



# InterVIEW/READ 3<sup>1</sup>

## The "unthinkable doctorate."<sup>2</sup>

Our PhD program covers interdisciplinary research in architecture and urban studies by training autonomous researchers contributing original knowledge to new subject areas with national and global relevance, offering innovative professional training and practices leading to academic growth. We produce theoretical dissertations that may include a project of architecture. The project should constitute scientific research, but it is not quite that. The link between theoretical research in architecture and urban studies, but also disciplines such as geography, history, anthropology, and others, is essential. Nevertheless, I suggest adding a new category: the "unthinkable doctorate" as a form of knowledge in the arts and architecture profession.

Dr. José Rosas Vera

Director of the School of Architecture (1997-2000)

Dean of the Faculty of Architecture, Design and Urban Studies (2005-2012)

Director of the Heritage Center (2012-2017) at the Pontificia Universidad Católica de Chile (PUC) discussed the developments of their PhD program in Architecture, which started in 2004.

*Facultad de Arquitectura, Diseño y Estudios Urbanos* (School of Architecture and Urbanism)

*Pontificia Universidad Católica de Chile* (Pontifical Catholic University of Chile, PUC)

April 2, 2020, Santiago, Chile & Ottawa, Canada

## The PhD Program in Architecture and Urban Studies at PUC

[Federica Goffi] Could you introduce the history of the PhD program in Architecture and Urban Studies at the Pontifical Catholic University of Chile since its foundation in 2004? How did it come to be, and what has been your role?

[José Rosas Vera] The School of Architecture and the Institute for Urban Studies created one of the first interdisciplinary doctoral programs at PUC.<sup>3</sup> The program introduces architects and other disciplines and professions to an expanded field of urban studies and networks, strengthening hybrid spaces of research—our doctorate results from the 2004 curriculum, revised by the 2017-2018 curricula adjustment. I was in charge of implementing this adjustment when I took office in 2016. In this context, an important role was played by Dr. Fernando Pérez,<sup>4</sup> a well-known architect and professor. He received the mandate from Professor Juan José Ugarte, Director of the School of Architecture to formulate (2002) and implement the program (2004).<sup>5</sup> While I was Dean (2005-2012), I represented the school in the Doctorate Committee through the initial accreditation process and taught in the program, strengthening interdisciplinary research. We are starting the fifth accreditation supervised by a nationally accredited commission (CNA) to consolidate the program's interdisciplinary nature and be accredited in the future by an international board.<sup>6</sup>

Our PhD program originated to provide an interdisciplinary doctoral education to architects, geographers, historians, and other professionals after receiving a bachelor's or master's degree in architecture and/or another discipline. Indeed, a master's degree in architecture is not a requirement of our program. We recognize that architecture makes progress through contact with other fields. For example, ecology emerged from the relation between biological science and architecture, and from this intersection, new knowledge was produced, including landscape architecture.

[FG] How many students join the PhD program every year?

[JRV] The admissions committee selects eight applicants each year. Our students receive scholarships from the government or the University. Up to now, we graduated seventy-two Doctors in Architecture, and sixty students are presently enrolled. About 40% of the students are architects, but there are also historians, geographers, anthropologists, and 72% are international students.

[FG] Do the majority of graduates teach or practice?

[JRV] Our students work in academia and practice. Many join governmental institutions or intergovernmental organizations. Some enter politics, but none has gone into the industry yet.

[FG] Considering the diversification of knowledge production in doctoral research in architecture and urbanism, how does your program position itself in relation to others in Chile, Latin America, and the world?

[JRV] Our school of architecture is ranked 1<sup>st</sup> in Latin America and 34<sup>th</sup> globally, while PUC is ranked 132<sup>nd</sup> globally.<sup>7</sup> The Institute of Urban and Territorial Studies was the first interdisciplinary Institute funded at PUC, with a pioneer master's program and the first Journal of Latin American Urban and Regional Studies, EURE.

Our Doctorate belongs to two units, the School of Architecture, ranked 25<sup>th</sup> in the world, and the Institute for Urban Studies, created with the support of the Ford Foundation in the 1960s as the first center of interdisciplinary studies in urban planning, urban development, and urban design. The PhD program is an educational field hosted in the architecture and urban studies academic unit, led by a committee.

