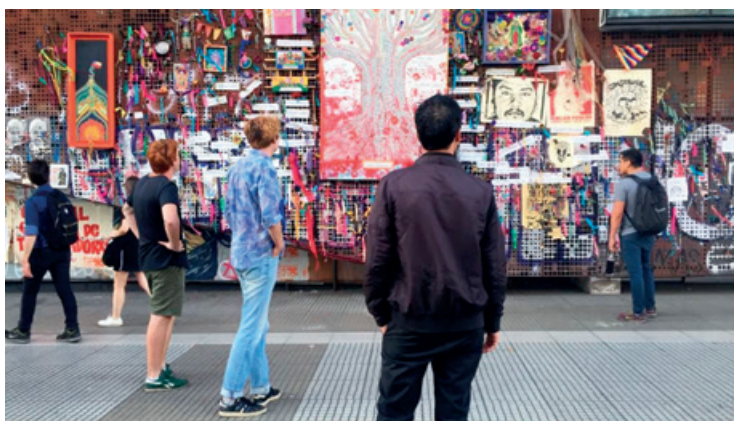
In the city of La Serena, the statue commemorating the Spanish soldier, Francisco de Aguirre, located on Avenida Panamericana (Paseo de las Esculturas or Sculpture Boulevard), and made in Madrid in 1950 by the sculptor Juan Adsuara, in the framework of Plan Serena, during the rule of President Gabriel González Videla (1946-1952), was torn down and burned, experiencing deformation to its face. In the same place, the monument was replaced for another, honoring a Milanka or a Diaguita woman, made with paper, cardboard and paint [Figure 10]. The occasion of its enthronement as a new monument, was celebrated with a Diaguita ceremony, and the collective behind this, demanded changing the name of Avenida Francisco de Aguirre to Avenida Diaguitas. A while later, amid the social fray, Milanka also succumbed to fire, set by persons unknown. This event represents the obsolescence that the monument to Francisco de Aguirre has experienced, for many years part of the collective imaginary of the city, as well as other similar figures in the country, facing the growth in recent years of discourses that vindicate indigenous content. It also shows, that in a climate of social conflict, the representativity of the new elements is ephemeral and changing.

In Temuco, the statue of Pedro de Valdivia, the Spanish conquistador and founder of Santiago, was decapitated. While, the head of the aviator, Dagoberto Godoy, was hung from the hand of the sculpture to the Mapuche *toki*, Caupolicán, symbol of resistance against the Spanish conquests. On the pedestal of the monument, reads the message "New Constitution or Nothing", and on the head of the toki, the Mapuche flag flaps [Figure 11]. Meanwhile, Punta Arenas has seen the destruction of the statue to the Spanish rancher, José Menéndez, identified as the symbol of the genocide of the now extinct Selk'nam people. On the same plinth that held Menéndez, the figure of a hunter from this indigenous culture of Patagonia was later placed [Figure 12].

Facing the criticisms that traditional groups have made about the vandalization of these monuments, other voices have appeared that appeal for a different reading. An interpretation along this line, is the one that says that destruction is a natural reaction to the violent imposition that the State has exercised so that those monuments are objects of remembrance. Referring to the monuments vandalized in Araucanía, Ema de Ramón said: "was it not an act of bullying to plant a figure of Pedro de Valdivia or Cornelio Saavedra in the Araucanía?" (De Ramón, January 15th, 2020).

Figure 13

Walls of Gabriela Mistral Cultural Center (formerly UNCTAD). The city and its architecture turned into metaphors of change and new practices of citizenry. Source: Unpublished photograph by Fernando Dowling Leal (2020).



c) The city: space of negotiation of memories, meanings and values.

In a context of social conflicts, the city itself, with all its components, is conceived as a questioned heritage, and on doing this on a heritage scale, it becomes a place for negotiation of social memory. This memory construct constitutes a geographical truth, where monuments are located, acquires concrete shape and appearance on three scales: the city, its public spaces, and its architecture. The imagery of this geography marks aspirations of groups and people that acquire a configuration in the spatial order of the city (Claval, 2012, p. 32). In the historic city, the communicational dynamics of the uprising present a porous and active society, where the claim is expressed in an urban body that is “tattooed” to make visible the social needs that were invisible, and the architecture dilutes its initial meaning (Manzi, 2020, p. 1) [Figure 13]. In this measure, it is possible to understand how, in the social construction of heritage, the city and its networks work as anchors for the materialization of the social representations with their respective meanings (Castoriadis, 2013, p. 525).

Santiago, Valparaíso, La Serena, Concepción and Temuco have become urban scenarios of these social reappropriations of heritage. The city has seen the daily rituals that were thought as being so permanent and solid (housing, services, trade and mobility) paralyzed, being replaced by a social control and real experience of biopolitics. The resulting urban geography presents new boundaries, policed-military territories and differential spaces, whose players have changed their roles and practices of use. The cost has been the physical and violent destruction experienced by the architectonic and urban heritage, canonized by the legislation that tried to protect it. In these cities, the spaces for urban protest have acted as territories activated for different collective projects that refer to the Nation, the State, the hegemonic institutions and, the more or less marginalized communities, that uphold differentiated and contradictory forms of transformation of reality, and projecting it over time. The set of these more or less visible footprints, between the current and the obsolete, is what appears as the essence of current heritage conflict.

From this perspective, it can be said that the Chilean social protest is outlined in what Lefebvre has called the construction of the “democratic public space”, a meta-discourse that vindicates the right to exist and live in the city, through the appropriation of the public space (1975, p. 123-139). The concept of citizenry, while expressing the democratic access to political decisions, also alludes to the sense of belonging and identity, of participation; fact which allows that in the city, the inhabitants are recognized as activating subjects of the space of the *polis*. The notion of public and democratic space that socially discusses the symbols of the new heritage, is being resolved through the



Figure 14
 During the social uprising, urban perspectives of Santiago and around Plaza Victoria in Valparaíso. The physical destruction and spatial entropy hide keys for the activation of collective projects. Sources: Unpublished photographs by Fernando Dowling Leal (2020) and Mario Ferrada Aguilar (2020).

appropriation of the public space. The historic city is living through a stage that is trying to recover its role of *civitas* and *urbanitas* at the same time, being activated once more as agoras of collective debate.

The set of implied urban symbols is rejected, because it is perceived as a device of repression by the dominant groups, but, at the same time, it channels the possibility of other alternative symbols. Thus, social practices break the physical, regulatory and hegemonically authorized memorial frameworks, constituting legitimate acts of reappropriation of the public space and of materialization of the right to the city (Oliva, 2020, p. 5). In the Chilean cities exposed to the social uprising, a tendency towards the resetting of a framework of references is seen, that is spatial and temporal in nature [Figure 14]. Following Iniesta (2009, p. 476), this would be a framework formed by three complementary ideas. The first determined by a desire to find a sense in the present existential experience, through knowledge of the past. The second, is the unconscious construction of a historic narrative that facilitates the political activation of memory and of the private and collective identities. And third, fruit of the former, appears a reconstitution of the urban landscapes, where social groups activate their knowledge and narratives, where at the same time, imageries achieved and the heritage objects that allow the spatial anchoring of their memories, appear.

DISCUSSION

Following the phenomenon seen in the cases above, what would deserve greatest attention to understand the new paradigm of Chilean heritage, is the identification of the hidden keys that those institutional and social discourses hide in the context of the conflict. First of all, are the heritage properties that are no longer relevant and obsolete, as their meanings are not in tune with contemporary social ideas or perceptions. Then appear the architectonic and/or urban elements that, prior to the social conflict did not have an explicit value, but through it, are reactivated and *patrimonialized* to translate the new existential reality of the communities. Finally, there would be those monuments that, recognized by the official, institutional and legal discourse, are interpreted by urban tribes within the social conflict as violent elements the counter the new contents that they seek to instill. This situation is represented by the statue of Manuel Baquedano in Plaza Italia in

Santiago, or the Monument to the Heroes of Iquique in Plaza Sotomayor in Valparaíso, through which the elitist sense of power is rejected, advocating for a cross-sectional, participative and popular view. In an analog manner, the actions of amputation and changing of symbols in the monuments of Francisco de Aguirre in La Serena, of Pedro de Valdivia in Temuco, or of José Menéndez in Punta Arenas, reflect the reaction facing the aggression perpetrated against the voices of the ethnic groups made invisible in the country's history.

In this sense, the dynamic articulation of social demands around converting the public space and the monuments, into devices of transgression to the symbols of the institutionalized memory could be identified as common elements presented in this work. This is the case of heritage whose meaning was changed, through discourses of ethnic, social, gender, class and ideological identities, that transform the artifacts of heritage embedded in the city into 'political places' for the debate of participation, justice, and dignity, as well as for those discourses marginalized from the official narrative. Likewise, the elements particular to each case would be determined by the degree of intensity and persistence of the historical narrative that affects each monument and grants new uses, morphologies, and meanings to the public space, and the architecture that surrounds it. It is enough to mention, in this sense, Plaza Italia or the surroundings of public monuments of the republican tradition, where physical changing actions and markings are taken to an extreme, through new icons, murals, or actions of art for the public space, all of which momentarily or permanently changes the landscape and the daily urban geographies.

It is with this clarity, that the technique of conservation, management and intervention in the patrimonially valued elements, resulting from the claims of the active communities (Prats, 2005, p. 22), acquires sense. An interpretation of the *patrimonializing* effect of the Chilean social uprising would be that it makes people face a scenario of definition and selection of what deserves to be remembered and what does not. It is for this reason, that it would be an error in reading and a cunning operation in reverse to reinstall or relocate the monuments brought down, or "to cleanse" the reappropriated civic spaces, returning them to their previous appearance, as if nothing had ever happened.

However, in the framework of the new paradigm outlined here, the material angle of cultural heritage that undoubtedly has been affected, and in some cases, greatly destroyed, also deserves being questioned. What is the acceptable limit so that from the resignification process, new values and new types of heritage emerge, without this meaning the complete disappearance of the material anchors of the pre-existing questioned memory? Because, this is about trying to give a greater density of meanings and values to our heritage, not just to simplify it based on revealing some memories and histories, while eliminating others. Is it possible to handle this purpose in a setting of social unrest? And, finally, how can the resignification processes be something more than a social demand, so that they are legitimized and institutionalized through the consensus of the communities that promote them?

The impact of the demands to install new memories in the city has allowed that heritage is politically activated, starting with social groups whose social, economic and cultural interests may be different, but that come together in the idea of the right to be the protagonists of their development, and that their understanding of heritage is installed in institutionality. In Plaza Italia in Santiago, around the National Congress and in the squares of Valparaíso, or in the urban enclaves of La Serena, Concepción, Temuco and Punta Arenas, the social critique, transformed into cultural action, has stripped the approaches of a simplifying and verticalized notion of national heritage. In the public spaces of some cities presented here, in particular Plaza Italia in

Santiago, the social conflict has broken down the idea of a single definition of citizenry, eroding the authorized discourse of the powers and institutions that represent it. The evident physical destructions of monuments or the disintegration of public spaces is the high price that must be paid to achieve a coexistence of different citizenries, loaded with imageries and values, that are still being configured.

The social uprising has broken the myth of national unity around symbols and heritage, through which the call is supposedly made to adhere to a robust and single static identity. On the other hand, the tension coming from the wish to install the urban presence of other memories, breaks up the accepted and standardized historic discourse, for which the protected monuments, urban spaces, architecture, and statues are taken from their naturality, to have to face a coexistence with the new interpretation of history. This would explain the iconoclastic and new heterotopic images that emerge with respect to the urbanized historic space, of the public monuments “removed from their place”, and of the architecture used as a stronghold of spontaneous appropriations, a mural of critique, and support of unheard of discourses [Figure 15].

A core historic element in the dispute for heritage, that today is clearly perceptible, is determined by the tendency to use the monument as a means of political destruction of the patriarchal narrative of power, tending to disintegrate the correlation between dominating and dominated, advocating for new forms of freedom, diversity, and justice, that in the end demand means of representation in elements located outside the authorized heritage canon. As Bengoa states, behind it all, would be the rejection of the imaginary of feudal society, currently liberal, which in the collective unconscious of the dominating sectors continues representing the model of order, norms, and decency (2006, p. 46). A symptom of this phenomenon, can be perceived in the presence of common elements among the national demands and those emerging from the Mapuche people. These would be along the lines of political self-determination or an increase in the levels of direct democracy, territorial recovery, or reappropriation of public spaces, demand for language rights, or regarding the new means of social communication and demilitarization of the Wallmapu (Mapuche territory) or rejection of the political-military control within urban spaces (Alvarado Lincopi, 2019).

Figure 15

The social uprising, that began in October 2019, with its accumulated demands has meant the radical alteration of civic order regulated in the city, along with the destruction of heritage elements unquestioned by tradition. Source: Unpublished photograph by Fernando Dowling Leal (2020).



CONCLUSIONS

First and foremost, it must be stated that, as this work comes from the observation of a phenomenon that is still ongoing, the conclusions that can be reached, have provisional and not definitive results. Likewise, it must be considered that the situations of resignification of Chilean heritage that have been outlined, although they are not representative of the general situation of the country, nor of each city they took place in, do allow concluding the existence of a behavioral tendency of the heritage in other analog cases. As a result of the social breakdown the country is experiencing, it is possible to acknowledge a profound crisis of representativity of cultural heritage, from which processes of resignification and revaluation emerge that jeopardize the monument-document relationship, and through which new discourses, histories, and memories are founded.

The attempt has been made to demonstrate that, under the current social transformation conditions in Chile, an innovative paradigm is being born that affects the epistemic, axiological, and methodological bases of cultural heritage. The new means of appreciating, identifying, and valuing heritage are based on handing back to the communities, their leading role in the social construction of their histories and memories. That is to say, a patrimonialization process that reactivates our relationship with space and time in the city and its monuments, that pays attention to processes, and with these, discourses and imagery, more than on the end products that define the types of heritage to be conserved. The Chilean social uprising allows becoming aware of the main role of heritage at the level of a dynamic and changing entity: that of aspiring to being a "common asset". When this is separated from its social content and its legitimate administrators, agony begins, that is only recovered when the sense of citizenry resurges. Heritage is, along with its capacity of remembrance, a matter of control and power, that will always install a means of appreciating the present, displacing the hegemonies and the representative flows of one place to another.

The phenomenon presented has opened up the need to prepare a renewed historiography of the new narratives that talk of the *ethos* of emerging heritage, of its diverse means of appearing, of its contents of value, and of social players who were unheard until now. Such a challenge, forces accepting the social conflict as a substantial part of any real patrimonialization process, and to move away from the comfortable and contented space of given areas and professionals that respect the heritage that was believed to be so certain, clear, and stable. In a moment of socio-patrimonial transformation, the enormous responsibility the State takes on to guarantee the adequate representative flow of discourse that carries with it identities, histories, and social and individual memories, is undeniable. This would mean making possible, that in these public spaces, the negotiation of histories and memories, is made freely and democratically, in a state of dialog in the *parthesia* that is suitable for an agora. The city, its public spaces, its architecture, and monumental elements, are the places to express and evaluate how the new heritage can coexist with the preexisting.

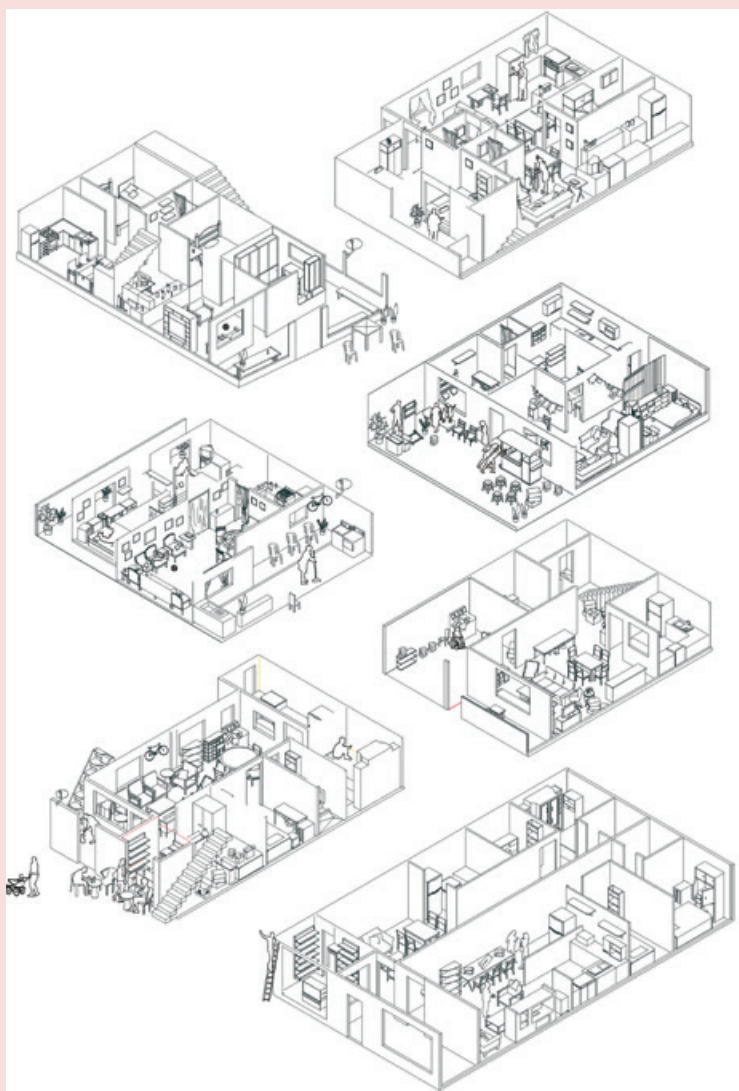
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THE SOCIAL SYSTEM OF THE HOUSE. IN THE CONSOLIDATED INFORMAL DWELLINGS OF GUAYAQUIL

El sistema social de la casa. En la vivienda informal consolidada de Guayaquil

O sistema social da casa. No alojamento informal consolidado de Guayaquil síntese



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Ground floor of
the 7 case studies
analysed in the
research project
of which this text
is the result and
for which 4 were
selected.

Source: Photograph
by the author
(2018).

ABSTRACT

The post-pandemic crisis of contemporary housing, triggered by COVID-19, only but extends, to the entire world, many of the questions in which, permanently, housing is immersed within, in an ongoing crisis of developing countries. How to make houses more shareable, flexible, transformable, productive, participatory, livable, etc.? In that sense, by studying low-income housing in these countries, it is possible to analyze alternatives to the current dwellings, that arise from informality as a response to those questions shared worldwide today. This article describes part of a research carried out at Universidad Católica de Santiago de Guayaquil, which analyzes the physical and social transformations in consolidated informal dwellings within the city center. The techniques used, include planimetric surveys of case studies, interviews to users, and mapping out the use of the dwellings throughout the day. The analysis focuses on the interaction exerted between several nuclear families inside the dwelling and their objects. Thus describing a habitat transformational and production system linked to objects, where the dwelling is understood as a social system of objects and people, in continuous interaction and transformation.

Keywords: Informal housing, social transformation, systems design, collectivity, multifamily housing, multifunctional objects

RESUMEN

La crisis post pandémica de la vivienda contemporánea, desencadenada por la COVID-19, no hace sino extender a todo el planeta muchas de las cuestiones en que se hallan inmersas, de manera permanente, las viviendas en continua crisis de los países en desarrollo. ¿Cómo hacer nuestras casas más compartibles, flexibles, transformables, productivas, participativas, habitables, etc.? Por ello, un acercamiento a la vivienda de bajos recursos de estos países permite analizar alternativas a la vivienda actual, que surgen desde la informalidad como respuesta a aquellas preguntas que nos hacemos hoy todos. El siguiente documento describe parte de la investigación llevada a cabo desde la Universidad Católica de Santiago de Guayaquil, que analiza las transformaciones físicas y sociales en la vivienda informal consolidada del centro de la ciudad. Las técnicas que se utilizan incluyen el levantamiento planimétrico de casos de estudio, entrevistas a los usuarios y el mapeo del uso de las viviendas a lo largo del día. El análisis se centra en la interacción que se ejerce entre los diferentes núcleos familiares de la casa y sus objetos, llegando así a describir un sistema de transformación y producción de hábitat ligado a los objetos, en donde la vivienda es entendida como un sistema social de objetos y personas en continua interacción y transformación.

Palabras Clave: Vivienda informal, transformación social, diseño de sistemas, colectividad, viviendas multifamiliares, objetos multifuncionales

RESUMO

A crise pós-pandémica da moradia contemporânea, desencadeada pela COVID-19, apenas estende a todo o planeta muitas das questões em que estão permanentemente imersas as casas em crise contínua dos países em desenvolvimento. Surge, portanto, a seguinte questão: como tornar as nossas casas mais partilháveis, flexíveis, transformáveis, produtivas, participativas, habitáveis, etc.? Neste sentido, uma abordagem dos problemas habitacionais de populações de baixa renda nestes países permite analisar alternativas aos modelos de moradia atuais que emergem da informalidade como uma resposta às questões que todos nos colocamos hoje. O seguinte documento descreve parte da pesquisa realizada pela Universidade Católica de Santiago de Guayaquil que analisa as transformações físicas e sociais na estrutura habitacional informal consolidada do centro desta cidade equatoriana. As técnicas utilizadas incluem o levantamento planimétrico de casos de estudo, entrevistas aos usuários e o mapeamento do uso das estruturas ao longo do dia. A análise se centra na interação entre os diferentes núcleos familiares da casa e seus objetos, descrevendo, assim, um sistema de transformação e produção de habitat ligado aos objetos no qual a estrutura habitacional é entendida como um sistema social de objetos e pessoas em contínua interação e transformação.

Palavras-Chave: Moradia informal, transformação social, concepção de sistemas, coletividade, habitação multifamiliar, objetos multifuncionais

INTRODUCTION

This article presents part of the results of an investigation of Universidad Católica de Santiago de Guayaquil, that analyzes the interaction between the users of the dwelling and its objects, as well as the influence that these jointly have in the generation of meetings inside and outside the house.¹ The research analyzes, using questions such as, what relationship is there between the house, its things and the people that live there? or, what transformations do the different groups of people and the objects have?, several cases of a consolidated informal dwelling neighborhood of Guayaquil.

The neighborhood studied, Santa Maria de las Lomas, is one of the informal settlements that has been left immersed in the urban scheme of the city. The result of a relocation, its consolidation has developed over six decades outside municipal regulations, self-regulating itself through neighborhood committees and cooperatives². This process has brought the different families closer. The site of the settlement is also right next to the campus of Universidad Católica de Santiago de Guayaquil. As a result, a symbiotic relationship has emerged over the years and grown stronger, leading to interesting supra-familial relationships.

The university students and workers are an example of these, eating daily in one of the neighborhood's dwellings, or playing sport on the streets with the neighbors. The families organize to move part of the furniture out of their houses, temporarily filling the street with objects like tables, tents, mobile stoves, swimming pools, goalposts, volleyball nets, etc. In this way, a direct relationship emerges between the groups of objects from the different dwellings and the meeting of people from the neighborhood and the university.

The capacity of the objects to keep up with the rhythm of people, contrasts radically with the rigidity of the house, which endures the limitations of an imported, ineffective construction system. The dwelling model suggested by modernity, a century after its appearance, continues to prevail. The *Domino* system has been accepted around the world as a paradigm of housing architecture, despite the rigidity of its concrete structure which, in its *bricolage* version, loses its structural independence, ultimately waiving the promised flexibility of content³. Modernity erupted into the domestic territory as a "work of purification", that opposed the existence of impure and hybrid objects. As a result, both its constructive and spatial system, as a regulation (at a house and city scale), resist free modernization, consigning the possibilities of change to inside the house.

This means that transforming the dwelling is normally restricted by the regulations and that, if changes are allowed, these would be very difficult to implement in practice. The transformation becomes even more complicated in informal dwellings, where self-builds – accelerated by the urgent needs of the city – lead to clumsy restructuring in attempts to add a new room, a new floor, divide the access in two, on so on.

However, the will for transformation is not the exclusive domain of informal dwellings. The sanitary restrictions COVID-19 has brought, have generalized the issues that dwellings, in permanent crisis in developing countries, were already facing. Issues that affect low-income dwellings, like the rigidity of the habitat model or its inability to immediately react to new changes, have today become universal.

The modern model, and its intended formal purity, has been deliberately distancing itself from an increasingly hybrid and unequal culture, where working with other non-architectonic areas becomes essential for development and innovation in housing. Housing demands the capacity to easily incorporate the latest advances, whatever they may be: programmatic, social,

1 From Universidad Católica de Santiago de Guayaquil, UCSG, several research projects have addressed the relationship between the progressive growth of families and the transformation of their dwellings and the adjoining public space (Mora, 2013, de Teresa, 2015, Mora, Viteri & De Teresa, 2017), resulting in several articles and a PhD thesis at Universidad de Granada, "Sistemas de Transformación en la Vivienda Informal Consolidada: caso de Santa María de las Lomas, Guayaquil" (De Teresa, 2017). This article is fundamentally based on the results of the project "Study of the collectivity generation in the consolidated informal dwelling: the case of Santa Maria de las Lomas, Guayaquil" (Mora et al., 2017).

2 The neighborhood of Santa Maria de las Lomas is located in the geographic center of Guayaquil, enclosed by Avenida Barcelona, La Fuente citadel, and UCSG. It comprises 200 dwellings, which practically all provide shelter to more than one nuclear family. The first settlement emerged at the end of the 1950s, the result of the eviction and relocation of a group of settlers from the La Atarazana area, for whom the first 50 reed huts were built. The families were initially organized through a Neighborhood Committee, and later, in 1969, in a Cooperative. However, their legalization only took place in 1980, although the formal supply of public services, paving of streets, drinking water, sewers, and electricity, appeared later (De Teresa, 2015).

3 In informal construction, brick walls tend to be used as support for concrete beams, as such the structural independence from the enclosures is lost (Hernández, Kellet & Allen, 2012, p. 29).

4 Hans Rosling, in his book *Factfulness*, argues that, in these cases where there tends to be no access to a bank, the best way owners have of investing with the broken income they obtain, is buying bricks that they add to their dwelling. In this way, apart from improving their home, little by little, they ensure that nobody steals their bricks, and that these are not devalued over time, as happens with money (2019, p. 188).

5 The parameters that determine the concept of "consolidation" of informal housing have been developed in the article "Aproximaciones familia-casa" (De Teresa, 2016a).

6 Rafael Iglesia (2011) describes how the slow transformation of certain daily objects over the centuries, like hammers or wrenches, until reaching what they are today, is based on a continuous critique of the preceding model, following a process that is more natural than artificial.

METHODOLOGY

productive, environmental, technological, energy, waste management, on so forth. Innovation and invention must be able to immediately reach the domestic space and, in particular after the pandemic, users throughout the world, will demand being a direct participant in these incorporations.

The informal dwelling, due to its ongoing state of crisis, has always cried out this need for immediate transformation. Generally, its users do not have access to bank loans to finance the construction of their home in one go, and need to add changes little by little⁴. Facing the rigidity of the house to incorporate these changes, the furniture and the other objects seem to take on the responsibility of transforming use of the space. Instead of adding a new room, the objects become responsible for subdividing the indoor space or of hybridizing its use.

The house, on one hand, and its things, on the other, have different natures, even opposite to one another. Although the house tries to be a single perfect and non-deformable object, the countless objects within it, seem to form a system of elements that, most likely as a reaction, incessantly move and regroup. For this reason, the nuclear families and household objects are at the heart of this research, which tries to discover the role the latter may have in the transformation of the housing system.

The consolidated informal dwelling⁵, and its way of adding changes that do not follow code, becomes a direct critique of the modern housing model; a slow critique, that for decades has relentlessly changed the shape and use of the house⁶. One that has been highlighting and responding to issues like several nuclear families cohabiting, or the need to generate income. For this reason, it represents a valuable field of experimentation, where the transformation the family has experienced, along with the house, can be analyzed, as parts of a social system in constant evolution.

This work shows four of the seven dwellings analyzed in the research project. These encapsulate the main findings and allow making conclusions by comparing them. Both the social changes that each one of the four analyzed family groups have experienced, and the physical transformations of their dwellings, are unique. This means that the way in which the physical and social limits imposed by the house⁷ and by the family are bridged, has also changed.

The four family groups analyzed comprise more than one nuclear family. Their number and social structure is also different, as is the transformation process they have experienced since their origin. The same happens with their dwellings, which differ in size, spatial organization, and relationship with the immediately surroundings. Because of this, each case has particular characteristics that affect their physical and social organization: some create dense intrafamily networks, while others, supra-family relationships with neighbors and with personnel from the neighboring university. Some cases move objects outside the house and others bring public objects into the dwelling.

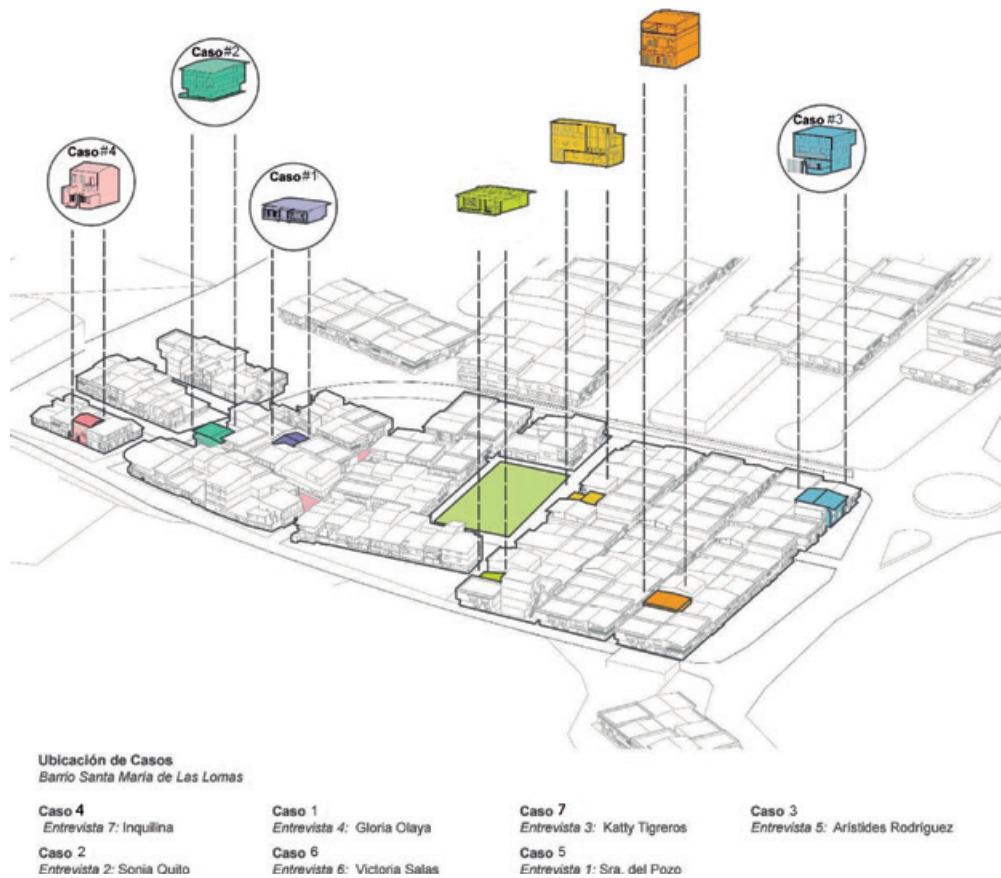
Figure 1 shows the location of the four case studies selected in the neighborhood:

- Case N°1: three nuclear families / seven members / single floor dwelling without major changes over time.
- Case N°2: five nuclear families / nine members / dwelling on three levels with major changes since its construction.
- Case N°3: two nuclear families / nine members / three-floor dwelling with significant changes.
- Case N°4: (Tenant) / two nuclear families / three members / dwelling with shops on the ground floor belonging to the family.

7 In this text, "dwelling" is defined as a habitat system comprising different objects, among which the "house" is the biggest of all. The "house" is understood as just another object, whose relationship with the rest of the objects is by inclusion. The "dwelling" encompasses the house and the rest of the domestic furnishings and objects.

Figure 1

Location of the cases selected in the Santa María de las Lomas neighborhood. Source: Photograph by the author (2018)

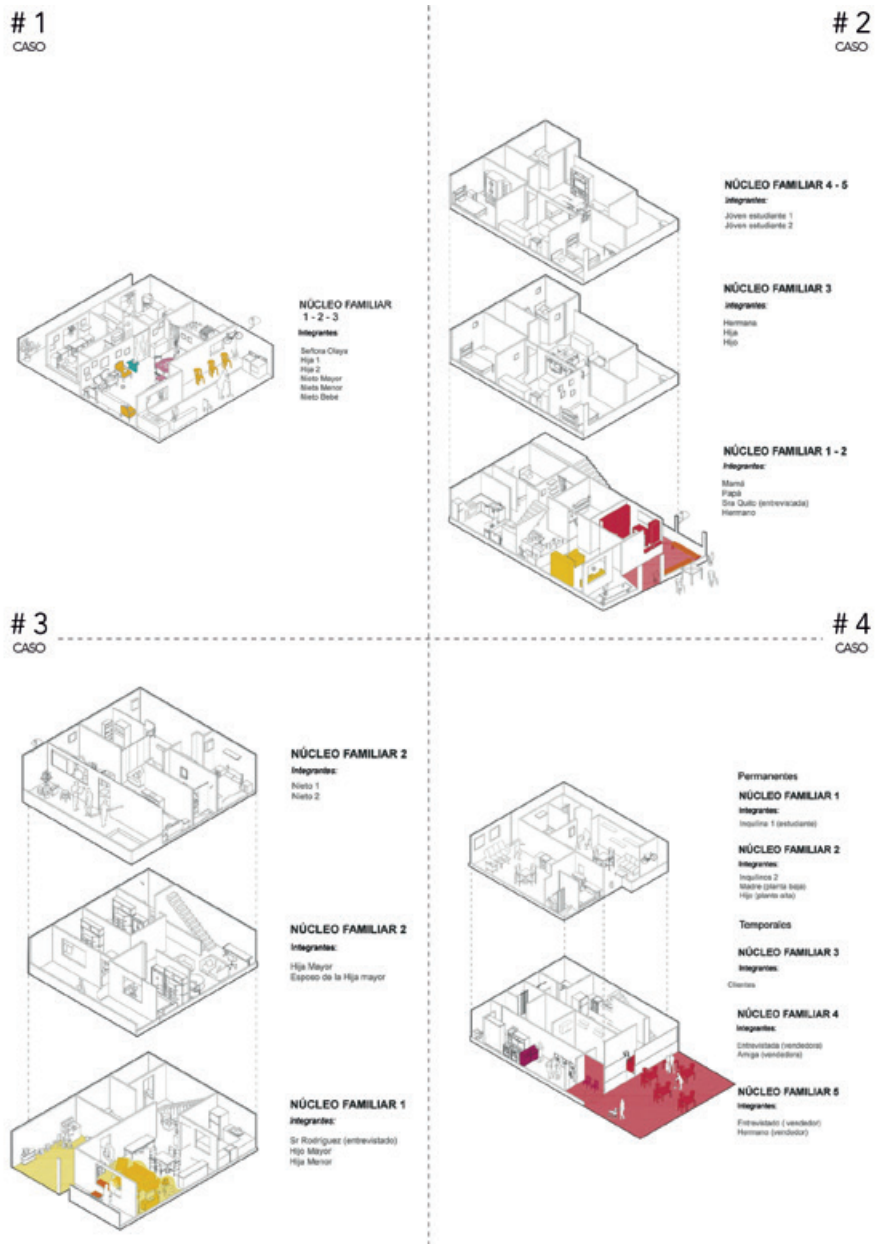


The research analyzed the gatherings between different nuclear families, the dwellings, their spaces, and objects, both inside and outside the house. For this, detailed planimetric surveys were made (floor plans, section plans, and axonometries) of the dwellings and their domestic furnishings⁸ and semi-structured interviews were made with the users to analyze their activity throughout the day. Alongside this, the movements and groupings of people and objects were observed, looking to uncover the influence the latter had on the generation of collective activities. Finally, interviews were made to unearth the movements and activities each member of the family had, the space where these take place, and the objects they interact with. Together, the plans, interviews, and observations allowed creating maps of the movements and interactions between the people and the objects during the morning, afternoon and evening [Figure 2].

People and objects, both in the usage maps, and in the rest of the planimetry, have been considered as equal subjects of graphical representation. In this way, the people and their objects have been understood as sets with mutual influence. It has shown the role that the system of objects of the house has in the generation of activities and in the way their movement is able to change the use of the space in each case. The plans show both the inside of dwellings, and their immediate surroundings towards the street. In this way, activities that take place on their boundary, and the gatherings between users of the dwelling and their neighbors, or with people from outside the neighborhood, can be analyzed.

8 Santiago de Molina analyzes, under the title "The invasion of the objects" (2013), the role these play in domestic life. In his thesis on the "Architecture Collage" (2014), he develops this concept of architecture as a sum of events.

Figure 2
Comparative axonometries of the most used spaces and furniture inside the house.
Source: Photograph by the author (2018).



RESULTS

The movement of objects inside the house changes intrafamily relationships, and this becomes even more significant on passing the boundary between the house and the street. Through this, the movement of objects is produced bidirectionally. On one hand, outside the house, to create ludic or productive activities with neighbors (card games, swimming pools, volleyball courts, tables and mobile stoves to offer snacks, etc.). And, on the other hand, inside the dwelling, incorporating to the domestic repertoire, public objects like altars to informally hold mass, or picnic tables to turn living rooms into restaurants at certain times.

Therefore, the objects have the ability to strengthen intrafamily relationships between the different nuclear families, and to establish supra-family relationships with the neighbors. This is because of the possibility to temporarily use the public space and to bring informal public activities into the dwelling. These two situations have been defined as incursions and excursions, respectively [Figures 2 and 3].

Figures 3 and 4

Excursions. Painting workshops with students, mobile stoves for evening snacks, tents, improvised dining areas with plastic crates, etc., the volleyball net and the sign with the rules of the game on a lamppost that lights the court, etc. (similar to the car).

Source: Photograph by the author (2019).



INCURSIONS

In Figure 2, the spaces that allow incursions into the dwellings can be seen. In Case N°1, for example, activity mainly takes place in the living room: by reorganizing chairs and the rest of the furniture, this room is redefined, converting it in a space for worship. In Case N°2, the most used space is the porch, where there is a store/bar. In addition, at certain times, patrons enter the dwelling when they use the restroom, extending the activity into the house, and sharing with the family in the private spaces. Case N°3 is the one with the lowest degree of incursion, since this is a shop that interacts with the outside through a window. Finally, in case N°4, it can be seen that the ground floor, on being destined to a purely commercial activity (cyber-café), is the one that allows the highest flow of people inside and outside the dwelling.