As a disciplinary field, urbanism is part of architecture studies, and for us, architecture and urbanism are one space of knowledge, and we differentiate architecture and urbanism from urban

studies, which is a complex crossing of disciplines. Of course, urbanists are connected with urban studies, planning, or urban design.

I recommend reading a book called *In Space We Read Time: On the History of Civilization and Geopolitics*,<sup>8</sup> by German sociologist Karl Schlögel, which introduces considerations about the relation between urban studies and geography, economy, sociology, anthropology, and returns to architecture, which is essential concerning space. Schlögel wrote that time occurs in space, and history materializes in space.

We are a private university, even though we are a public institution. The difference is that we are a Catholic University and not a State University. It is not easy to develop relations with doctorate programs in public universities, but we are temporary members of the state university group in Latin America (DOCASUR). We have an agreement with the *Universidad Central de Venezuela* in Caracas. We are connected with the *Universidad Nacional de Rosario* (UNR) in Argentina, *Universidad Torcuato Di Tella*, in Buenos Aires, University of the Republic of Uruguay, *Universidade Federal do Rio Grande do Sul* (UFRGS) Porto Alegre, and the *Universidade Federal do Rio de Janeiro* (UFRJ), Rio de Janeiro, and others. The *Universidad de Chile* recently introduced a PhD in Territory, Space, and Society.<sup>9</sup> We have a double degree with the Instituto Universitario di Architettura di Venezia (IUAV). We also have connections with Barcelona, Madrid, Sevilla, and Granada, Spain, but PhD programs in France, Italy, England, and Australia. Recently we have an important agreement with UNAM, Sevilla University, and La Plata University alliance that has resulted in the Doctoral and Postgraduate School Víctor Pérez Escolano.

Through our professors who studied there, we have connections with the Royal College of Art, the Bartlett School of Architecture (UCL), and the Architectural Association School of Architecture (AA) in London, UK. We have contacts with American universities, but we do not have agreements. It has been difficult for Latin American universities to connect with universities in North America, especially Ivy League ones, like Harvard, Princeton, Berkeley, and Columbia, but we have relations with their faculty. We have colleagues who studied at Princeton, Harvard, MIT, Columbia, Berkeley. We have contacts with several foundations, like the Getty Foundation, and also museums and archives.

[Nicolas Arellano Risopatron] What is the Catholic Church's role today and historically in relation to PUC?

[JRV] The Catholic Church has a crucial role in PUC. As far as research, there is a relevant text *Ex Corde Ecclesiae* by John Paul II, about Catholic Universities, which ratifies our service to society and our contribution to the development of our country. According to this document, the University is:

"...a place of research, where scholars scrutinize reality with the methods proper to each academic discipline, and so contribute to the treasury of human knowledge. Each discipline is studied in a systematic manner; moreover, the various disciplines are brought into dialogue for their mutual enhancement."<sup>10</sup>

In this context, our doctorate program contributes new research in public policy, governmental studies, academia, industry, which is where Catholic Universities intend to contribute. Of course, perhaps not all the professors or students agree with this. Frequently in Latin America or other countries, it is problematic to say that we are a Catholic University because it is understood as a confessional University, which is not the case since we have many ideologies. Our Rector is chosen among three candidates that promote the pope's academic agenda. Still, as far as research, it is not a confessional University, and the Faculty are diverse and include Muslims, Agnostics, non-Catholics, and Catholics of different confessional faiths.

The *Universidad de Chile* and the *Real Universidad de San Felipe* in Santiago are public universities; the latter was the first colonial University founded in the Republican period by the new state government. Our University was founded in 1888 as a Catholic answer to the public University. In the 1960s, when changes were happening in universities worldwide, we went from being a Catholic University that forms Catholic professionals to a Catholic University for the country. It is a small but significant change. Sol Serrano, National History Award and distinguished academic of the Institute of history, studied this process and explains the dimension of public service of our university.