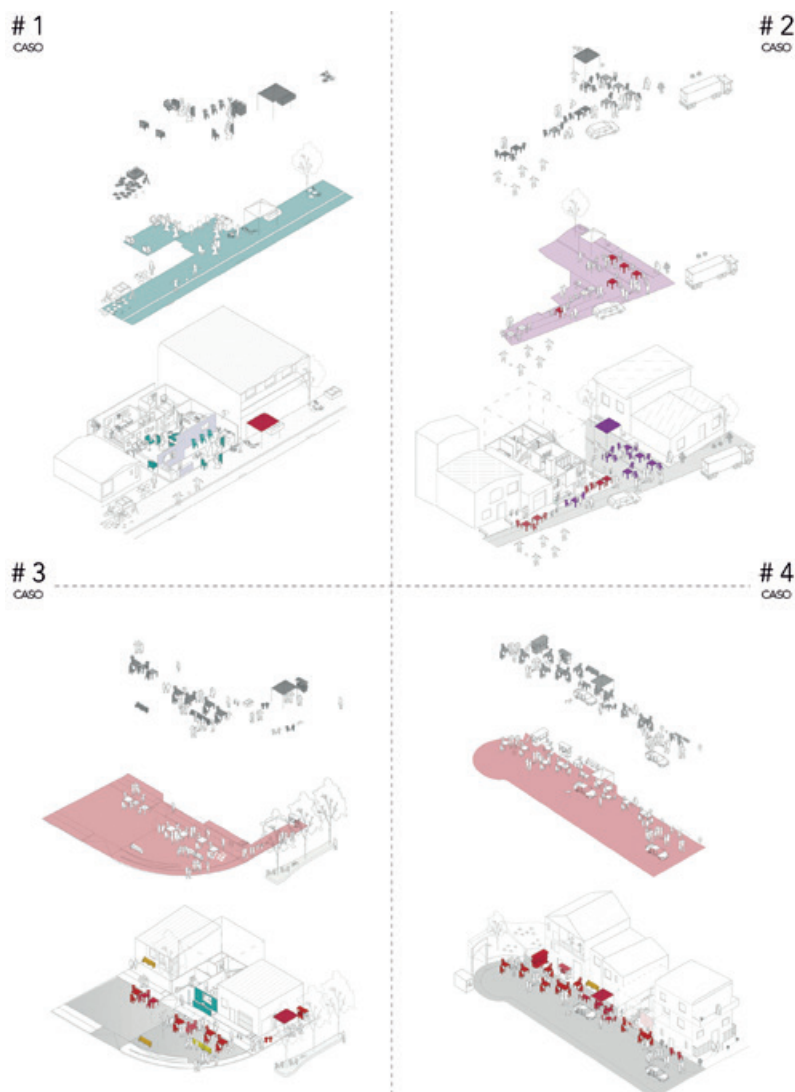
These incursions come from social activities, holding mass, raffles or bingos, generally with neighbors, commercial activities, in adapted bars or shops, that also include the university community, that take place thanks to the flexibility inside the dwelling, which is able to alter its initial setup, with new uses throughout the day. The dwellings often turn to mobile elements like curtains or panels to solve unforeseen issues, visually splitting areas of the house or, otherwise, temporarily moving objects between the different sites. That is to say, the spatial fragmentation the setup originally had, is later altered by the real use. The axonometries of the dwelling [Figure 2] show the leading role of the object against the housing.

EXCURSIONS

Figures 3 and 4 illustrate the temporary movement of objects onto the street: tents, stoves, swimming pools, tables, or chairs. These objects are responsible for the generation of community activities outside the dwelling. What begins as a public space, temporarily appropriated by a single family, is filled by others, and adds university students. The families do not have enough indoor space to provide services, nor do they have access to financing to add these on their own lot. As a result, they opt to accommodate outside, the objects needed for the commercial activity they are involved in.

From the selected cases [Figure 5], N°1 is the one that has the least relationship with the outside. However, in the afternoons and evenings, the family uses the curb to sell fast-food, adding a small collapsible cover. In case N°2, it is seen that the store operating inside the dwelling, has a small space with seats on the curb. However, people at the weekend and in the evenings crowd around the house. This is because the family, along with their neighbors, take advantage of the curbs and streets to organize bingos. In case N°3, the family makes use of a public parking area and adds some municipal benches to sell food. Finally, in case N°4, which is closest to the university, food carts, chairs, and tables can be seen, which the family and neighbors place on the street, generating a commercial corridor to provide services to university students.

Figure 5
Comparative axonometries with the moving of domestic furniture onto the street.
Source: Photograph by the author (2018)



BOUNDARIES

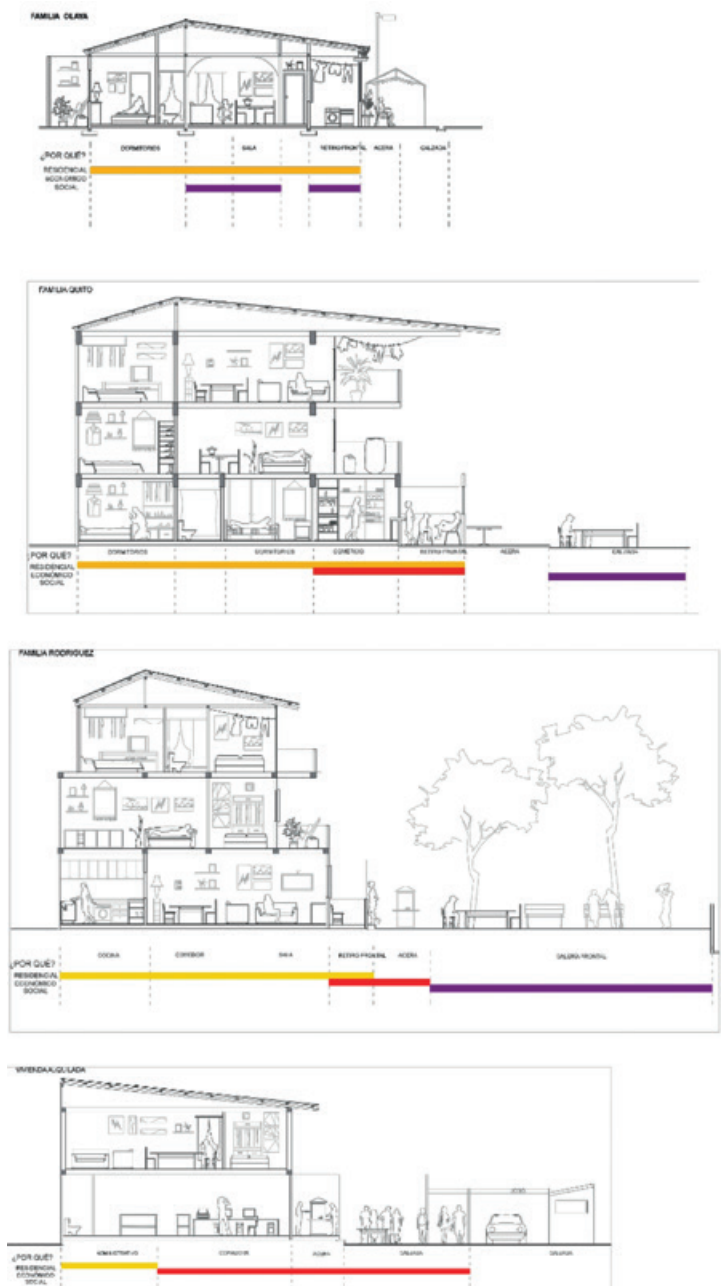
On regrouping objects and people from different dwellings, the incursions and excursions violate and blur the limit the house sets between the public and the private. The sections [Figure 6] allow identifying the moving of objects over this boundary, something which mainly happens because of three reasons: the introduction of public property objects and the collective use inside the dwellings, the temporary moving of privately owned objects onto the street, or the incorporation of municipal urban property. This free movement of objects over the boundaries, entails the opening up of social boundaries imposed by the family or by the neighborhood, leading to new groupings, associations, and scales of collectivity.

The four sections of Figure 6 allow seeing, in detail, the different household objects and furniture and their immediate context. Each graph incorporates colored bands on the lower part. The color represents a particular use of the space. The location of the band also allows seeing, in the projection of the top drawing, which spaces of the section are used for activities related to each use. For example, case N°2 shows how the yellow band, which corresponds to residential use, is extended throughout the ground floor of the house and extends onto the street. In this same case, the red band, that illustrates commercial use, runs from the porch of the dwelling to the inside. A transfer of the boundary is produced by this, in both directions.

The reading of the bands allows observing the overlapping of activities with a different use in the same spaces, reinforcing the dissolving of distinctions between inside and outside, and between the public and private. In addition, it reveals the obsolescence of a rigid architectural program, insofar as there is no connection between the activities and the spaces traditionally defined for a single particular use. This is the case of the section of case N°4, which portrays a red band of commercial activity that occupies more than half the inside space of the dwelling.

Figure 6

Comparative sections of the selected cases (incursions and excursions).
 source: Photograph by the author (2018).



PEOPLE, OBJECTS AND ACTIONS⁹

9 Yona Friedman, in her "Structures serving the unpredictable" (1999), and Constant Nieuwenhuys, in his "Nueva Babilonia" (2009), describe this space formed by people, objects and actions.

In Figure 7, the movements of the members of the four families have been mapped, during the morning, afternoon, and evening. Each movement is motivated by an action that is associated to the use of certain objects. The colors represent the main activities that take place, and the objects involved in them. The overlapping of the movements points out the meeting points of the different users, delimiting the places with greatest affluence.

The bottom right figure, in each case, points out these centers of agglomeration, where at some point of the day, a large number of people and objects come together. In case N° 1, for example, the area where the altar is placed to hold mass and the seats for those attending, is highlighted as the center of largest gathering. The same occurs in the porch area of case N°2, or the shops of case N°3.

Figure 7
Mapping of the use of the house throughout the day by the different members of the family, in 4 of the case studies analyzed. Source: Photograph by the autor (2018).



This leads us to understand the dwelling, not as a sum of functionally differentiated spaces, but as a group of objects and people that temporarily regroup. The objects and people form, in this way, groups capable of incorporating, losing, or moving elements. These actions are the same that are produced in the social structure of the family, as such, a parallel evolution of both sets is made possible.

DISCUSSION AND CONCLUSIONS

The results presented, coincidentally describe the needs that dwellings around the world have had during the months of confinement that the pandemic demanded: flexibility, adaptability, participation, immediacy, production, and so on. The goal of this research, which is partially presented here, is actually describing this informal logic of transformation, which from the precariousness the dwellings analyzed live within, allows making conclusions applicable to any other housing project.

With this in mind, the links between these results and the several theoretical positions are set out below, which approximate the territory of the systems of objects. This has allowed defining six fundamental principles, capable of being used in new cases.

PRINCIPLE 1: THE HOUSE AS A MEETING POINT

The house is not understood as a single volume that houses an inhabitable space, but rather a "center of masses" that conveys a given density; a crowding of objects that previously formed part of other groups and that have been relocated and brought together around a center of gravity that binds them together¹⁰ (Allen, 1999). In this way, the house is not defined so much by its physical (walls) or legal (plot) setting, but rather by a "meeting point" between objects and people, that replaces its boundaries¹¹. The reading of the house as a set of objects, is fundamentally based on Moles' "Theories of the Object" (1975), that sets off from the consideration that daily objects are capable of forming a system of relationships between them, as Baudrillard defends in his book, "The System of Objects" (1969). It is even possible to understand that there is a certain "social life in things" (Appadurai, 1991). In 1993, Latour gives a name to these systems of objects and people through their *quasi-objects* and *quasi-subjects*, but it is Lash (1999) who equates the system of objects to that of people, demanding a necessary "planeness" between both groups.

PRINCIPLE 2: FAMILY-HOUSE APPROXIMATIONS

The house, just like the family, is an event that is also exposed to contingencies over time (García-Huidobro, Tugás & Torres, 2008). It can be understood, therefore, as a "society of objects", with a similar nature to the social structure of the family (Chombart de Lawe, 1960). The objects in this society behave on the ground as people, approaching or moving away, complementing each other. They are moved, included in one group or in another, on so on.

Understanding the dwelling as a social system of objects, at the same time, makes the appearance of approximation mechanisms between the social system of the family and the physical-social system of the house possible, leading to a common driver of change (De Teresa, 2016b). The family and the house have, following on from this, a similar social structure, so they can mutually affect one another. They are entities in permanent change, formed by systems of elements (people and objects) that are jointly transformed and that, as a result, cannot be analyzed separately. This dual system between people and things is, for some authors, more stable the greater equality of influence there is between both subsystems¹².

10 Stan Allen (1999) talks about "field conditions" within a system of freely moving elements.

11 The understanding of house as a shelter comes from the creation of a rhetoric on fear and safety (Turner, 2017).

12 This is how Scott Lash (1999) describes "planeness" and it goes against the imbalance shown by the "predator-prey" model of Wilensky and Resnick (1999).

PRINCIPLE 3: SOCIAL TRANSFORMATION OF THE HOUSE

The objects of the house can be understood, from this perspective, as a "social system", with a similar structure to that of the family, so they can be transformed alongside each other. The house has to be capable of transforming itself following the same logic as that of the family. It is not just growth, as the "progressive" housing plans proposed, but rather progressing towards a global housing system whose nature is capable of facing the familiar complexity and adapting to diverse circumstances, among those, the economic restrictions, the changing relationships with the neighborhood and other dwellings, and those of the obligatory confinement seen today, with the COVID-19 pandemic.

Therefore, the consolidated informal house does not intend on being a pure object that is resistant to change, but rather a hybrid, that behaves as one of the uncontrollable "indocile objects" that Lash describes (1999). In that sense, the possible recycling cannot be produced through the physical change of an object, but rather through changing its position and role inside a group. The same happens with families, as people do not change, but rather their way to group and the role that they perform in a given social group does. It is these groups, of people or of objects, that are hybridized on moving and exchanging elements from some groups to others.

PRINCIPLE 4: DIRTY AND HYBRID OBJECTS

Latour (1993) states, in this context, an uncontrolled proliferation of "hybrid monsters" as the result of the purification work pursued by modernity. The author describes as "dirty objects", all those that cannot be classified because they are experiencing an ongoing transformation. This happens with groupings both of objects and people. Thus, he introduces the concept of "quasi-subjects" and "quasi-objects". These are entities formed by elements (people or things) intertwined through a system of relationships, that are permanently being updated. The people, as the collective subject, and the things, as the collective object, do not correspond to clear typologies. They are hybrid as they do not fit in any taxonomy.

The case studies analyzed exemplify this changeability in the family makeup, as family structures differ enormously from one another, in terms of members, role they have in the group (renters, distant relatives, on so one), and nuclear families into which they are structured. Both the house and the family tend to become, because of this, "dirty" objects and subjects, hybrids and unclassifiable, as Latour describes, or the difficult group as Venturi (1978) outlines.

PRINCIPLE 5: THE OBJECT AS MEDIATOR

Objects are, as has been seen, the main parties responsible for transforming dwellings. It is thanks to moving certain objects, that activities and gatherings are generated. These are the first ones to appropriate a place, both inside and outside the house. They are also in charge of changing the use of a space or hybridizing uses by mixing with each other. So the object inevitably becomes a mediator between people and their surroundings.

It is probably through these objects, that the architect can intervene in these precarious contexts¹³. The users of the dwellings analyzed buy everything there is in their house, except for one thing: the house itself. The professional architecture that we know, it not made to be sold in these cases¹⁴. The main role of the architect, as a professional in charge of projecting a dwelling, could maybe incorporate this role of "product designer", being responsible for devising objects that can be acquired by families and included among household objects. Architecture has to be able to offer an affordable product, and through this, contribute quality to dwellings. In this way, the object becomes a mediator between the architect and the user.

13 This article does not propose excluding the architect from housing production; on the contrary, to involve them in 95% of constructions that currently do without their work.

14 Approximately 95% of constructions made in Guayaquil are done following an informal system, without having the figure of the architect, on this being an expense that can be done without (De Teresa, 2016b).

PRINCIPLE 6: ARCHITECTURE BY CATALOG

However, this need for change in the role of the architect, is not exclusive to the informal dwelling. After the pandemic, the whole world will demand the same as in the analyzed informal dwellings: being able to easily change on facing any contingency, making the users themselves direct participants. The only way the architect has of intervening in these situations, and at a global level, is also through the design of objects that can be bought directly by families¹⁵. In fact, the current housing crisis demands a revision of the role of the architect, to be able to indirectly, but immediately, mediate in alterations that any house may require.

This implies incorporating object design to the formal practice of architects who are dedicated to housing, generating an "architecture by catalog", capable of responding to the immediacies of urban life. The research suggests, in this point, the appearance of a habitat formed by mass produced objects, that can be bought at a good price, and that can likewise be moved, exchanged, thrown away, on so on¹⁶. In this way, the catalog converts daily, ordinary, and everyday objects into the key to understand the world, to make a "policy of the daily" and, to transform, through them, society. This is not a classification, but rather a choice, a menu, a toolbox. This architecture by catalog has the goal of passing from the anti-hybrid culture, to accepting a proliferation of hybrids, that begins with the proliferation of the catalogs themselves. This would allow a greater diversity and, consequently, a greater ability to choose and customize, just as happens with the clothing in our wardrobe, or with the furniture in our room .

In this world of mass produced objects, each one has certain implied possibilities of transformation, which work as their own "social norms", in charge of regulating the behavior of the group . It is these objects that are the path to innovation in the housing field, on being able, by themselves, to introduce changes in any house (solar panels, composting heap, balcony and so on) or on hybridizing with other objects, passing the ability to innovate to the user. Hence, the field of action of these objects can be extended throughout all the scales, from the small objects in a drawer, to the scale of the house, or even the city, becoming the stars of the domestic and urban setting. The objects are those that are ultimately responsible for extending beyond the physical limits imposed by the house and the social limits imposed by the family, and to weave a dense social structure that is capable of becoming a driver of joint change.

15 Many associations have reacted to the pandemic offering new articles for direct sale, like masks, air purifiers, mechanisms to open doors without touching them, on so on. These objects are an example of how a given industry can immediately intervene in any home.

16 Walter Benjamin analyzes in "The work of art in the age of mechanical reproduction" (2013), the capacity of the industrialized object to become truly transcendental.

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REFLECTIONS OF LE CORBUSIER ON THE WORK OF ÁLVARO SIZA

Reflejos de Le Corbusier en la obra de Álvaro Siza

Reflexos de Le Corbusier na obra de Álvaro Siza

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Image of Álvaro
Siza with his
inseparable cigar,
alongside the image
of Le Corbusier,
who used to smoke a
pipe.

Source: Galiano,
Miguel. Published in
Magaceen ([https://
magaceen.com/es/
interview/alvaro-si-
za-vicente-verdu/](https://magaceen.com/es/interview/alvaro-siza-vicente-verdu/)) y
LeCorbusier Archives
– Fondation Le Corbu-
sier. Imagen extraída
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aspx?sysId=11&sysLa-
nguage=fr-fr&sysPare-
ntId=11&sysParentNa-
me=home&clear
Query=1](http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=11&sysLanguage=fr-fr&sysParentId=11&sysParentName=home&clearQuery=1)



ABSTRACT

This research article navigates through the different common lines seen between the life and work of two of the most relevant architects of the 20th century: Le Corbusier and Álvaro Siza. Though belonging to different times, they both constitute indisputable examples of the architecture of their times, where several aspects in common appear, inviting us to think about the unconscious influence of the Swiss master on the work of the Portuguese architect over the years.