[Devon Moar] Can you tell us what constitutes doctoral research in architecture and urbanism in your program?

[JRV] The program, and the 2004 and 2016 curriculum changes, stimulate an interdisciplinary field of doctoral research, favoring the study and comprehension of the urbanization process to understand how urban space and representation are registered by the landscape, city, and architecture in Chile and Latin America. The metropolization process derives from changes in the first industrialization period that continued until now, with significant transformations. The program is structured by courses, seminars, debates, colloquia, and events with guests, groups of faculty, and collaborators. It is complemented by an academic internship that allows students to deepen the research in different settings while participating in teaching and research. We have an excellent library and archive for architecture, design, and urban studies, guaranteeing adequate means of research and the quality of the work.

While most dissertations are in the expanded field between architecture and urban studies, we also have disciplinary dissertations in architecture or sociology. There are six research lines in the program:

- History and Theory of Architecture and the City;
- Architectural Representation of the City and the Territory;
- Architectural, Urban and Landscape Heritage;
- Architectural, Urban and Territorial Project;
- Governance and Competitiveness; Urban Development and Social Transformation.

We involve PhD students in our research and academic courses as part of their training. We have a House of the Doctorate (Figure 1), with a garden and a barbeque. Students have space to work equipped with a computer lab and supervised by a program coordinator, administrative and academic staff in an educational atmosphere.

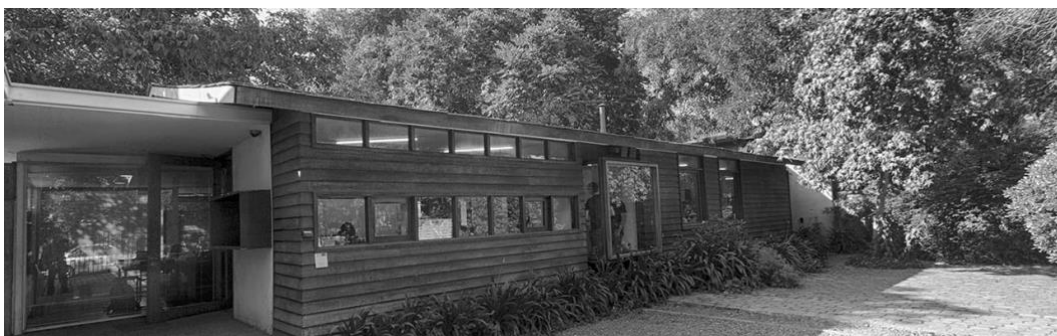


Figure 1 *Sede Doctorado en Arquitectura y Estudios Urbanos*, PUC, Santiago, Chile.

[FG] Which research approaches are explored by doctoral students? If you were to locate the PhD students' contribution to knowledge in architecture and urbanism, would we find this in the writing, drawing, mapping, or other research mediums?

[JRV] Since the curricular adjustment in 2017-2018, the dissertation prospectuses are related to the program research lines, the subject areas of OPR courses, and the specialization of faculty members and collaborating professors. Asking—what is the core of the doctoral program—is a critical question. The dissertation has to be written. The research must have a relevant theoretical dimension, delving into subjects that prioritize the discipline and profession and contribute new documental, cartographic, and ethnographic methodologies and evidence. Many dissertations become primary sources for further research and acquire the value of documentary evidence, contributing new knowledge. Another contribution to architecture and urbanism knowledge is the representation methods used, such as cartography, plans, elevations, sections, photography, drawings, and sketches. The cartographic evidence in architecture and urbanism is a primary source from which knowledge is extracted through observation, producing discordance between reality and primary sources. We can also introduce ethnographic evidence through interviews. For instance, this interview could be part of a doctoral thesis in the future or a book like the one Federica produced recently.<sup>11</sup> Interviews are an essential primary source, representing the contact with the actors having a record of research in architecture. Research evidence and other primary sources support further research and theoretical products in new investigations.

For example, doctoral students in our program produce new knowledge connecting datascares, maps, mathematical, and numerical evidence about the population, the economic level, etc. A contribution to knowledge in architecture and urbanism produces a field of tensions between cartography and ethnography evidence—between documental evidence and reality.