Keywords: Álvaro Siza, Le Corbusier, Contemporary Architecture, Modern Movement, influences

RESUMEN

El presente artículo de investigación plantea un recorrido por las diferentes líneas comunes advertidas entre la vida y la obra de dos de los arquitectos más relevantes del siglo XX: Le Corbusier y Álvaro Siza. Aunque pertenecientes a diferentes épocas, ambos constituyen indiscutidos referentes de la arquitectura de su tiempo en los que asoman numerosos aspectos en común que invitan a pensar en una influencia inconsciente del maestro suizo sobre el trabajo que el portugués desarrolló a lo largo de los años.

Palabras Clave: Álvaro Siza, Le Corbusier, Arquitectura Contemporánea, Movimiento Moderno, influencias

RESUMO

Este artigo de pesquisa propõe um percurso através das diversas linhas comuns encontradas na vida e obra de dois dos arquitetos mais relevantes do século XX: Le Corbusier e Álvaro Siza. Embora tenham vivido em épocas diferentes, ambos são referentes indiscutíveis da arquitetura de seu tempo. Entre eles podem-se contatar inúmeros pontos em comum, os quais nos convidam a suspeitar de uma influência inconsciente do professor suíço no arquiteto português ao longo dos anos.

Palavras-Chave: Álvaro Siza, Le Corbusier, Arquitetura Contemporânea, Movimento Moderno, influências

INTRODUCTION

Trying to discover the influence, today, that a figure like that of Le Corbusier had on the theory and practice of 20th century architecture, somewhat lacks sense. It may not be an exaggeration to say that there has been no other architect that has achieved this, both with their built work and their theoretical work, setting new parameters in the discourse of modern architecture in the same way as the Swiss architect did with what is assumed as the start of the Modern Movement.

In the same way that for many other architects of the time, Charles-Édouard Jeanneret (1887-1965) was, without a doubt, one of the stand-out influences for Fernando Távora (1923-2005), and by proxy, for his disciple Álvaro Siza (1933-). The theoretical thinking of the Swiss architect, set important grounds in Siza, who was capable of adopting (and conceiving) all the international trends he had access to after the opening up seen in Portugal with the Carnation Revolution, which made him a referent of architecture at the end of the 20th century, as a nexus between the Modern Movement and current architecture. Siza would transfer, often unconsciously, different aspects that are very present in the work of Le Corbusier and his theoretical discourse. From an in-depth study of the work of both architects, mainly using the methodology defended by the Pritzker 2001 award-winner, Jacques Herzog, where he states that "considering buildings and describing what one sees is the best way to learn architecture" (Kipnis, 1997 p. 16), some of the reminiscent echoes of the Swiss architect are extracted in the work of the Portuguese architect. Some of the most notable reflections of the past that these traces left in the architect of Matosinhos, are spelled out below.

REFLECTION 1

KNOWING THE PAST TO BUILD THE FUTURE

On numerous occasions, the Swiss master manifested being in favor of the study, but not of the direct use, of what he called 'folklore', stating that "the study of folklore does not provide magic formulas capable of solving contemporary architectural issues; it informs intimately about the profound and natural needs of men, manifested in the solutions experienced as centuries have gone by" (Le Corbusier, 2006, p. 28).

This is, without a doubt, the same attitude that Álvaro Siza would later adopt when looking into the regional architecture of Portugal - especially in the north -, which undoubtedly represents a crucial role in his means of understanding Architecture. The rationalist approach he uses to develop his path, beyond what the materials and construction techniques allow him -or invite him-, to analyze the physical circumstances of the territory and the socio-economic politics of the population, often finding the answers to the material needs there are in the rural setting.

Although it could conceptually seem that this idea is contradictory, there is a close similarity in the innovative nature of both architects, founded in the knowledge of what already existed. It was not in vain, that Le Corbusier was one of the greatest exponents of the Modern Movement, that promoted a new means of understanding architecture and implied the greatest and most significant change of modern times, in this aspect. His "Five points of architecture" (1926-27), materialized in Villa Saboya, appear absolutely present in the manifest of Fernando Távora's 1951 'House on the Sea', and that accompanied Siza throughout his career, especially at its beginning, coinciding with the enormous impact of the CIAM of 1951 and 1953, where Le Corbusier and his ideas were received with admiration and even, a certain devotion. Then, just as Le Corbusier and Távora had done, Siza abandoned - or at least left on another plane -, the famous five points.

Therefore, both share interest about the History of Architecture, understanding that knowledge of the past is key to be able to create the future. Proof of this is that, on several occasions, Siza says that architects do not invent anything new, they only transform the reality that already exists.

REFLECTION 2

TRAVELING AS A SOURCE OF INSPIRATION

Every time that Álvaro Siza gives an interview, or answers questions in any of his conferences, when he is asked about advice for young architects, his response is always the same: "TRAVEL A LOT". Traveling has been the unconscious source of inspiration of a good number of the Portuguese's projects, which in a meeting he even explained how memories of his childhood, in trips with his family to Barcelona or on visiting La Alhambra, appear without him being aware at the time of how to resolve certain aspects of a concrete project that had a similar issue.

The knowledge acquired through travels, likewise implied an endless source of inspiration that Le Corbusier absorbed throughout his career, both with the influences that he adopted in his stays in South America, as well as from his more renowned travels in India. The Swiss master himself expressed this in the following way:

"The site is the plate of the composition. I understood this during a long trip I made in 1911, backpacking, from Prague to Asia Minor and Greece. I discovered architecture, installed in its place". (Le Corbusier, 2006, p. 64).

This would explain the importance the act of knowing how to read the place has for both architects, not only as a physical space where the built architecture is placed, but rather as a relationship of this physical space with the surroundings. With the immediate physical surroundings, but also with the social setting, the cultural setting, the political setting, and the historic setting. And this is what makes them both have a special sensitivity in the reading of the context, achieving that their work, is often placed in the context as if it had always been there, adapted to the setting without transforming or brusquely conditioning it. In fact, this special ability to read the place is done by these two architects using with a pretty similar methodology:

I arrived, took out my sketchbook, as I always did. I drew the horizons, placed the orientation of the sun, smelt out the topography. The first step was choosing the place, the nature of the land, and then the composition that we were going to do under these conditions. (Le Corbusier, 2014, p. 9)

REFLECTION 3

EYES WHICH DO NOT SEE¹

Maybe, with a certain irony, Le Corbusier titled a chapter of his work, *Towards a New Architecture*, this way, since in 1918 he had lost sight of one of his eyes. Curiously, Siza today is also suffering, and for some time now, from a condition that causes that his eyelids to close, giving him a look that he is musing on occasion, while speaking. Concretely, this expression used by Le Corbusier in 1923 is one of the favorites of the Portuguese architect, which he often uses, which comes to mean a call to attention for society - and specially architects - who are compelled to not just look, but see. Siza considers -he would mention this to us in one of our meetings in his study in Porto-, that "architects learn by seeing, not looking: seeing", and this was what Le Corbusier was trying to say, in one way or another, in the lines of this chapter of *Towards a New Architecture*, where he encourages architects to look further, to focus on planes, ships, and other engineering works to be able to apply what they observe to the area of architecture, as in the long run, the house is a "living machine". In this sense, Jeanneret had the feeling that the style of a new era already existed, manifested in structures and great feats of engineering, and that it had to be merged into two culturally different phenomena: the acknowledgement of the architectonic meaning of engineering, backed by Gropius and other renowned members of the Werkbund, and one's own aspiration to industrialize the site of the dwelling.

¹ The title of this 'reflection of the past' (eyes which do not see) reproduces that of one of the chapters of *towards a new architecture*, the emblematic book that Le Corbusier would publish in 1923.

When asked on one occasion about the great talent of Siza, the Portuguese architect himself said that “it has never been a matter of talent. It was a matter of work, and, above all, having your eyes open” (2016).²

The capacity of seeing further is vitally important for both architects. Of seeing, looking, observing, of being able to capture with their eyes, the essence of the place, its character, its soul, and also its needs, to cover them with the intervention that is done in said space; a proposal that goes against that of believers in the partisan trend where architecture must transform the environment, instead of adapting to it.

REFLECTION 4

INVOLUNTARY OPPORTUNISM

For Siza, the great talent of Le Corbusier is because of “being the right man in the right time and at the right place”.³ This kind of opportunism is understood, if we consider that Le Corbusier appears on the international stage at a time of great transformation in the entire world. In the 1920s and 1930s, resulting from the euphoria of World War I, there is a great appetite for living, creating, and rebuilding. It is a historic moment where artistic creation experiences a noticeable boost. And something similar happens with the end of World War II, at the end of the 1940s. Le Corbusier, who has a special sensitivity, sees himself as by chance immersed into that atmosphere of change, and it undoubtedly helps that his renovating ideas acquire a well-known international scope and projection.

The case of Siza is not so different, having heard many comments of well-known friends, Eduardo Souto de Moura or Kenneth Frampton, among others, who say that the fame and recognition arrived “despite him”. Álvaro Siza starts his professional path under the guidance of Távora, his master, who a few years earlier had begun a project to form the identity of the School of Porto and sees in Siza, a figure capable of providing continuity and symbolizing this new Portuguese School. Later, this is added to the fact that Portugal takes on an atmosphere of change and freedom (after the Carnation Revolution of 1974, that brought an end to the dictatorship of Salazar)⁴, similar, somewhat, to the one around Le Corbusier at an international level. These airs of change, after decades of dictatorship and hermetism, lead to Siza being surrounded, without overly seeking this, in the SAAL projects that position him, as a sort of expert in social housing. These circumstances will facilitate the international recognition that he had not sought from his discrete profile and way of understanding architecture.

Thus, we can say that there is a kind of parallelism in the way both architects reach international renown, almost accidentally, or at least not sought deliberately, as only the consequence of knowing how to read the socio-political situation surrounding them, with a sensitivity that allowed them to interpret the needs of the time, and respond to these with their theoretical and built proposals.

2 Interview made by the author to Álvaro Siza in his Porto office in December 2016.

3 Interview made by the author to Álvaro Siza in his Porto office in December 2016.

4 António de Oliveira Salazar was the head of the Portuguese regime that was in power from 1933 to 1974. After the dictator's death, in 1974, a series of chain reactions were triggered that would bring an end to the regime with the Revolution of 1974.

REFLECTION 5

MATERIALITY OF LIGHT AND KINETICS OF SPACE

Both for the work of Le Corbusier and Siza, natural light and the kinetic nature provided by it to architecture, are essential elements. Natural light adopts a special symbology in sacred buildings, which are object of the comparative analysis presented below. Said approach is based on the work of Henry Plummer, a great scholar of the work of the architects in question, who pays special attention to the light aspect.

Le Corbusier, in his three sacred buildings (Ronchamp, La Tourette and Saint-Pierre en Firminy), manages as he so wished, the orientation, the openings and the materiality to lead to a type of architecture, that in all cases, has a strong kinetic character due to natural light. Light has been associated for thousands of years, to the divinity and sanctity of religion. With each new era, and each artistic movement, a language of light itself has histori-



Figure 1

Inside Le Corbusier's church of Ronchamp.
Source: Photograph by Rory Hide (<https://www.plataformaarquitectura.cl/cl/02-74548/clasicos-de-la-arquitectura-ronchamp-lecorbusier/1288285438-ronchamp-roryrory-1000x750>)

Figure 2

Outside view of Le Corbusier's Ronchamp church.
Source: Photograph by Cara Hyde Baso (https://www.plataformaarquitectura.cl/cl/02-74548/clasicos-de-la-arquitectura-ronchamp-lecorbusier/1288287321-ronchamp-1000x666?next_project=no)



cally emerged: the bright bells of Romanticism, the Byzantine golden glow, and the stained glass of the Gothic, are just an example of this. However, at the turn of the 20th century, light adopts a new meaning, also in religious buildings, that Henry Plummer explained as follows in his book *Cosmos of Light: The Sacred Architecture of Le Corbusier*:

Instead of serving as a tool of religious persuasion, as it generally has in the past, light has become a quiet force to visually resist and elude, erode and outshine, the Church's mandate. Light eats away and weakens institutional discipline, while exerting its own dazzling powers to draw attention out to the sky and its commonplace marvels – in effect using light to consecrate the natural universe. (Plummer, 2013, p. 97).

In the case of the Chapel of Notre Dame du Haut de Ronchamp (1950-1955) [Figures 1 and 2], the main characteristic is the continuous cycle of solar events. The dawn sun lights up the side chapel, turning it into a reddish tinted empty space, which Plummer considers as a clear analog of human birth. As the sun moves, the high openings located between the eastern and southern walls begin to be flooded, penetrating the deep hollows generated on the southern wall. A small horizontal slit of barely ten centimeters, visually separates the ceiling from the wall, generating a marked contrast. The solar cycle culminates at dusk, when the opening located in the other chapel, allows a warm glow to bathe the inside of the building.

The Convent of La Tourette (1953-1960) [Figure 3], with a much more straight-lined geometry than the poetic shapes of Ronchamp or Firminy [Figure 4], implies a more complex work of light. Each and every one of the aisles has an open side, each one with one orientation, which leads to very different lighting sensations. The different openings provide an irregular rhythm to the light, which in the opinion of Plummer, remind one of a musical composition:

Unlike the repetitive rhythms of windows and columns in traditional churches, these fluent rhythms are aperiodic, based upon intervals of light and transparency that gradually compress and expand in waves. The lovingly cadenced beats have the intonation and flow of music — not orchestral music, but chant-like sounds, whose tones help to draw people further into a contemplative state. (Plummer, 2013, p. 124).



Figure 3

Inside Le Corbusier's La Tourette chapel. Source: Le Corbusier Foundation (<http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=11&sysLanguage=fr-fr&sysParentId=11&sysParentName=home&clearQuery=1>)

Figure 4

Inside Le Corbusier's Firminy chapel. Source: Photograph by Henry Plummer (<https://www.plataformaaarquitectura.cl/762849/light-matters-le-corbusier-y-la-trinidad-de-laluz/54da556ae58ecec5300000f-view-looking-south-t>)

With the sunset, the light's dance gains more of a leading role, thanks to the slit located on the west wall, that helps to draw lines along the side walls. The north wall connects the two golden lines that slowly move as the sun sets. If this were not enough, it is worth highlighting that this effect varies depending on the season, projecting a small triangle in winter, and a large rectangle when the sun is stronger, during the summer:

The lighting scenography of the Parish Church of Saint-Pierre de Firminy (1960-2006), is structured in three phases. The façade has small windows that create points of light on the ground, becoming waves of light that rise and fall as the sun moves, creating a surprising pattern on the walls in front of the altar.

However, it is worth stating that the construction of the building took place after the death of Le Corbusier, and Plummer states that surely the Swiss architect did not imagine this phenomenon, originated by placing polycarbonate cylinders with concentric grooves.

Around midday, the waves disappear and the light ends with darkness through two tubes at an angle, placed on the roof.

With the sunset, golden light filters inside, bathing the altar wall. A straight-lined canon intensely projects the sunlight, while cosmic scenes appear in a suggestive manner as a whole.

The light techniques used by Le Corbusier are presented as a new multi-faceted and dynamic language, that transcends the constructive statism and adopts a kinetic nature that changes as the hours pass during the day, and as the seasons do so during the year.

Meanwhile, in the church of Santa Maria de Marco de Canaveções [Figure 5], Álvaro Siza "recreates the spirit of the primitive Christian church, providing a supernatural nature to the nave, that resides, to a great extent, in the fluctuating presence of the sloped northern wall that lights the nave using very high windows" (Frampton, 2000, p. 56).

Siza would repeat the play of straight and curved volumes years later, in the Church of Saint Jacques de la Lande [Figure 6], where other aspects, like the furniture, also exude the influence of Marco de Canaveções.

In the church of Marco de Canaveções, Siza makes use of multiple constructive resources to generate a space loaded with meaning and symbolism, which although it changes depending on the area, it is also subjected to this kinetic nature, and varies as the day and the different times of the year go by.

In this way, Henry Plummer explains the different settings that the natural light generates in the church built in 1996:

The light that the three high windows on the north wall of the church emit, appears with the force of its radiation, to pressure and deform the solid plane, making it slope and curve. The directional



Figure 5

Inside Álvaro Siza's Church of Santa Maria in Marco de Canaveães. Source: Personal files of Juan Rodríguez. Rights granted by the author.



Figure 6

Álvaro Siza's Church of Saint Jacques de la Lande. Source: Amado, Ana. Published in Archdaily: <https://www.archdaily.com/889080/alvaro-sizas-new-church-of-saint-jacques-de-la-lande-though-the-lens-of-ana-amado/5a8490d1f197ccb8c000079-alvaro-sizas-new-church-of-saint-jacques-de-la-lande-though-the-lens-of-ana-amado-photo>

light thus paints the space with vaporous effects, whose soft tonal play is heightened by the empty walls. Helping to stabilize the light countercurrent and reaffirm the axis of the liturgy, there are two blind windows behind the altar, lit by a small hidden skylight. Opposite moods are developed in other areas, like the baptismal font, where the rain of light is focused towards the artisanal tiles and even brings a fluid sparkle to the font. The funerary chapel, located under the church, is once again different. After a series of deathly steps and winding corridors, a telluric gloom surges towards us, culminating in a lit space located under the clarity of a small skylight where the coffin is placed. (2009, p. 212)

With all this, it could be confirmed that, with the figure of Fernando Távora as an undeniable nexus, the work of Siza presents several reflections of a past acquired, in many cases unconsciously, from Le Corbusier. And as a confirmation therein, Siza himself acknowledges the Swiss architect as one of his greatest influences, although he assures that, the same goes for Frank Lloyd Wright or even aspects of his childhood, that this is knowledge acquired, that is stored in the memory and appears as unpremeditated influxes, when a given project issue so requires, to contribute towards giving shape to the ideal solution.

These factors are essential to understand the architectonic profile of the Portuguese master, which have led him to become one of the references of the international architectonic stage at the end of the 20th and start of the 21st centuries.

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ARCHITECTURES FOR SOLITUDE. PROLIFERATION AND PANDEMIC OF ISOLATED CHAPELS [CHILEAN VERSIONS]

Arquitecturas para la soledad. Proliferación y
pandemia de capillas aisladas [versiones chilenas]

Arquiteturas para a solidão. Proliferação e pandemia
de capelas isoladas [versões chilenas]

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*Spaces for the
solitary spirit.
Five covers edited
between 1998 and
2019.
Source: Luis
Fernández-Galiano,
with references
to Chilean
works, cited in
"Architectures
for solitude".
Composition by
the author using:
Arquitectura Viva
issue N° 58, 85, 192
and AV Monografías
issue N° 199 and
217*

ABSTRACT

"Architectures for solitude", which are those that are small in size and were first used by a single resident to later be inhabited by a very small number of people as a place of spiritual retreat or for liturgical rites, deals with analysing the circumstances and causes of the great increase in the number of isolated chapels that have been projected and built in the first two decades of the 20th century around the world, and particularly in Europe and Latin America. The study of such a notorious proliferation focuses, by way of example and symptom, on a reduced repertoire of works designed by Chilean architects. Methodologically speaking, although the progress presented only contains some indications of the procedures used, the study will be carried out by reviewing the pages and cover pages dedicated to them by architecture publications, printed or digital, resorting to the discursive strategies of architectural types and semantics analysis, comparison and statistical calculation, the communicative potential of the photographic image, and the expressive capacity of the word. From the theses raised, it is proposed that the term "chapel" be redefined to re-signify it; of the cases presented, that the heterogeneous formal repertoire of contemporaneity starts from the vernacular to venture into experimentation devoid of prejudice. Ultimately, the data allow us to deduce that the current rise of hermitic architectures is related to the circumstances of hegemonic urban societies, as well as to predict that the process will be accelerated by upcoming pandemics.