A future doctor should understand that new knowledge is a small step in relation to existing knowledge. It is research about research. Architecture and urbanism, territorial and landscape studies analyze the discordance between the urban phenomenon and how they are represented in the text. The contemporary city is an interdisciplinary problem. We must learn to observe the disconnect between the reality of the phenomena and the evidence in the documents, cartography, ethnography, datascape, or statistics to produce new knowledge because our field is different from biological science and social science. We need to create new knowledge starting from our field while connecting rather than borrowing paradigms.

[Kristin Washco] I wonder to what extent you see the doctoral research within the University affecting "territory, landscape, city, and architecture"?<sup>12</sup> Does the program affect public policy and has a dialogue with the planning department of Santiago?

[JRV] At this point, the research is not as connected with the municipal administration as I would like. However, some works illuminate urban planning, and we have a doctoral thesis that introduced changes in public policy. Nevertheless, our Faculty and visiting professors have led public policy issues with State institutions.

The program's primary influence has been the graduates' contribution to several universities and teaching institutions where they work. An example are the graduates from our program that entered the Faculty of Architecture and Urbanism, *Universidad de Chile*, through two competitions and renovated the academic body along with international Faculty working in universities in our region.

We produced fifty-eighth dissertations,<sup>13</sup> but not all are connected with the reality of the city. However, dissertations are producing a change in society. For example, Doctors of architecture Waldo Vila,<sup>14</sup> Simón Castillo,<sup>15</sup> and Marcelo Mardones,<sup>16</sup> dealt with urban mobility at the beginning of the twentieth century and wrote three original documents contributing to urban history, the understanding of public transportation in Santiago during the nineteenth century, and the transition to the modern city. The dissertation by Dr. Paulette Landon won a prize in public transportation from the Albertis Chair of the Faculty of Engineering (PUC).<sup>17</sup> She studied two low-income districts in the south of Santiago that interfered with the construction of a private road, and were destroyed, creating a disconnect between the two sides.<sup>18</sup> Through interviews, she evidenced the need for community space and social reform of the two district clusters divided by the road.

The program also contributed designs through the PUC Wood Innovation Center (CIM).<sup>19</sup> Dean Mario Ubilla Sanz and Professor Juan José Ugarte work at CIM. We have a new research line on energy efficiency modeling pursued by Professors Felipe Encinas and Waldo Bustamante. We must also create significant relationships between what a doctorate produces in four years with government and university funds, connecting with the ministry, industrial production, and public governance. Professor Margarita Greene, who was Director of Research and Post-Graduate studies, and studied with Bill Hillier (Space Syntax) at University College London (UCL), and our program representative in "*South of the World*" defined the problem of connecting research with public governance as the "last mile."

[KW] What is the role of the academic institution in public life in Santiago and the broader regional and national context?

[JRV] The academic institution's role is to solve the country's main problems and propose integrated urban projects. Architecture and urban studies are disciplines, but architecture is also a profession. Unlike the Anglo-Saxon educational world, license and professional degrees are achieved simultaneously in our country. We intend to position our discipline and profession in the public political debate, applying research to the country's main problems, proposing and integrating urban projects. Presently, in our country architecture is not yet relevant, and we should recognize this situation.

But nevertheless, we are trying to reinforce the role of the discipline and many who participate in our program do not hold doctorates but are recognized professionally through national and international architecture prizes. Our school has an agreement with Elemental, the firm of 2016 Pritzker Prize architect Alejandro Aravena, a professor in our doctoral program. He recently built the PUC Innovation Center (*Centro de Innovación Anacleto Angelini*), linking research with industry (Figure 2).<sup>20</sup>

At PUC, architectural and urban studies are essential disciplines and, together with the profession, aim to resolve the contemporary city's complex problems. We try to insert our voice, discipline, and profession to act with others to resolve the issues of the contemporary city, landscape, and territory. However, it is not easy for architecture or the arts and humanities to get at the core of debates to which disciplines such as engineering, biological science, and medicine make essential contributions. Recently, we created new agreements with several research centers at our University. We work with the Wood Innovation Center and the Center for Sustainable Urban Development (CEDEUS) to build sustainable cities and research how to solve the housing problem.<sup>21</sup> CEDEUS was founded with government funds, and students produce research on mobility, public policies, and housing. We collaborate with the Cultural Heritage Center to change how society and public policies interact with cultural heritage.<sup>22</sup> Lastly, we cooperate with the Centre for Social Conflict and Cohesion Studies (COES),<sup>23</sup> which investigates how different income

levels impact the quality of life, producing tensions in urban settlements. Regarding this research area, we collaborate with the *Universidad de Chile* and the PhD program in Territory, Space, and Society, and *Universidad de Sevilla* in Spain, a technology and energy efficiency study leader.



Figure 2 *Centro de Innovación Anacleto Angelini*, PUC, Santiago, Chile.  
Designed by Alejandro Aravena (ELEMENTAL) and completed in 2014. © Philippe Blanc.

[NAR] In your opinion, is it essential that PhD candidates have a deep connection to the subject and the place of study? Has the study of Santiago in different periods influenced the PhD program?<sup>24</sup>

[JRV] The study of Santiago is essential, but that should not be the only focus or an impediment to include other valuable subjects for disciplinary and professional advancement. A PhD program is an educational environment where the academic community tackles the contemporary city's complex problems requiring interdisciplinary approaches. We have students from regions of Chile and Spain, Italy, Colombia, Ecuador, Argentina, Brazil, Peru, and Venezuela, among others. PhD candidates should indeed have a deep connection to the subject and place of study.

The studies on Santiago are followed by professors in Urban Studies, like Wren Strabucchi, Germán Hidalgo, Pedro Bannen Lanata, and others. In the last ten years, we produced four new urban plans of Santiago in 1850, 1875, 1910, 1939/1989, at a 1:5000 scale. I agree with Schlögel when he writes that "history is set not only in time, but also in space."<sup>25</sup> In this context, we investigate how social, economic, and political processes form space and contribute to urbanism while enriching related disciplines like the social sciences.

Another book I recommend, by Schlögel, is *Terror and Utopía. Moscow 1937*.<sup>26</sup> It discusses the importance of the cultural context of the city during Stalin's period. Moscow is examined in thirty pages, but the book is a three-hundred-page cultural study discussing the relation with the state, the Stalin group, and the Secret police.

During my doctoral studies at the *Laboratori d'Urbanisme de Barcelona* (Barcelona Urban laboratory), I worked with Manuel de Solà-Morales i Rubió (1939-2012), who was one of the most influential architects and urbanists in the world. My thesis supports the relevance of the cultural context.<sup>27</sup>

Several doctoral dissertations about Santiago deal with the nineteenth and the twentieth century, studying how the metropolis transformed from a colonial city in Hispano America into a contemporary city in South America. The documentary and cartographic evidence show that Santiago's transition from a colonial to a capital city in the republican period was spatialized in a tension between the center of the capital and the new residential periphery, producing a conflicted interchange.

Jorge Francisco Liernur from the *Universidad Torcuato Di Tella-Conicet* in Buenos Aires, a Visiting Professor in our program, said that when Buenos Aires transformed into Argentine's new capital, it faced similar problematics, simultaneously giving form to the metropolis and the center of the city.

[NAR] In our PhD program, students investigate the research topic through textual probing and an "epistemic object." Is it accurate to say that Santiago's urban plan has become the "epistemic object" of your research? Do you promote the use of "epistemic objects" as research tools?

[JRV] Specifically, for me, the 1986 Plan Atlas of my doctoral dissertation has become an epistemic object for research and teaching practices.<sup>28</sup> The epistemic object has not been promoted in our program, but dissertations may include an epistemic object, cartography, or a design object.

[Marco Ianni] What is the role of the PhD supervisor? What should be the relationship between an advisor and the student?

[JRV] Doctoral students select a PhD program for different reasons, one of which is the professor, who gives orientation to the research and contents, supporting the rethinking of a problem. The supervisor is an academic with research in the field recognized by national accreditation agencies



and international doctoring networks. An advisory committee follows the study from the beginning, and if a student wants to do a double degree, they select a co-supervisor from another subject area.