Keywords: Solitude, chapel, Eduardo Castillo, Pezo-von Ellrichshausen, Smiljan Radić

RESUMEN

"Arquitecturas para la soledad" (aquella de reducidas dimensiones que primero fue usada por un solo residente y después habitada por una mínima cantidad de personas como lugar de retiro espiritual o ámbito de ritos litúrgicos) se ocupa de analizar las circunstancias y causas del gran incremento del número de capillas aisladas que se han proyectado y construido en las dos primeras decenas del siglo XX en el orbe, y particularmente en Europa y en Latinoamérica. El estudio de tal proliferación porcentual se centra, a modo de ejemplo y de síntoma, en un reducido repertorio de obras proyectadas por arquitectos chilenos. Metodológicamente (aunque el avance que se presenta solo contenga algunos indicios de los procedimientos utilizados), el estudio se llevará a cabo revisando las páginas y portadas que les dedican las publicaciones de arquitectura, impresas o digitales, recurriendo a las estrategias discursivas de los análisis de los tipos arquitectónicos y a la semántica, a la comparación y al cálculo estadístico, a la potencialidad comunicativa de la imagen fotográfica y a la capacidad expresiva de la palabra. A partir de las tesis planteadas se propone que se redefina el término capilla para resignificarlo; de los casos presentados, que el heterogéneo repertorio formal de la contemporaneidad parte de lo vernáculo para aventurarse en la experimentación carente de prejuicios. Los datos, finalmente, permiten deducir que el auge actual de las arquitecturas eremíticas está relacionado con las circunstancias de las sociedades urbanas hegemónicas, así como pronosticar que el proceso se verá acelerado por las situaciones pandémicas venideras.

Palabras Clave: Soledad, capilla, Eduardo Castillo, Pezo-von Ellrichshausen, Smiljan Radić

RESUMO

"Arquiteturas para a solidão", aquelas de dimensões reduzidas inicialmente utilizadas por um único residente e, mais tarde, utilizadas por um número mínimo de pessoas como locais de retiro espiritual ou âmbitos de ritos litúrgicos, trata da análise das circunstâncias e causas do grande aumento da quantidade de capelas isoladas que foram projetadas e construídas nas duas primeiras décadas do século XX no mundo e, particularmente, na Europa e na América Latina. O estudo dessa proliferação porcentual foca-se, a título de exemplo e sintoma, em um repertório reduzido de obras de arquitetos chilenos. Metodologicamente, embora os avanços apresentados contenham apenas alguns indícios dos procedimentos utilizados, o estudo será realizado através da revisão das páginas e capas a elas dedicadas por publicações de arquitetura, impresas ou digitais, recorrendo às estratégias discursivas da análise dos tipos arquitetônicos e à semântica, à comparação e ao cálculo estatísticos, ao potencial comunicativo da imagem fotográfica e à capacidade expressiva da palavra. A partir das teses levantadas, propõe-se que o termo capela seja redefinido para resignificá-lo e que, dos casos apresentados, o repertório formal heterogêneo da contemporaneidade parte do vernáculo para se aventurar na experimentação desprovida de preconceitos. Os dados, por fim, permitem deduzir que o atual auge das arquiteturas eremíticas responde às circunstâncias das sociedades urbanas hegemônicas, além de permitir antever uma aceleração do processo devido às futuras situações pandêmicas.

Palavras-Chave: Solidão, capela, Eduardo Castillo, Pezo-von Ellrichshausen, Smiljan Radić.

INTRODUCTION

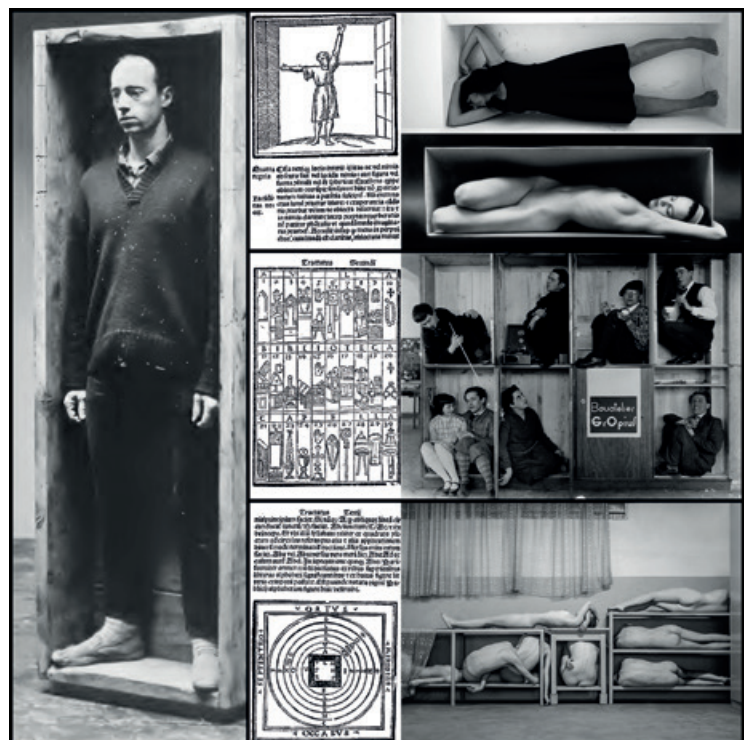
This text thematically addresses a phenomenological analysis of the significant increase in architectural religious and secular projects and works, related to the conventional notion of isolated chapel, that has taken place in the first two decades of the 20th century around the world, especially in the European Community and in Latin America, through the strategic review of examples of cases projected by Chilean architects. The definition of chapel of limited to the one which arose architecturally from the ancestral building of hermitages and, among the goals, a range of works are presented, showing the heterogeneity of responses given to the recent programmatic requirements, ones tied to tradition, to the vernacular or to the modern, and others developed by similar preventions to those that have arisen due to epidemics, are among the initial purposes. Methodologically, the lexicography, typological analysis, comparatism and statistics are recurred to, although data tables are omitted, articulating a discourse interspersed with illustrative images that provide the first glimpses about a still unfinished university research project.

CONTEXTUALIZATION. CHILEAN EREMITIC ISOLATION, CONTEMPORANEITY AND PARTICULARITIES

As a prelude or premonition of the transformations that began to happen around the world in 2020, sped up by the epidemics, the architecture of solitude and confinement, compelled by the need for distancing, forced by the imposition of social and environmental isolation that zoonosis pandemics politically demand, has seen two decades of a growing boom, of exponential increase, of experimentation both from the proposals of the Modern Movement and the archaeological findings. The apartments, minimal even to stenosis, that property developers offer as residential models of the future, the shrunken bedrooms, even converting them into capsules or oriental silk cocoons, the boxes considered as rooms, or the museums, as has already been trialed in Coimbra to show a single work of art, with capacity for a single spectator, are signs of the theory that will give grounds to the approaching architectural paradigm [Figure 1].

Figure 1

Boxes-houses-chapels-cells-hermitages-rooms: Robert Morris, Self-portrait 1958. Congestorium artificiose memorie, 1553. Ana Díez, Hueco 2011. Ruth Bernard, Box 1962. Edmund Collein, Bauhaus 1928| Evelyn Bencicova, Ecce Homo 2015.
Source: Composition by the author.



From all the elemental architecture used to impose limits and boundaries for people, to confine them in an ever smaller living space, causing distress when approaching walls, to the contact with the fingertips of the constricted inhabitants (Romberch, 1553; Parra, 2019), perhaps never as significant as now as that which began its walk with the residential model that in the past, on being placed on the wasteland, they called hermitage (Sevilla, 2000) (Vorágine, 1997). That is to say, with the shelter of the hermit, with the exiled refuge that, with the passing of time, led to what it is today, generically and inaccurately, what we call chapel (Sadeler, 1594). In the individual site for the solitary and silent retreat, linked to the first ascetic initiatives, where the cell (cave or cabin, cavern or simple rock and branch roof), is a minimal empty room, that is rooted in the religious typology of open, independent, autonomous chapels, although not that of chapels incorporated in other buildings that they functionally depend upon.

Except as reference, this article does not use the chapels that dictionaries defined as buildings adjoining a church, or that are an integral part of it: nor those that are a formal and organically dependent fragment of another building, be this a temple or a palace, nor those where a relationship of dimensional submission between the components is implicit, but rather those that have hierarchically and spatially cut ties from a superior entity. That is to say, of the chapels inherited from those which were isolated, unoccupied small buildings, raised with a certain constructive and structural elementality; in general, anonymous, cheap, solid, sustainable, with an easy upkeep, integrated into the environment, located in unpopulated areas, and that were of common ownership. Those that used to have just one room, of a unique indoor space that was used as a temple: to extraordinarily house certain individual or community rites of the Christian liturgy. The users, and not the intermediaries, like Diogenes with the barrel he lived in, were those who were in charge of their conservation. Those primitive hermitages, once they perished and their former tenants were considered saints, after the eremite builders and resi-

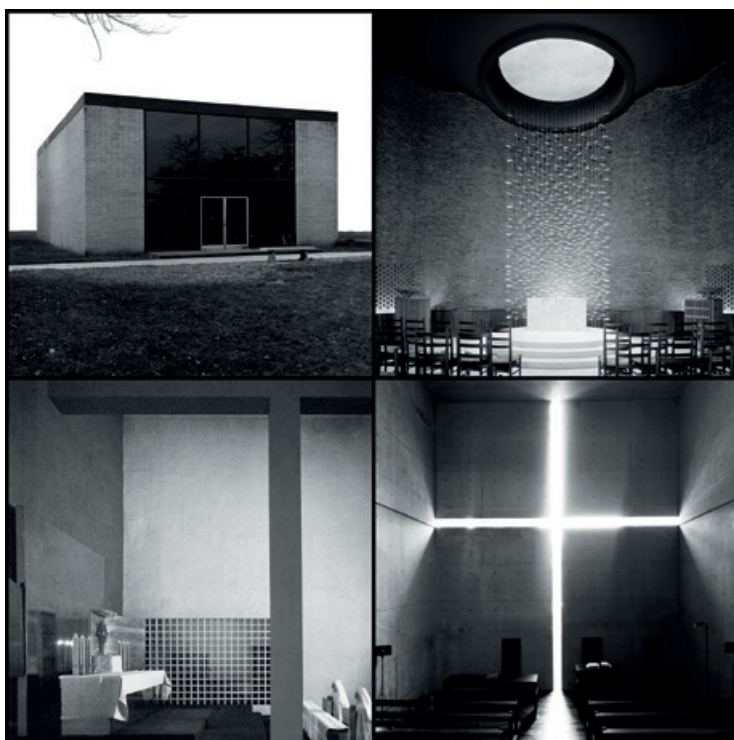


Figure 2

Four 20th century chapels: Mies, ITT Chapel, 1952. Saarinen, MIT Chapel, 1954. Barragán, Chapel of the Capuchinas, 1960. Ando, Church of the Light, 1984. Source: Composition by the author.

dents were canonized, stopped being dwelling spaces of a single room, and were transformed into places of veneration. Thus, the house was transformed into a temple: and the domestic indoor space was converted, by the use and the rite, by the imposition of other habits, and the inclusion of new ceremonies, into a sacred interior.

The great masters of the Modern Movement, without omitting the Greek, Latin and Byzantine precedents, the medieval ones of the Way of St. James, or the magnificent examples of the European Renaissance, had already raised splendid chapels which were, actually, small churches: Mies van der Rohe, ITT Chapel, Chicago, 1952; Eero Saarinen, MIT Chapel, Boston, 1954 (Lambert, 2001) (Merkel, 2014). They built churches, which they kept calling chapels, even though some dreamed of being cathedrals (Lloyd Wright, Annie Pfeiffer Chapel, Lakeland, 1941; Le Corbusier, Chapelle Notre Dame du Haut, Ronchamp, 1955), and humble conventual chapels (Luis Barragán, Chapel of the Capuchinas Sacramentas, Mexico DF, 1952-60), from whom our contemporary colleagues learned so much (Tadao Ando, Church of the Light, Osaka, 1989) [Figure 2].

The ecumenic proliferation of chapels has begun one of its aligid periods in recent decades, from east to west, confirmed by the ferrous experimentation carried out with all conceivable architectural forms, from the extravagant spirals of Hiroshi Nakamura (Ribbon Chapel, 2013), to the metaphysical serenity of that projected by Zhang Lei (Nanjing, 2014), including the monolithic Bruder Klaus Field Chapel by Peter Zumthor (Wachendorf, 2007), or the most recent and welcoming one of Bernardo Bader (Salgenreute Chapel, 2016).

Not all were consecrated or projected to house religious rites that tradition had assigned to them. This is one of the particular aspects of contemporary chapels: the omission of both the sacred and the rituals that used to characterize them and that distinguished them from, for example, mere places of meditation. Today the word chapel is given indistinctly to the spaces for Christian worship, to spaces for reflection, to rest areas, and those for walkers and cyclists, whether these are pious pilgrims or inspired urban sportspeople (Parra, 2020).

From the century so far, it is 2018, according to the data collected, still unpublished, by the Department of Architectural Graphical Expression of the University of Seville, in an ongoing research project led by the author of this article, is the most prodigious in the building and inauguration of chapels in the European Community. Perhaps a small sample of indicators to back this comment is enough. In 2018, the Vatican State presented for the first time, the Venice Biennale of Architecture: they did this with ten chapels exclusively built for the occasion. Also, in 2018, in Germany, the Siegfried and Elfriede Denzel Foundation built the first three chapels of the "Sieben Kapellen" program: John Pawson was in charge of one of these, built in Unterliezheim. That same year, in the Portuguese Algarve, Álvaro Siza concluded the construction of what, by its discretion and wise humility, is one of the most honest among recent chapels [Figure 3]. Likewise, international tenders abounded on this topic, like the proposal by the multinational company, Hispalyt Ceramics: a Chapel on the Way of St. James, which would be raised in Palencia.

Neither Latin America as a whole, nor Chile in particular, remained outside this universal trend, which has had an effect on all current religions, and contaminated all spiritual movements eager for transcendence and mystic. From the southern chapels of Chiloe, nailed up forever in the dank unstable soil, or taken from one place to another using the exceptional practice of "tiradura"¹, a same woven thread links this heritage architecture with the

1 Tiradura is a traditional process on the islands of the Chiloé archipelago, where neighbors move an entire building on logs or even across channels, to move it from one place to another.

Figure 3

Four 21st Century chapels: Peter Zumthor, Wachendorf, 2007. Bernardo Bader, Salgenreute, 2016. John Pawson, Unterliezheim, 2018. Álvaro Siza, Lagos, 2018. Composition by the author.



2 Animitas are small shrines or miniature chapels, typically found by the roadside to mark the site where a family member was killed or to pray for the blessing of a local saint.

sincere and fragile architectures of the marginal chapels of the “animitas”², and for example, with the “Chapel of the Crucifixion”, built in Venice by Smiljan Radić. From that same string, as happens in the abacuses displayed in the basement of the Chilean Museum of Pre-Columbian Art, dangled the “New Capilla País or Country Chapel Contest” in 2018, promoted by the School of Architecture of PUC-Chile, whose purpose was to build a network of some fifty of these in the least developed communities of Chile. These are tied, among others, to the eloquent chapels of the Benedictine Monastery of the Most Holy Trinity projected by the architect-monks Gabriel Guarda and Martín Correa (1964), and the concrete chapel that the architect Cazú Zegers curved in Puente Alto in 2003. And also, even though the distance from the last knot to the Quipu is greater, the Chapel of Retiro by Undurraga-Deves (2009) or, for other reasons, the pavilion-chapel of Pezo-von Ellrichshausen in Vitry-Sur-Seine (2017).

METHODOLOGY

UNCERTAINTY, TYPOLOGY AND COMPARISTICS

The study, focused on determining the degree in which the multiplication of these self-centered architectures is being encouraged by the uncertainty of a culture and a population that feels lost, and perhaps abandoned due to the precarious biological destiny, or how it is promoted by the deer-like fear that the climate and health environmental crises stir up. This should be of more interest for architectural disciplines, although scientific research of its phenomenology does not strictly belong to their area. It is from there, that this study being developed by the author in the research group “TEP3939-Arquitecturas para la ciudad creativa”, proposes anamnesis analyses, that allow making a record starting from memory, with the intention of unveiling the etiology of the problem, looking into the casuistry, tracking signs and manifestations of the trauma, detecting symptoms to, through the project, present architectural responses that ultimately seek to proactively

collaborate, from living in the city and the region, to the global solution of the upcoming conflict.

In this synopsis, semantics and etymology are turned to, to rummage through the meanings; a comparistic methodology is entrusted, one already experienced by linguists seeking similarities and differences between the chosen case studies and, strategically and temporarily, the quantification and geolocation of these are omitted at a time which, tormented by brevity, these are isolated from their contexts. The statistical research behind the thesis outlined here, has been done by sifting through the information recorded in digital or printed press publications, and in specialized monographs and anthologies on ecclesiastical architecture, as well as parliamentary acts. It serves as a symptomatology of the growing attention that the media has been giving to this architecture, where in 2020, the journal *Arquitectura Viva* issue N°85, would dedicate a monograph to Chile, in which it published the Chapel of Remembrance by Eduardo Castillo, the Church of Colegio Villa Maria by Enrique Browne and the Cathedral of Our Lady in Los Ángeles, by Rafael Moneo. Previously, in 1998, issue N°58 was titled "Sacred Shape" (Fernández-Galiano, 1998), documenting divergent formal exercises performed in churches by Botta, Holl, Meier, Moneo, Piano, and Siza; while later, in 2017, the chapel-church-cathedral series led to a monograph titled "Spaces of the Spirit. From East to West: Eight Temples", where eight buildings were shown, located on four continents, sometimes called "temples" and on others, "spiritual spaces" (Fernández-Galiano, 2017a). This journal, just like *El Croquis* or *The Architectural Review*, has highlighted the chapels, small churches, oratories, basilicas, and sanctuaries of the current masters, of Peter Zumthor, John Pawson, Álvaro Siza and Bernardo Bader, to mention four unparalleled Europeans of different generations, from a general catalog of works, placing them on its covers. On the hegemonic digital architecture platforms, practically the same occurs: they show that "places for personal meditation" figure among the most publicized architecture in recent decades.

CHAPEL OF NAMA AND CHAPEL OF RETIRO (NAMA: AUCO)

The humble Chapel of the Holy Cross de Nama is a true chapel. The award-winning Chapel of Retiro, projected by the Undurraga-Deves firm, just like the Chapel of San Alberto Magno of Requesens and Pavez (Valparaíso, 2014), is not, lexically or semantically, a chapel: it is a relatively large church. One that, due to its size and due to the complexity of its floorplan, does not hide its ambition of being a sanctuary or a basilica. Both buildings are, in any case, temples. The Chapel of Nama, in the Suca Gorge, in the commune of Carmiña, in the Region of Tarapaca, is 3013 meters above sea level. It has a welcoming nave built from adobe and is covered with a straw mud roof. Perhaps built in the primordial times of the town's foundation, its surface area is barely 35 m². Its elementality is evident: it is a complex and, in all probability, perfect architectural entity. Surrounded by a low wall, it fills the heart of a rectangle, that is approximately 19 meters long and 9 meters wide. On the left, is the belltower, the internal structure that holds the two domestic bells. At the front, the blue door, framed in an austere portico of moving beauty. The door, the entrance, the portico open to the end of the atrium, the roof overhangs and, supported on the two emerging walls, limits an intermediate space that welcomes and embraces parishioners in the same way that the Bernini Colonnade does in Saint Peter's Basilica in the Vatican, but here without intimidating them. Whitewashed, with a votive vaulted niche, outlined against the conic rough mountains, the Chapel of Nama could well be exalted on a Mediterranean island, instead of on the Chilean high planes. Le Corbusier, Sert, Coderch, Rudofsky and so many other authors, sensitive to that which lacks pedigree, would have admired it (Rudofsky, 1964).