In the context of the PhD seminar, students work on the dissertation proposal with three professors from different disciplines, testing a hypothesis. At the end of the first semester, they select a supervisor and produce a project to be presented to a dissertation committee. There are four development phases, and in the end, an external examiner reviews the dissertation, and candidates defend the dissertation in a public setting.

## Contemporary Architectural and Urban Planning Research

[DM, KW] Should architecture and urban planning be seen as different disciplines? What is the architect's role in urban design and development?

[JRV] In my opinion, urbanism, which began as a science in the second half of the nineteenth century, is a disciplinary shift of architecture. Both are indissolubly linked to spatial thought. The city is the subject of study of architecture, and urban studies are a crossroads of disciplines, including the social sciences and humanities, sharing the notion of space, context, and place with architecture and urbanism. Architecture, urban design, urban planning, and landscape architecture are interrelated disciplines, informing different aspects of the disciplinary study of cities.

In the nineteenth century, Ildefons Cerdà (1815-1876), the engineer that established Barcelona's grid in relation to the Old City, saw urbanism as a science.<sup>29</sup> He called engineers, architects, and other professionals working on the city: 'urbanists.' Urbanization is a form of design at the scale of the territory. Cerdà's theory and the 1910 London conference on town planning,<sup>30</sup> where significant research on urban planning emerged, defined two work lines that began with urbanism and grew as site planning and town planning (later urban planning and urban design). In the United States or Anglo-Saxon universities, these disciplines are divided, but in South America, particularly in Chile, and in our school, they are closely related. However, in Mexico, Brazil, and Venezuela, urbanism is a professional career independent of architecture.

[MI] What is positively and negatively unique to the way Santiago evolved?

[JRV] The relationship between the city's conformation and the Mapocho Valley geography, with slopes, hills, the Andes, the coastal mountain range, torrents, and waterways, is unique. The city evolved through time following, on the one hand, the foundational grid in the formation of the capital city's center, and on the other, the concentric rings around the vital center and the periphery sub-centers. The negative aspects have been the consequence of the de-regulation applied in 1979 that liberalized the land market, giving way to a series of inequities in the current spatial order.

[MI] Could you define what you call "primary elements" of the city?<sup>31</sup> What could be considered the primary elements of future urban development in Santiago?

[JRV] I agree with Rossi's definition of primary urban elements, where monuments are "signs of collective will" and fixed points in the urban dynamic.<sup>32</sup> I would add that primary factors participate in an intermediate scale. Santiago's future primary elements are the urban center with its grid of galleries, passages, and pedestrian streets. Santiago's interior ring, the train surrounding the city,

the beltways, and some radial roads visible in the spatial organization, contain public spaces and combine transport with mixed land uses and metro lines. The sub-centers, the geographical elements of the Mapocho Valley, urban projects, such as *Mapocho 42K*, *Zanjón de la Aguada Park*, and *Cerros Islas*, among others, give form to a polycentric city.

[KW] Can you speak about the relevance of scale in the study of urban phenomena?

[JRV] The chosen scale is a way of thinking. When you select a study area, you must define the limits and the scale of the research. Scale—the distance between the observer and observed—is fundamental to understanding the urban phenomenon and architecture. The 'distance' (scale 1:5000; 1:1000), and urban area are epistemic decisions determining the field of study and the analytic points of view. One cannot read the map at the scale of the territory. The geographer observes reality at 1:10.000 or 1:20.000.

My 1986 doctoral thesis's plan atlas is in three scales: 1:2500, 1:1000, and 1: 500. I studied the city center in three periods: the end of the nineteenth century, the beginning of the twentieth century (1930-60); 1975-1986. The epistemic object disaggregates methodological questions, manifesting the city's evolution and transformation from one typology to another. If you compare the Atlas with the documentary evidence (urban or governmental planning, legal documents, construction norms), you can observe that an economic transformation rushed change.