Figure 4

Four Chilean chapels: Chapel of the Holy Cross of Nama, 1856. Guardia-Correa, Benedictine Chapel of the Most Holy Trinity, 1964. Requesens-Pávez, Chapel of San Alberto Magno, 2014. Undurraga-Deves, Chapel of Retiro, 2009.
Source: Composition by the author.



The Chapel of Retiro is sunk amid the foothills of Mount Carmel, behind the Carmelite Monastery of Auco, next to the guest house of the residential complex, to which it gives service (Fernández-Galiano, 2019). Built in 2009 with four muscular concrete screens, coated inside with recycled wooden cross-beams, it has a built surface area of 620 m². It is, let there be no doubt, a good project that, probably, would continue being of merit if it housed an auditorium, a library, a large gymnasium or a mall for the elite. It is not a chapel because of its size, its magnificence, its heterogeneity and its necessary floorplan complexity: it is so because of its administrative dependence of the Auco Monastery, as is the Sistine Chapel to Saint Peter's Basilica or the Pazzi Chapel, in Florence, where the last farewell to the master Brunelleschi was given [Figure 4].

L'ANIMITA CHAPEL AND BELL CHAPEL (CONCEPCIÓN: VITRY-SUR-SEINE)

The chapels spread along Chilean roads to remember the dead that perished there, signifying the site of their death are, because they as popularly called so, chapels. The "chapels of the animitas" contain cigarettes, words, offerings, photographs, dolls, flowers, fire, but never chaplains or hermits: neither do they have parishioners. The "animitas" are traditionally called chapels because the word shrine and the word monument seemed pompous to their founders, excessive for the name of such as succinct and germinal architecture; because "house of the anima", "soul-filled house" or "house of the spirits", were syntagms that were too poetic to assign them to a model or a toy-like architecture. "House of the Soul", as Eduardo Castillo (2002) called it in an article published in issue 85 of *Arquitectura Viva*, refers to what he projected for the municipality of Florida, which would also be called "Chapel of Remembrance" and "Capilla L'Animita" in commemoration of the popular "animitas". These are ideologically little chapels, little temples, secular sanctuaries, diminutive cenotaphs, fireflies, lanterns that light the night. Even if they have a simple wall, graffiti, a mud wall, stones or a hollow, they are architecture. So that university students do not forget what buildings are about,

these chapels have, miniaturized, reduced to sketches, imprinted on the skin, a symbolic house. This is the house drawn in children's notebooks and that appears in conventional dreams, the one sculpted in marble by Louise Bourgeois and that Juan Borchers traces on the blackboard in his classes. The one Castillo built with wooden planks alongside the road to Concepción in 2000, is a true chapel that sprouts from those anonymous and collective. A chapel with hermitage characteristics, with the essence of a mother's embrace and affectionate lap, with peculiarities of a setting for reflection. A "chapel as an archetypal shape, capable of identifying with the sacred", he states in the last paragraph of the aforementioned article (Castillo, 2002, p. 53).

In France, Mauricio Pezo and Sofia von Ellrichshausen projected and built in 2017, the so-called Bell Pavilion in the gardens of the Val-De-Marne Contemporary Art Museum, in Vitry-Sur-Seine, to harbor reproduced sounds and moving images (Fernández-Galiano, 2017b). This 50 m² building, raised in a few days with prismatic blocks on a pre-existing base, would house the projection of a video that the artist Christian Boltanski had recorded in the Atacama Desert in 2014, and that was played at the Venice Biennale of Architecture in 2015. The work, the recording, is called Animitas. It shows a plantation of metal rods covered by little bells, whose clappers are moved, through a plate hanging from them, by the torrid wind of the desert. The museum refers to the work of the architects as "bell pavilion" or as "oratory-pavilion". The authors themselves also call their baby this way, inured in ideating dissimilar pavilions, on describing and presenting their project: they call this projection room a chapel, when they allude to its religious nature and on insisting on its mystic. And once again, just like Castillo, they recall their knowledge of "animitas", stating that, in them, lies the seed of this dark and sinuous place, occupied by a seat where visitors can take their time in the plastic observation of an echoing view transmitted from the immensity of the Chilean landscape to the confinement of a room for contemplation [Figure 5].



Figure 5

Two Soul-Filled Chapels:
Eduardo Castillo,
Remembrance Chapel,
2000. Pezo-von
Ellrichshausen, Bell
Pavilion, 2017.
Source: Composition
by the author.

BENEDICTINE CHAPELS AND VATICAN CHAPELS (SANTIAGO DE CHILE – VENICE)

Thus, the Bell Chapel is not that distant from the so-called Rothko Chapel, projected by Philip Johnson, Barnstone and Aubry, inaugurated in Houston in 1971, today used as a museum, a meeting and conference room (Johnson, 1979). The Pezo-von Ellrichshausen-Boltanski folly and the octagonal oratory of Rothko, show the acceleration in the dissolution process of the traditional concept of chapel: how architecture for contemplation has gradually been converted into architecture to be contemplated. The terminological confusion has also been encouraged by haughtiness, or by arrogance, of wanting to put a name on something that perhaps should not have a name that identifies it, like those mistakes from the theory about the *non-places*. *Anonymous spaces* of Marc Augé (2000).

The infiltration of vernacular architecture into the contemporary one through the "animitas" is manifested in this and other avantgarde candidate Chilean chapels. Chilean chapels, many built in recent years, also have reminiscences and the impression of the chapels and church of the Benedictine Monastery of the Most Holy Trinity, projected in 1961 by the architects and monks, Gabriel Guarda and Martín Correa, which was built between 1962 and 1964 at Los Piques Hill, in Santiago de Chile. The prägnanz and transcendence of this church, which can be called a chapel on organically depending of a monastery as well as on containing inside, other small sublime chapels, is in some cases evident and, on other occasions, like in the Italian work of Radić, perceptible just in the subtlety of some details, or in the French work of Pezo, recognizable in the fluidity of the space. Thus, in the Chapel of San Alberto Magno, the cubic and diagonal space evidenced their ties with this; in the sinuous Chapel of the Holy Spirit of Cazú Zegers (La Colonia, 2003), the concrete curves avoid the tangency to introduce, like in Las Condes, but now contorted, thin bands of light; and in the Chapel of Retiro, even the signed Cross that indicates the access ramp, is inspired in the Cross of the monastic altar.

The Benedictine sites of the Most Holy Trinity, the amber colored Chapel of the Most Holy, just like the Cornaro Chapel of Rome, in the Church of Santa Maria della Victoria, are built with the golden light that emanates from sources other than knowledge. The Cornaro Chapel was just one of the eight funerary chapels that would conventionally open to the nave until Gian Lorenzo Bernini, impregnated it by sculpting Teresa de Ávila, for the recreation of the cardinal who ordered his work, accompanied by an angel, during one of his most moving and disturbing ecstasies.

Distant from the exemplary case of the "animitas", and in the antipode of the Benedictine chapels, in the sixteenth Venice Biennale of Architecture, in the fall of 2018, the Vatican as a participating state, presented to the secular world of architecture, a collection of ten recently conceived chapels. This first multiple-pavilion of the Holy See at a Venetian biennale arose dispersed, atomized, threaded in the forest of San Giorgio Maggiore Island. The Roman Church recruited, with the legitimate intention of gaining publicity through architectural promotion, the Chilean Smiljan Radić, the Englishman, Norman Foster, and the Portuguese, Eduardo Souto de Moura. Also Carla Juaçaba (Brazil); Javier Corvalán (Paraguay); Sean Godsell (Australia); Eva Prats and Ricardo Flores (Spain); Francesco Cellini (Italy); Andrew Berman (USA); and Teronobu Fujimori (Japan). The selection of the personnel was made by Francesco Dal Co [Figure 6]. There was a kind of casting of sorts, an aesthetic competition between them and their stars.

Anaxtu Zabalbeascoa (2018) correctly called them "Pavilion-Chapels". Pavilions because they were demountable artifices, transportable to other places, like those of the first international fairs. Too close to one another, one

Figure 6

Four Venetian-Vatican Chapels
2018: Eduardo Souto de Moura. Carla Juaçaba. Teronobu Fujimori. Javier Corvalán.
Source: Composition by the author.



visible from the other, indiscrete, and sometimes strident, these proposals of relations between secular spirituality and religious architecture, that are so perceptible and eloquent both in a Romanic chapel, and in a Greek orthodox one, were left, in most of the projects, limited to pure scenography. Devised for detachment, they ended up being too simultaneous, thought for the disorder of the dispersion and the uninhabited, they were organized in a group and in the theatrical way.

The chapel projected by Radić, was built by the company Moretti, using eight curved concrete panels, of 5 meters in height, printed through a plastic bubble matrix, that form an open cylinder and constitute, in unison, the load-bearing structure and the enclosure of the building (Márquez, 2019). Two rectangular double-glazed sheets, of 3 meters wide and 6 meters long, slightly tilted towards a central beam that acts as a gutter, work as a transparent roof. The tree branches, more than the cloudy sky of Venice, begin to poke inside, to talk with the razed trunk that it uses, as a central column, the axis of this centripetal space. Perhaps this mast is a vertical of the cross, or *stipes*, and the metal beam is the horizontal crossbeam, or *patibulum*, even though they are only seen as a unit when the observer lifts their gaze. Perhaps the beam is the master beam that the biblical texts talk about, that where the mystic of the saints rests upon. The Chapel of the Crucifixion is inspired, or so the commentators say and the author affirms, in the votive altars which are the “*animitas*” [Figure 7]. Other emotional spaces, recognizable here, are the transparent and anguished ones conceived by Louise Bourgeois in her cylindrical cells: in her “*Monastery dorms*”, in the cages that the *Structures of existence* collection comprise. The Vatican chapel of Radić is also a cabin crossed with a skewer (a confessionary with a mute and squalid wooden priest petrified in the middle, a canopy for a Giacometti sculpture). It could have been built by one of those 3D printers that have worked hard during Covid-19 manufacturing masks.

Figure 7

Four fragments of a cross: Smiljan Radić, Chapel of the Crucifixion, 2018. Piero della Francesca. Details of the Dream of Constantine, 1452-66 and the Flagellation, c. 1455. Source: Composition by the author.



In the issue of ARQ+2 titled *Smiljan Radić. Bestiary*, it is possible to find several photographs, chosen by the architect himself to illustrate his poetic texts, that could also be proposed as grounds for his project. For example, those of the architectures comprising waste that "Fragil fortuna or Fragile Fortune" document (Radić, 2014a), or those belonging to "La muerte en casa or Death at Home" (2014b), and even those of the interventions of Gordon Matta-Clark or those of the works of Frederick Kiesler.

CONCLUSIONS, DISCUSSIONS, DIAGNOSIS AND FORECASTS

Since conceptual misrepresentations, hastened by the lack of accurate names, led to considering as "chapels", buildings that were not, perhaps today it is right to resignify this term in the particular dictionary of architecture as a building that seeks isolation and confinement, and that waives the concept of parishioners and of church (of common space), as well as the etymology of the word religion (*re-ligare*: reunite), and, thus, proceed to redefine it, given that the room is etymologically and functionally the place where habits take place and rites are seen, as a celibate room in conflict with coexistence, apt for life in solitude. A consequence of identifying the chapel with the minimal dwelling is the fact that forms of ephemeral existence are being tried out in chapels, similar to those proposed as forms of residence, as well as the opposite phenomenon, that the miniscule temple imitates the monastic house, and the apartment is limited to a hermitage.

Considering what has been said, a paradigmatic increase can be foreseen in the production of places where gods are invoked in solitude, one-to-one or in small groups of similar devotees. The proliferation of enclosed spaces where one can be intimate, where one can concentrate on oneself, augurs a return to the etymological monastic life (to the monastery like *monos terion* or the residence of the solitary man), the return to ways of coexistence based not on the shared house, but rather on the monographic niche, in the room as an individual monastery dorm (where one has to remove shoes before

entering) or as an indivisible and incommunicable dorm, connected to the outside telematically. The great difference between the genetic hermitage and the modern chapel is therefore, that solitude and calm were chosen, the isolation and inaction, voluntary, and the silence was not imposed from outside, but yearned from within (Andrés, 2010). That the search for this state was personal, volitive, and not demanded by a punitive political action, and that architecture responded to the human desire and not the cruel law of the market. It seems that architecture for hiding has a fruitful future [Figure 8].

Just as in other times when commissions dominated, including singular architectures of theaters, museums, teaching premises or malls, in the last two decades the construction of small public architecture for solitude (hermitages, chapels, oratories, and so on) have seen a curious increase, of around 50%, in the 2000-2020 period in the European Union, as well as in Latin America, and even, specific by countries, somewhat above this percentage in Chile and in Portugal. In the two-year period between 2019-2020, the twenty or so publications analyzed, documented that double the number of projects and works related with the notion of temple of the 1999-2000 period have been built in those countries. This notorious presence in the professional media, in all likelihood, coincides with what is happening in the material reality: the calculation of how many meters squared of chapel per nation and per year that have been built, has not yet been concluded.

This expansion, driven by the deer-like fear of extinction, will be accelerated by the pandemic, by the current one and those to come, where societies spread out, communities break down and away from their components, people flee the city to the healthier countryside, aspiring to the uninhabited, competing for private land, and returning to the means of life experienced by the hermits who, as Isidoro de Sevilla demonstrated in his Visigothic *Etymologies*, with its hermits and hermitages, led to the transcendental places that were later called chapels.

Figure 8

Hermits: Saint Zoerdade and Saint Blaise engraved by Jan Sadeler in *Sylvae Sacrae* (Hermits in Landscapes), 1594. Photogram of *O que arde* (That which burns), Oliver Laxe, 2019. Fragment of Richard Hamilton, *Just what*, 1956. Source: Composition by the author.



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CORVI, RATIONALIZED HOUSING TYPOLOGIES: AN EXERCISE IN STANDARDIZATION

CORVI, tipologías de viviendas racionalizadas:
Un ejercicio de estandarización

CORVI, tipologias de habitação racionalizadas:
Um exercício de padronização

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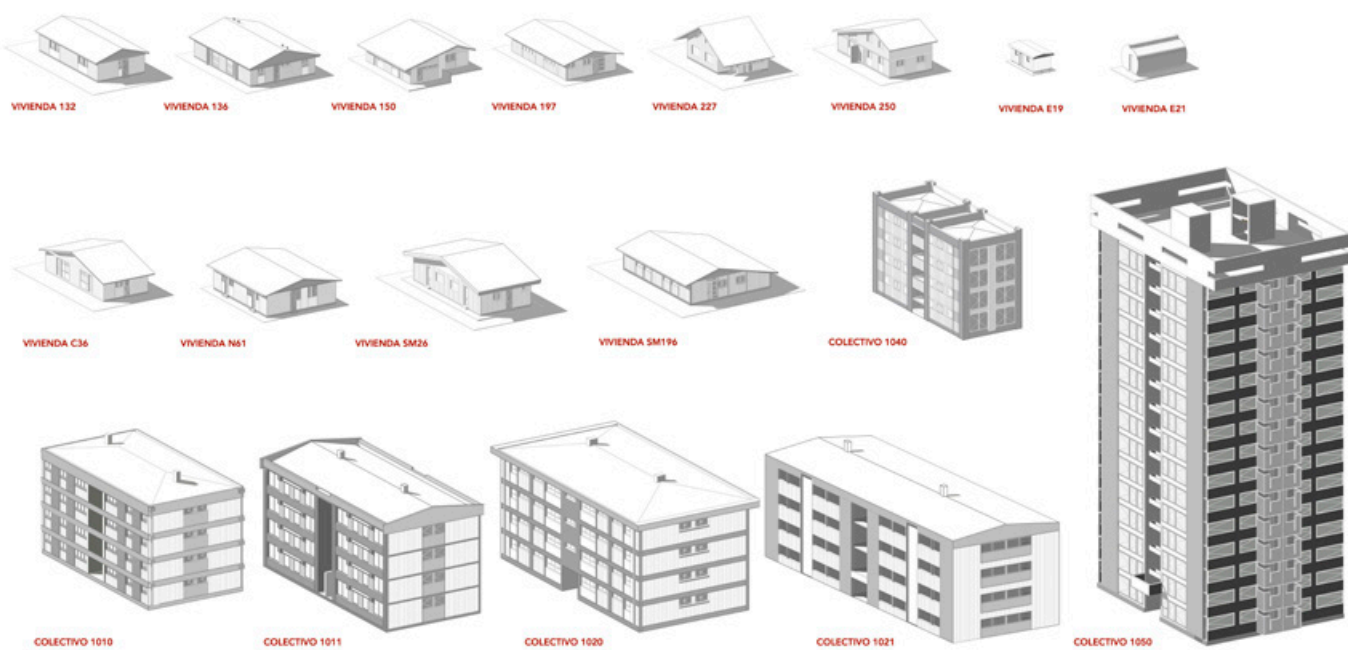
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Housing typologies designed by CORVI between 1966 and 1971.

Source: Own elaboration based on data contained in Rationalised housing typologies 1966-1972 (CORVI, 1972).



ABSTRACT

The social housing designed by the teams of the Corporación de la Vivienda (CORVI) constitutes a material presence of enormous influence within Chilean society and within the community of architectural practices. This paper observes the work of these teams, by analyzing the information contained in the CORVI document called "*Tipologías de viviendas racionalizadas 1966-1972* (Rationalized Housing Typologies 1966-1972)", which provides data on the shapes, dimensions, materials, and programs of eighteen housing typologies developed by the design teams between 1966 and 1971. Not all of these prototypes were built, but as a whole, it shows how the idea of social housing rationalization was conceived, and how it became an exercise in standardization, based on typologies, from which it is possible to learn both the forms of order and layout of everyday life that they propose, along with the interpretative flexibility used in their communication.

Keywords: Typologies, housing, prototype, standardization, CORVI

RESUMEN

Las viviendas de interés social diseñadas por los equipos de la Corporación de la Vivienda (CORVI) constituyen una presencia material de enorme influencia dentro de la sociedad chilena y dentro de la comunidad de prácticas de la arquitectura. El presente trabajo observa la labor realizada por dichos equipos a partir del análisis de la información contenida en el documento *Tipologías de viviendas racionalizadas 1966-1972*, de CORVI. Éste entrega datos sobre las formas, dimensiones, materialidades y programas de dieciocho tipologías de viviendas elaboradas por los equipos de diseño entre 1966 y 1971. No todos estos prototipos llegaron a ser construidos, pero su conjunto da cuenta de cómo se concibió llevar a lo concreto la idea de racionalización de las viviendas de interés social, y de cómo ello devino en un ejercicio de estandarización, basado en tipologías, del cual es posible aprender tanto las formas de orden y disposición de lo cotidiano que propone, como la flexibilidad interpretativa que utiliza en su comunicación.

Palabras Clave: Tipologías, vivienda, prototipo, estandarización, CORVI

RESUMO

As habitações de interesse social projetadas pelas equipes da Corporación de la Vivienda (CORVI) constituem uma presença material de enorme influência na sociedade chilena e na comunidade de práticas arquitetônicas. O presente artigo observa o trabalho destas equipes mediante a análise das informações contidas no documento do CORVI "*Tipologías de viviendas racionalizadas 1966-1972*" (Tipologias de habitações racionalizadas 1966-1972), que fornece dados sobre as formas, dimensões, materialidades e programas de dezoito tipologias habitacionais elaboradas pelas equipes de design entre 1966 e 1971. Nem todos estes protótipos foram construídos, mas o conjunto mostra como a ideia da racionalização da habitação de interesse social foi concebida e como se tornou um exercício de padronização, baseado em tipologias, a partir do qual é possível aprender tanto as formas de ordem e disposição da vida cotidiana propostas, como também a flexibilidade interpretativa utilizada em sua comunicação.

Palavras-Chave: Tipologias, habitação, protótipo, padronização, CORVI

INTRODUCTION

Standards are invisible things said Susan Leigh Star (2002), one of the pioneers in her study on sociology, but they are behind almost everything around us. If we turn the way we see things around, it is possible to note how these hold the performative contents of all the material forms that accompany us. This gives standardization a key role in the social and cultural life of modernity, not just as an explanation of the similarity and replicability of its objectual solutions, but also as a means of coordination, where material practices allow speculating about the future (Esguerra, 2019; Hölscher, 2019). The material worlds of modernity, its industrial and urban worlds, were built with standards embedded in them, as a semiotic way that allows thinking in and with them (Galaz, 2019; Law & Mol, 2020).

Standardization processes, Lampland and Star (2009) say, arise from the need of having technical agreements that help to speed up procedures, regulate actions, obtain specific results or avoid damage. They are related to the quantification, the formal modeling, and the extraction, reuse and classification of data; they express the organization of technical agreements about the work, tasks and conditions, that need to be replicated to obtain quantitative and formally similar results. Standards allow that agreements about work and their results are displaced in an objectual way in time and space, replicating themselves in different realities.

If work is interaction (Hughes, 1989), the standardization processes that make relocating the work within different and distant situations possible, are a sort of remote interaction (Latour, 1987). In this sense, one of the characteristics of standards is that they consider different degrees of delegation, so that, despite standardizing material practices, they are interpretatively flexible. For this reason, Star (2002) states that they are intensely local and affect very specific communities in very specific contexts, regardless of the global ranges that their scope may have.

This article analyzes the document *Rationalized housing typologies 1966-1972* as a case that shows how the project design teams of the Housing Corporation (CORVI under its acronym in Spanish), sought to limit the interactions involved in the selection work, the construction and the habitability of social housing, by rationalizing their materials, floorplans and types. These teams followed the guidelines that the architect, Héctor Valdés first, and then the architect Hiram Quiroga, had engraved into the housing policies from the Executive Vice-Presidency of the corporation (Sepúlveda & Carrasco, 1991; Gámez, 1999). Not all the designs prepared as typologies and included in the aforementioned text were finally built, but clearly their purpose was to guide both housing production and the later living in them, and the sociality that emerged from their building complexes.

This work addresses the document mentioned as a response to an issue that came “from the 1954-1960 period, [where] housing design was needed to renew mass-scale policies. The private sector was entrusted through public tenders. This brought with it a renewal and incorporation of more contemporary urbanistic criteria in the living action, and at the same time, a deterioration of the technical teams. In the 1964-1970 six-year period, some steps were made to correct the anarchy of housing types and a rationalization of them was sought, like dwelling 132, in semi-detached houses and block 1020, as a building” (Quiroga, 1972, p. 42). In this context, the design teams of CORVI, created prototypes, considering as an input, the complexes built before 1966.

The first result of this design exercise was seven prototypes that corresponded to five semi-detached and two collective high-rise dwellings, that largely explain the housing built under the governments of Eduardo Frei and Salvador Allende (CORVI 1969; 1972a), despite them having different politi-

cal views. By 1971, the original prototypes were revisited, a process that led to another four semi-detached housing types, four new collective high-rise buildings, including a sixteen floor building and two types of emergency housing. The document *Rationalized housing typologies 1966-1972* shows these, where the designs are presented indistinctly, as housing prototypes and typologies, prepared under the perspective of rationalization, aiming at their wide-scale and mass-produced replication.

Although CORVI's work was typically published in brochures with a general text, along with production information and photographs by CORVI's Public Relations Office (1969, 1972a), these prototypes were published under the signature of the Sub-Department of Design, with detailed information about their floorplans, heights, dimensions, materials, and the teams responsible, on scales of 1:1000 and 1:2000, and without any other text other than an editorial by the Head of the Sub-Department. José Quintela affirms that this constitutes "the architectural testimony of the rationalization process of typified Housing Design, for a repetitive, mass-produced, national scale use" (CORVI, 1972b). All the above helped to define this document as the corollary of a design exercise that managed to establish similar parameters for housing shapes, materials, dimensions and floorplans, accounting for a standardization process that also presents a sufficiently flexible framework for its adaptation and replicability in different local situations.

METHODOLOGY

In order to determine the type of standardization that characterizes the design exercise analyzed, the information of each housing prototype in the *Rationalized housing typologies 1966-1972* (CORVI, 1972b) was systematized. This information was grouped in four aspects: shape, materials, dimensions, floorplans. This allowed verifying the ways in which the prototypes were similar, and also the ways in which their differences were organized. The results of each one of the aspects mentioned are shown below, and conclusions are proposed about the type of housing standardization that characterized the construction rationalization agenda of CORVI.

SHAPE

As has already been said, the document, *Rationalized housing typologies 1966-1972*, gathers systematic information about eighteen housing prototypes designed between 1965 and 1971. Their origin comes from the design departments of CORVI, whose structure varied over the two periods mentioned, even though most of its members were involved in both. In the 1964-1970 period, the design department considered a north, central and south division, following the climatic and geographical divisions that are normally used in the country, which led to a "regionalized" sense of what the prototypes mean which affected the material choices of each one [Table 1]. The teams were unified in the Sub-Department of Design as of 1971, and the production experience of the 132, 136, 1010 and 1020 prototypes, which spread over the entire country, pushed aside the regionalized indication as it was irrelevant.

The architect Rafael Moneo, defines "typology" as "that concept that describes a group of objects characterized on having the same formal structure" (1978, p. 190). Under these terms, the document uses the term "typology" to indicate whether the prototype corresponds to a semi-detached dwelling, which generally corresponds to semi-detached houses [Figure 1] or a detached collective (block or building) one [Figure 2]. The houses are semi-detached, or better said, contain two semi-detached housing units. Collective housing is classified as a "detached typology", even though they have semi-detached housing units, that share a same wall.

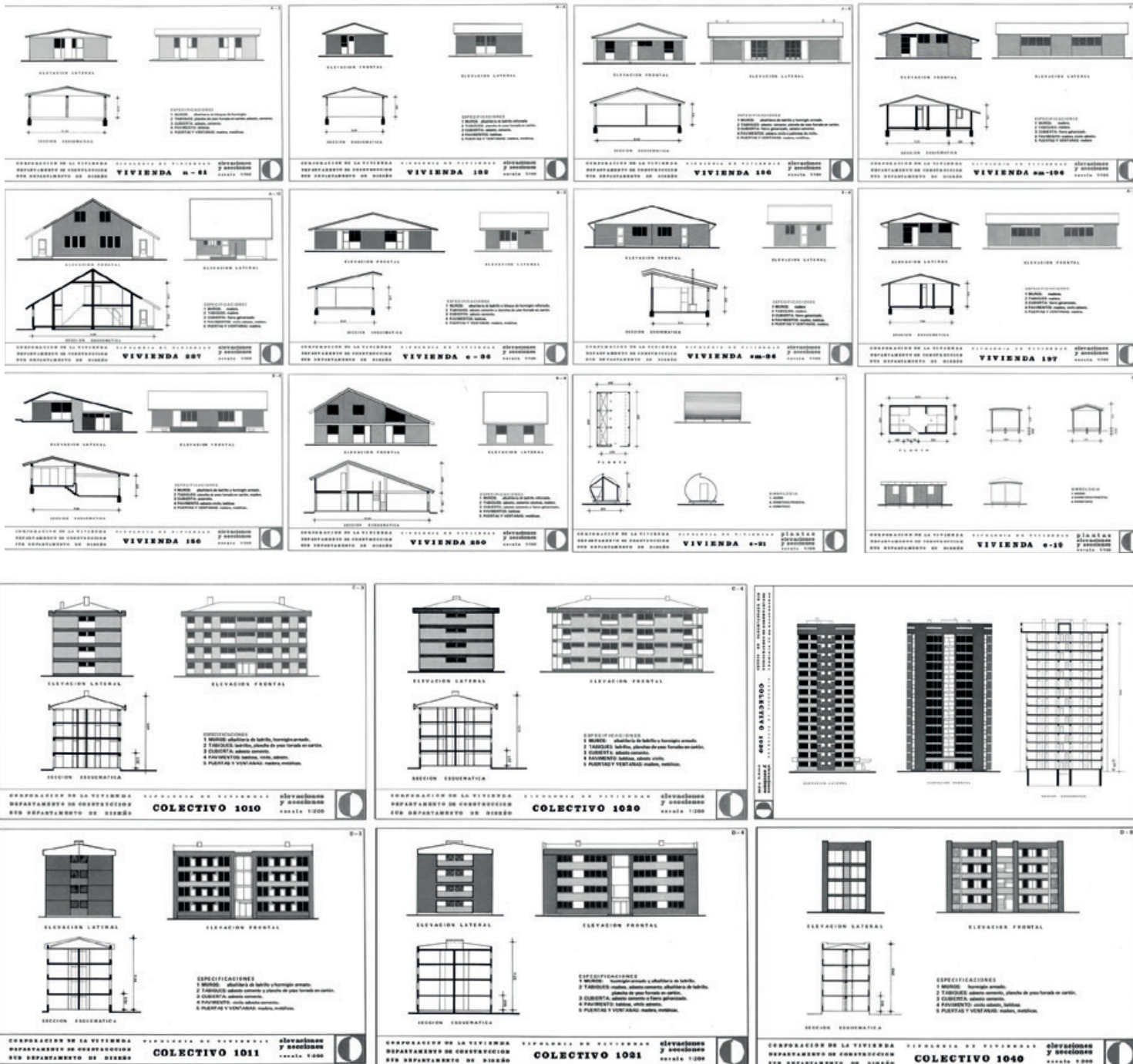
José Quintela (1972), in his introduction to *Rationalized Housing Typologies 1966-1972*, uses the terms “typologies” and “prototypes” interchangeably to refer to the eighteen designs, but the document also uses the term “typology” to indicate whether this is a semi-detached house or a detached building. Regardless of this, and following the definition of Moneo (1978), the document offers four complexes with internal structural similarities: semi-detached (houses), collective high-rise (four or more floors), and emergency (units with a single floorplan) dwellings. In this sense, it is worth pointing out that collective 1050, which is a residential 16-story building, should be considered as a different shape to the collective high-rise buildings, which correspond to four-story housing blocks. The fact that both shapes are considered within the same typology reveal that their structural similarity is also an epistemological link: both are part of the same collective housing standardization exercise and of a similar project reflection.

Table 1
 General data on the shape aspects of rationalized housing prototypes. CORVI 1965-1972.
 Source: Preparation by the Authors using CORVI (1972b).

Type	Prototype	Year of Design	General Aspects					
			Origin	Design	Use		Construction System	Typology
A. Semi-Detached Housing 1966-1970	N 61	1967	South Department	Rationalized	Regionalized	North Zone	Tradicional	Semi-detached
	132	1966	Central Department	Rationalized	Regionalized	Not indicated	Tradicional	Semi-detached
	136	1966	Central Department	Rationalized	Regionalized	Not indicated	Tradicional	Semi-detached
	sm-196	1966	South Department	Rationalized	Regionalized	South Zone	Semi-Industrialized	Semi-detached
	197 SM	1966	South Department	Rationalized	Regionalized	North Zone	Semi-Industrialized	Semi-detached
	227 SM	1966	South Department	Rationalized	Regionalized	South Zone	Tradicional	Semi-detached
B. Semi-Detached Housing 1971-1972	C-36	1970-1971	Manuel Montt Design Dept.	Rationalized	Regionalized	Central Zone	Tradicional	Semi-detached
	SM-36	1971	South Department	Rationalized	Regionalized	No information	Semi-Industrialized	Semi-detached
	150	1972	Sub-Department of Design	Rationalized	Regionalized	Central Zone	Tradicional	Semi-detached
	250	1972	Sub-Department of Design	Rationalized	Regionalized	Central Zone	Tradicional	Semi-detached
C. High-Rise Collective - 1966-1970	1010	1965	Studies Department	Rationalized	Regionalized	All the country	Tradicional	Detached
	1020	1965	Studies Department	Rationalized	Regionalized	All the country	Tradicional	Detached
D. High-Rise Collective - 1971-1972	1011	1972	Sub-Department of Design	Rationalized	Regionalized	All the country	Tradicional	Detached
	1021	1971	Sub-Department of Design	Rationalized	Regionalized	All the country	Tradicional	Detached
	1040	1972	Sub-Department of Design	Rationalized	Regionalized	Central Zone	Tradicional	Detached/Semi-detached
	1050	1972	Sub-Department of Design	Rationalized	Regionalized	Central Zone	Tradicional	Detached/Semi-detached
E. Emergency Housing	e19	No indica	-	-	-	-	-	-
	e21	No indica	-	-	-	-	-	-

Figure 1
Semi-Detached Housing Typology designed in CORVI between 1966 and 1971.
Source: CORVI (1972b, p. A1-E2).

Figure 2
Collective High-Rise Housing Typology designed in CORVI between 1966 and 1971.
Source: CORVI (1972b, p. C1-D14).



MATERIAL

In a 1969 document titled "Housing Corporation", published by the CORVI Public Relations Office, it is stated that "the materials that CORVI uses in the building of dwellings are the following: cement, sand, gravel, iron, wood, slate, vulcanite, metal windows and frames, single and double-glazed windows, tiles and vinyl plastic, copper piping; in electricity: steel and plastic tubes; sliding hinges and locks; plumbing fixtures, and paint. All locally made" (CORVI, 1969, p. 1). Contrary to this non-specific style, the document *Rationalized housing typologies 1966-1972* establishes the material used in walls, partitions, roofs, slabs, doors and windows for each prototype, which allows checking that, although there is a given number of materials that are repeated in the complex, there are also choices that are specific to each prototype and their eventual location [Table 2].

As can be seen in Table 2, there are not many variations of material composition, although constructively speaking, these are significant. The mix between brickwork and reinforced concrete is privileged in walls in almost all the typologies, except for the smaller housing versions and the emergency dwellings, where wood is chosen. In the partitions, drywalling and asbestos cement are mainly used, that are also used on the roofs and slabs, as well as with the tiles. These specifications assign alternatives, not closed material compositions, as such there is no detail about the amounts to use in each prototype. What can make the difference is the price and geographic availability, so that the prototypes are materially open, depending on the available budgets. An example of the latter is that, on roofs, "asbestos, cement" are spoken about interchangeably, as if they were two different materials, and "asbestos cement" as if it were just one, which can be understood as part of the interpretative flexibility needed for the prototypes to adopt to different concrete situations.

Two construction systems are outlined in *Rationalized housing typologies 1966-1972*: the traditional, which implies that each situation is resolved by the respective construction companies; and the semi-industrialized, which deals with housing with mass-produced panels that are assembled locally (Aguirre, Cañas & Vergara, 2015). Just as happens with the so-called fluid technologies (Redfield, 2016), the housing prototypes show two different, but not contradictory epistemological movements. They are part of a standardization process that implies a limitation of the shape, function and material options of the work and, at the same time, the heterogeneity of the world interpretations is open. The variations require a base. Standardization displaces this base in all directions, as part of an evolution process. While the adoption of the governmentalized typological standard in the design and construction of housing, also helps their displacements and their adaptations. Standardization does not close off the design, since the standard opens up technology to local adaptation.

Table 2

Material specifications of rationalized housing prototypes, CORVI 1965-1972. Source: Preparation by the authors using CORVI (1972b).

Type	Proto-type	Year	Specifications					Presence of Asbestos
				Partition	Roof	Flooring	Doors and Windows	
A. Semi-Detached Housing 1966-1970	N 61	1967	Concrete block masonry	Drywall, asbestos, cement	Asbestos, Cement	Tiling	Wood, Metal	Yes
	132	1966	Reinforced brick masonry	Drywall	Asbestos, Cement	Tiling	Wood, Metal	Yes
	136	1966	Reinforced concrete and brick masonry	Drywall, asbestos, cement	Asbestos Cement, Galvanized Iron	Asbestos vinyl or vinyl tiles	Wood, Metal	Yes
	sm-196	1966	Wood	Wood	Galvanized Iron	Wood, asbestos vinyl	Wood	Yes
	197 SM	1966	Wood	Wood	Galvanized Iron	Wood, asbestos vinyl	Wood	Yes
	227 SM	1966	Wood	Wood	Galvanized Iron	Wood, asbestos vinyl	Wood	Yes
B. Semi-Detached Housing 1971-1972	C-36	1970-1971	Reinforced concrete block or brick masonry	Drywall, asbestos, cement	Asbestos, Cement	Tiling	Madera, Metálica	Yes
	SM-36	1971	Wood	Wood	Galvanized Iron	Wood, Tiling	Wood	No
	150	1972	Reinforced concrete and brick masonry	Drywall, wood	Slate	Asbestos vinyl, tiles	Wood, Metal	Yes
	250	1972	Reinforced brick masonry	Asbestos, Cement, Wood pulp, Wood	Asbestos Cement, Galvanized Iron	Tiling	Metal	Yes
C. High-Rise Collective - 1966-1970	1010	1965	Reinforced concrete, brick masonry	Drywall, brick	Asbestos Cement	Asbestos vinyl, tiles	Wood, Metal	Yes
			Reinforced concrete, brick masonry	Drywall, brick	Asbestos Cement	Asbestos vinyl, tiles	Wood, Metal	Yes
	1020	1965	Reinforced concrete, brick masonry	Drywall, brick	Asbestos Cement	Asbestos vinyl, tiles	Wood, Metal	Yes
			Reinforced concrete, brick masonry	Drywall, brick	Asbestos Cement	Asbestos vinyl, tiles	Wood, Metal	Yes
D. High-Rise Collective - 1971-1972	1011	1972	Reinforced concrete, brick masonry	Drywall, brick	Asbestos Cement	Vinyl, asbestos cement	Wood, Metal	Yes
			Reinforced concrete, brick masonry	Drywall, brick	Asbestos Cement	Vinyl, asbestos cement	Wood, Metal	Yes
	1021	1971	Reinforced concrete, brick masonry	Drywall, brick masonry, wood, asbestos cement	Asbestos Cement or Galvanized Iron	Asbestos vinyl, tiles	Wood, Metal	Yes
			Reinforced concrete, brick masonry	Drywall, brick masonry, wood, asbestos cement	Asbestos Cement or Galvanized Iron	Asbestos vinyl, tiles	Wood, Metal	Yes
	1040	1972	Reinforced concrete	Drywall with Asbestos Cement	Asbestos Cement	Asbestos vinyl, tiles	Wood, Metal	Yes
	1050	1972	Reinforced concrete	Drywall, Asbestos Cement	Tiled Terracing	Asbestos vinyl, tiles	Wood, Aluminum	Yes
E. Emergency Housing	e19	-	Wood	No information	Wood	No information	Wood	Yes
	e21	-	Wood	No information	Wood	No information	Wood	Yes

DIMENSIONS

With regard to the dimensions of dwellings, it is possible to find that each prototype has different ones, but within a framework that limits their variance. The height of the rooms is 2.3 meters on average, but seven prototypes have a height of 2.52 meters, and another five, 2.20 meters, establishing a mode. Something similar happens with the thickness of the walls. When information is provided on this aspect, there are values of between 15 and 20 centimeters, although it is worth mentioning, that the thickness of the partitions is factory standard [Figures 3 & 4].

The set of variations in dimensions that can be seen in Table 3, shows a broad range of options that were considered to prepare the prototypes and that had, as a result, a flexible standardization. As this is the result of the work of several design teams, there is no overriding formula. The dimensions agreements made within the Study Department, that designs collective prototypes 1010 and 1020 [Figure 2], does not repeat the decisions made in the South Department regarding the dimensions of the semi-detached house, both because they involve different target populations and because they are projected for different situations, as occurs with dwelling 150, designed for a site with two levels, or dwelling e-21, designed for emergencies [Figure 1].

Now, there are cases, such as housing prototypes 196 and 197, designed by the same team in the same year, but regionalized for different areas (north and south) that are exactly alike in their design and material, with there being no difference between them. The housing prototypes C36 and SM 36, designed by the same team, but one year apart, for different areas (central and the entire country), are different in dimensions and materials. However, their distribution is exactly the same in the blueprint. Actually SM36 did not consider a small hallway that appears in the blueprint, and that gives some meters in the specifications of C36. The result is similar blueprints, but with different footage: 34 meters squared (C36) and 35.44 meters squared (SM 36) in floor space each. On the other hand, prototype 150, was a single-floor dwelling, but on two levels, specifically adaptable to hillsides with a sharp slope [Figure 1].

Figure 3

Dimensions and floorplans of semi-detached housing designed in CORVI between 1966 and 1971. Source: CORVI (1972b, p. A1-E2).

Figure 4

Dimensions and floorplans of collective high-rise housing designed in CORVI between 1966 and 1971. Source: CORVI (1972b, p. C1-D14).



Table 3

Dimensions (in meters squared) of rationalized housing prototypes, CORVI 1965–1972.
Source: Preparation by the authors using CORVI (1972b).

Type	Prototype	Year	Housing Typology	Housing Model	Height	Thickness of Structural Walls	Front length (including wall)	Side length (including wall)	Total m ² of dwelling
A. Semi-Detached Housing 1966-1970	N 61	1967	Semi-detached	A	2,2	0,2	5,42	8,45	38,89
	132	1966	Semi-detached	A	2,2	0,2	6,6	6,45	36,93
	136	1966	Semi-detached	A	2,2	n/i	6,85	9,5	57,81
	sm-196	1967	Semi-detached	A	2,35	0,15	10,2	7	52,26
	197 SM	1967	Semi-detached	A	2,41	0,15	7,2	7	52,26
	227 SM	1967	Semi-detached	A	2,2	n/i	6,75	7,55	62,34
B. Semi-Detached Housing 1971-1972	C-36	1970-1971	Semi-detached	A	2,18	0,15	6,30 /6,40	5,8	34
	SM-36	1971	Semi-detached	A	2,4	0,15	6,4	5,8	35,44
	150	1972	Semi-detached	A	2,2	0,15	6,2	9,3	49,32
	250	1972	Semi-detached	A	2	n/i	12,4	6,2	33,36
C. High-Rise Collective - 1966-1970	1010	1965	Detached	A	2,52	n/i	5,54	8,69	44,06
				B	2,52	n/i	5,54	11,52	50
	1020	1965	Detached	A	2,52	n/i	6,085	11,08	58,99
				B	2,52	n/i	6,085	14,01	66,95
D. High-Rise Collective - 1971-1972	1011	1972	Detached	A	2,52	n/i	6,085	11,08	58,99
				B	2,52	n/i	6,085	14,01	66,95
	1021	1971	Detached	A	2,52	n/i	5,485	10,31	48,87
				B	2,52	n/i	5,485	11,66	52,98
	1040	1972	Detached / Semi-detached	A	2,56	n/i	6,17	11,27	60,55
	1050	1972	Detached / Semi-detached	B	2,56	n/i	6,17	14,045	67,65
E. Emergency Housing	e19 (emergency)	S/información	Detached	A	2,8	n/i	2,5	6	21
	e21	S/información	Detached	A	2,15	n/i	6,24	3,04	18,96

FLOORPLANS

One aspect that motivates greater structural similarities between the different prototypes is the floorplans, which are also related to the standardization of indoor dimensions. All prototypes have similar floorplans: living/dining room, kitchen, bathroom, bedroom, hallway and closet, which constitutes one of the results of the housing design standardization made by CORVI. Although the dimensions for each activity vary among depending on each prototype, on average, the floorspace for Living and Eating correspond to 27%; Cooking, 11%; Hygiene, 6%; and Sleeping, 45% (21% to the master bedroom and 24% to the rest); 6% is dedicated to moving from space to space; and 4% to storage [Table 4]. It is worth stating that the floorplan division proposed does not just indicate a rationalization of the activities and their infrastructures, but also a family concept of the inhabitants and a hierarchization within this, in the means that a master bedroom is placed and more space is given to it.

The houses have, for each prototype, homogeneously sized housing units. While, the collective options have housing units with different dimensions and types. Collectives 1010 and 1020, for example, have four levels: the first contains four type A dwelling units, while the following ones include three type A and one type B. The latter includes an additional bedroom or a space which is included in the meters of the floor-

plan as such, although in the blueprint it appears as an extension of the living-dining room. In collectives 1010, there are dwellings with 2 (A) and 3 (B) bedrooms, where A is the master bedroom, and the B are smaller but equal in size. In collectives 1020, there are 3 (A) and 4 (B) bedroom dwellings. Here two bigger units and two smaller ones are considered, with both pairs alike.

Table 4

Dimensions (in meters squared) of living spaces within rationalized housing prototypes, CORVI 1965-1972. Source: Preparation by authors using CORVI (1972b).

Tipo	Prototipo	Año	Tipología de vivienda	Modelo vivienda	Estar Comedor	Cocina	Baño	Dormitorio 1 (y 4 si lo hay)	Dormitorio 2 y 3	Pasillo	Clóset	Total m ² de vivienda
A. Viviendas en Extensión 1966-1970	N 61	1967	Pareada	A	11,37	3,18	2,08	8,56	12,66	1,04	0	38,89
	132	1966	Pareada	A	12,04	4,68	2,57	8,81	6,48	1,14	1,21	36,93
	136	1966	Pareada	A	17,96	4,79	3,29	10,16	16,45	3,16	2	57,81
	sm-196	1967	Pareada	A	13,23	8,17	2,89	8,63	16,12	1,6	1,62	52,26
	197 SM	1967	Pareada	A	13,23	8,17	2,89	8,63	16,12	1,6	1,62	52,26
	227 SM	1967	Pareada	A	13,3	5	3,22	12,32	19,67	4,08	4,75	62,34
B. Viviendas en Extensión 1971-1972	C-36	1970-1971	Pareada	A	7,8	3,3	2,64	8,01	8,01	2,24	2	34
	SM-36	1971	Pareada	A	8,23	4,94	3,29	8,49	8,49	0	2	35,44
	150	1972	Pareada	A	15,12	5,3	4,9	7,95	13,12	0,77	2,16	49,32
	250	1972	Pareada	A	11,2	2,6	2,4	8,68	5,88	1,6	1	33,36
C. Colectivos en Altura - 1966-1970	1010	1965	Aislada	A	13,63	4,78	2,4	11,26	8,28	2,26	1,45	44,06
				B	13,63	4,78	2,4	11,26	14,22	2,26	1,45	50
	1020	1965	Aislada	A	16,2	8,15	3,31	9,52	14,22	5,62	1,97	58,99
				B	16,2	8,15	3,31	17,48	14,22	5,62	1,97	66,95
D. Colectivos en Altura - 1971-1972	1011	1972	Aislada	A	13,77	6,47	3,43	8,91	10,15	3,98	2,16	48,87
				B	13,77	6,47	3,43	13,02	10,15	3,98	2,16	52,98
	1021	1971	Aislada	A	15,48	7,03	3,74	10,31	15,3	5,45	3,24	60,55
				B	15,48	7,03	3,74	17,41	15,3	5,45	3,24	67,65
	1040	1972	Aislada / Pareada	A	17,71	5,87	2,42	8,24	10,26	2,94	2,16	49,6
	1050	1972	Aislada / Pareada	B	16,28	7,69	4,52	9,88	15,77	4,75	3,63	62,52
E. Viviendas de Emergencia	e19 (emergencia)	S/ información	Aislada	A	7	0	0	7	7	0	0	21
	e21	S/ información	Aislada	A	6,32	0	0	6,32	6,32	0	0	18,96

CONCLUSIONS

The revision presented here allows setting four variables involved in housing design, where it is possible to see a standardization attempt in CORVI's work. Its particularity lies in the fact that it does not seek a rigid model, but a flexible one. The measurements are not the same among prototypes, nor are they expressed in limited volumes; on the contrary, they provide a possible idea of being interpreted within an established framework, insofar as both who decides which housing typology to build, and who wants to imagine its workings, have the possibility to speculate about these and make decisions regarding their concretization. However, the same cannot be done about the structural aspects of the dwellings, since their shapes, floorplans, materials and spaces are outlined and match one another.

In other words, the design of the CORVI housing typologies is standardized by the rationalization idea so that, regardless of their variations, the set of prototypes acts socio-materially in a similar fashion. Their material choices allow assuming a durability that, seeing the cases today, have lasted more than fifty years. Their shapes, dimensions and floorplan distributions make it possible to foresee the life of nuclear families, that evolve, and that are sustainable over time, if the nuclear families decrease in size. Both parameters suggest a dwelling that is functional to the life cycle of the families that acquire them, that stabilize their urban environment, and that come from learning from previous and contemporary experiences.

In this aspect, as has already been mentioned, the notion of typology can lead to misconceptions. Rafael Moneo (1978; 2015) says that the most intense moments in the history of architecture, are those where a new typology emerges, a phenomenon where external elements collaborate, like the availability of new techniques, or the urgency of new social requirements. For Moneo, a typological moment is a particular milestone, that marks the production of architecture works in the mid-term, and has an effect on the socio-materials means of understanding and/or reflecting this community of practices. Certainly, the building typologies designed by CORVI teams do not promote new or different architectural shapes from pre-existing modern shapes, but they articulate more syncretic versions of these, and their virtue lies in this [Figure 5]. They show a moment of the community of practices within Chilean architecture, where this has a considerable number of exemplary social housing dwellings, produced in the almost seven previous decades, along with a clear mandate, referring to simplifying the material composition processes and their production.

Work is also done within a social narrative that has been persistent: modernization, in whose progress, the different lines of architecture and policy trust, and in whose framework, the efforts for standardizing and rationalizing production processes, as well as the attempts to industrialize them, are generally seen as positive advances (Quintela, 1972). The document, Rationalized housing typologies 1966-1972 accounts for the particular aspects of that time. Their intensity can be appreciated, both in the number of different living options that CORVI's design teams produce, 18, as in the adaptive intension of their language of floorplans, materials, and basic shapes in said versions. At the same time, this design exercise consolidates three types of typological strategies for social housing: semi-detached houses, detached blocks and high-rise residential buildings. In later decades we will see how the debate focuses on houses, which expand through city outskirts, and high-rise buildings, that densify their centers (Vergara, 2017), but at that time, the main protagonists were the detached or collective blocks, intermediate forms of densification that coincided with the densities of the planned street blocks.



Figure 5
Dimensions and floorplans of collective high-rise housing designed in CORVI between 1966 and 1971.
Source: Preparation by the Authors.

Figure 6
Dimensions and floorplans of collective high-rise housing designed in CORVI between 1966 and 1971.
Source: Preparation by the authors.

Collectives, in particular the 1010 and 1020 models [Figure 6], were successful both in the number produced, and especially on being taken to most of the cities in the country, even though they were designed for the central area. Their interpretative flexibility as a typology, allowed them to be adapted for opposing climatic areas (Arica and Punta Arenas, for example), without seeing variations in their floorplans, so that regardless of their two-sided roofs, or their overlays, their inhabitants had the residential experience expected by their designers: living-dining room, closets, hallways, differentiated bedrooms, kitchen with laundry area, within the 60-meter square apartments inserted in collective units. These living proposals lost strength once CORVI stopped producing them, towards the end of the 1970s, but their influence is noticeable in the later social housing, which would seek to maintain the shapes, materials and floorplans despite reducing their quality and size, as the residential forms that these floorplans had, had already been consolidated in Chilean society.

Establishing previous works that were analyzed by CORVI design teams, is somewhat difficult. It is known that these were standout works of the Worker Housing Law, the Pereira Law and DFL 2, as such the Huemul I, II and III neighborhoods were considered, as well as others located in Antofagasta and Valparaíso. It is also worth considering that among those who took part in the analysis workshops, were not just Valdés, who had just inaugurated the Tajamar Towers and Villa Portales, but also Sepúlveda and Perelman, who had just concluded the Republica Remodeling. All in all, what is key to recover is, that in these design exercises, CORVI had the “synthesis of the best individual contributions to solve given repetitive issues” (Benévolo, 1963, p. 883), in this case, that of social housing, looking to “correct the anarchy of housing types” (Quiroga, 1972, 0. 42) which public policy perceived.

Although the CORVI teams do not prepare a new architectural form, both the design task that they receive and the three general typologies that they propose in their eighteen prototypes, bring ideas with them that are consolidated through them in society: that of the nuclear family with

internal hierarchies; that of urban living as collective living; the use of solid materials for the dwelling (bricks and concrete), that are associated to a dwelling that accompanies the life cycle and that constitutes a lasting property; the physical separation between the floorplans for living, sleeping and preparing food. These are just some of them, which is why it is possible to state that we are facing a special moment for design within Chilean architecture, whose effects must be dimensioned considering the standardization of social housing, the consolidation of collective living typologies and, of a material moment in Chilean cities, beyond the valuation of singularities of the works, and although this moment does not lead to a definitive housing standard, it is part of the experimentation that helps to organize designs "for a repetitive, mass-produced use, on a national scale" (Quiroga, 1972, p. 42).

It is good to have in mind that the standardization of the shapes, materials, dimensions, and floorplans made by CORVI's teams, and contained in "*Rationalized housing typologies 1966-1972*", does not have rigid formulas or indications, but rather are interpretatively flexible and locationally adaptable design guidelines, which fit the sociological role of the standards reviewed at the start of this work. But there is also, in the eighteen typologies proposed, a structural communality that expresses a way of producing housing, where the project design is the key piece of a collective argument for living, not just at a residential complex scale, but also at a scale of the economic segments that had access to said dwellings and that produced a symbolic cohesion on the national level.

From the reflection that arises from the designs of the CORVI teams, it is possible to learn both the benefits of typological design, based on the rationalization of expense and on the standardization of materials and programs involved in the production of social housing, along with the virtues of the flexibility of standardization, that allow its adaptation to the different urban realities of the country. This reflection should be considered for the optimization of social housing standards and to seriously address collective living as a future public policy.

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- The article meets the requirements established in the Citations and Bibliographic References section of the *Guidelines for Authors* by following APA standards.
- The article does not present a professional or personal, past or present conflict of interest. If one does exist, the possible relationships that may bias the research must be expressly indicated and should also be clarified in the submitted article.
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2. Editorial review process in *Arquitecturas del Sur*

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- PUBLISHABLE (which may include suggestions with optional changes from the reviewers and/or mandatory changes from the editor)
- PUBLISHABLE WITH MODIFICATIONS (mandatory changes from the reviewers and editor)
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If the reviewers differ in their recommendations, the article will be sent to a third evaluator.

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Upon submitting a manuscript for publication, the authors must complete and attach the Certificate of Authorship, in which they responsibly declare that:

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- After the copyediting process, the authors have the right to review the latest version of the text before its final publication. Once approved, this version will continue on to layout and publication, and no further changes may be made.
- All authors duly mentioned in the article submission must have contributed significantly to the research and must have a personal ORCID iD.

2. Editorial responsibilities

- The Editorial Team will consider all manuscripts received through its online platform for possible publication and will base its decision on compliance with the Editorial Policies and the article's scientific contributions, in accordance with peer review results.
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- The Editorial Team will preserve reviewer anonymity and will maintain the scientific character of the publication.
- The Editorial Team must be free of possible conflicts of interest with respect to the submitted articles, their authors, and their funding institutions.
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SUBMISSIONS

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As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

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- The article and annexed material comply with ethical principles and current copyright laws, as well as with the stylistic and bibliographic requirements summarized in the *Guidelines for Authors*, which are available in About the Journal.
- The article has not been published previously. Neither is it a fragment, duplicate or redundant publication, nor has it been submitted simultaneously to another journal (or an explanation has been provided in the Comments to the Editor section).

- The article follows the IMRaD structure (Introduction, Methodology, Results, Discussion and conclusions) bibliographic reference and its graphic material, figures and/or tables is provided in separate files.
- The article meets the bibliographic reference requirements by following APA guidelines, using mainstream scientific articles for more than 50% of the references, and correctly indicating websites when appropriate.
- The article does not present a professional or personal, past or present conflict of interest (if one does exist, the possible relationships that may bias the research must be expressly indicated and should also be clarified in the submitted article).
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- All the tables and/or figures are appropriately numbered, titled and/or captioned and their source is indicated, whether they come from open format files, they were created by the authors, or the authors of this article have permission from the original authors of the graphic material to use the table/figure.
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AUTHOR GUIDELINES

Articles may be submitted in Spanish, Portuguese or English and must include an abstract in all of the aforementioned languages.

Each submitted manuscript must follow the IMRaD structure (Introduction, Methodology, Results, Discussion and conclusions), and bibliographic references. When appropriate, photographs, graphics, tables, plans and maps that increase understanding of the text may be included, provided they meet the specific requirements detailed below.

The submission will consist of separate sections: the article itself, the tables, and the figures.

The submission, review and processing of texts in *Arquitecturas del Sur* is free of charge for authors.

1. TITLE

Considering the title is often used for subject indices, it should be concise and informative, include translations into the two other obligatory languages (Spanish, English and Portuguese), and not exceed fifteen words. When there is a subtitle, it should be included immediately below the title and include the translations into each language.

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The abstract may contain a maximum of 300 words (in Spanish) and a minimum of 150 (in Spanish); in addition, it must be translated into the two other obligatory languages (English/Portuguese). It should synthesize the objectives of the research, the methodology used, and the most important conclusions, and emphasize the original contributions made.

2.1. Palabras Claves / Keywords

The submission must include 5 (five) keywords. In all cases (and especially in terms of the architecture/urbanism disciplines) they must be selected from the Network of Architecture, Art, Design and Urbanism Libraries' Vitruvio Controlled Vocabulary webpage, available at <https://vocabularyserver.com/vitruvio/>. If the terms are from other disciplines, they should be chosen from the UNESCO Thesaurus.

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Tables include additional information that when necessary broadens the content of the text with data or statistics. If used, tables must be cited in the text and should be numbered sequentially with Arabic numerals. They should be included in the article near where they are referenced, as in the following example:

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4.1.1. In a file separate from the text, include the title of each table in the article. The file in MS Word format

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Table 3: Chronological evaluation of temperature increase in adobe walls. Source authors

Table 4: Increase in humidity in winter months in adobe walls. Source authors

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This section must include all of the references cited throughout the text. It should have a minimum of 20 references, a third of which should be no older than 5 years. All references and bibliographic citations should conform to APA formatting rules (<https://normasapa.com/category/referencias-y-bibliografia/>).

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