For instance, when Santiago was founded in the colonial period, the Spanish conquerors divided the city block into a quarter with a cross. Over time it was further subdivided into smaller parts producing a typology called the patio house.<sup>33</sup> When the city center became the most important business center in the nineteenth century, urban planners divided the block into micro blocks, introducing a new division with covered galleries. These galleries result from a transformation from the colonial block to a high-density modern block with a crown around it and a covered central area. Cartographic evidence is an epistemic object, a research methodology, and a primary source used in research and practice, building over previous research. For example, Louis Khan's project is inspired and built on the concept of light of Le Corbusier's project. In architecture, someone could say that Vitruvius is obsolete, but you can build over Vitruvius even today. Our doctorate exists in the context of the arts and humanities, and there are many research possibilities.

[DM] Considering the urban scale focus within the program, do you promote architectural scales?<sup>34</sup> Do you see architecture as an urban endeavor?

[JRV] The point of view that I subscribe to is one of multiple scales and relations. In this context, architecture, be it a project or a built work, is a detail within the territory, not a consequence of a lot or site; it results from multi-scalar relations. Architecture is a substantial part of what is urban and is partly determined by urban space.

We are a Hispano-American country founded by the Spanish Empire. In Canada, due to colonization, you have two languages, French and English, but also different cities, and societies, including the aboriginal cultures that produce different ways of life. The idea of scale is instrumental, but in Spain, De Solà-Morales, Joan Busquets, and other professors at the Barcelona Urban Laboratory use the concept of "distance."<sup>35</sup> What is the distance between the researcher and the object of study? The distance more than the scale is an instrumental way of representing and understanding reality. Distance is a cultural concept. However, all scales are possible in research. The short 1977 film by Ray Kaiser Eames (1912-1988) and Charles Eames (1907-1978) about the Powers of Ten,<sup>36</sup> shows how the scales connect.

Of course, some architects are egocentric, but architecture and our intellectual production are a service to humanity. This must be the project's horizon because architects and urbanists

contribute to constructing the territory, resolving problems, and coordinating disciplines. The urban scale requires a distance from the object of study and necessitates multi-scalar observations. The contradictions between scales are positive. At this time of a global pandemic, we live isolated, and cities are empty. We stay in our houses, and we are connected by digital technology. Architecture is not about isolated, egocentric, or independent constructions; the city is about a collective and civic experience.

[NAR] You stated the importance of interdisciplinary research. How do you generate dialogue with disciplines that are different from architecture?<sup>37</sup>

[JRV] Architecture, as a broad discipline, has been in place since antiquity, starting with Vitruvius' treatise on architecture. Architecture advanced through contact with other disciplines that allowed it to grow out of its field; conversely, disciplinary autonomy, relegates architecture to formalism, and does not produce new knowledge. The disposition of architecture to establish cross-disciplinary relationships has been an indicator of a profound intellectual and practical reflection.

Our program is one of the few interdisciplinary ones at our University. Initially, this was a matter of circumstance because we have an Institute of Urban and Territorial Studies with a tradition in interdisciplinary studies in Latin America. This became an opportunity to create an alliance between architecture and urban studies. Within this context, our journal *EURE* has become essential in Latin American studies in architecture and urbanism.

Architecture has a heteronomous relation with other disciplines, which enlightens our field by connecting with history, philosophy, and the arts. In this context, respect for other fields, even when you disagree, is essential. We must work with humility and engage in an open dialogue.<sup>38</sup>

In heteronomous relations, one discipline illuminates another. Philosophy enlightens architecture, but we are not philosophers. Interdisciplinary research can advance complex problems that cannot be resolved in a disciplinary silo.

[NAR] Is there research collaboration with other Chilean regions, or is centralization an issue?<sup>39</sup>

[JRV] Chile is the last country in South America, at the end of the planet! All the flights end in Santiago. However, I do not believe that centralization is a problem. The Spanish conquerors determined the location of Santiago. When they arrived in Peru, they founded Lima and expanded to the south, founding Cusco, which is 3000 kilometers from Santiago. Santiago is 3000 kilometers from Punta Arenas, the furthest away city in our country. In our case, centralization is the reality, like in other South American countries; however, it facilitates relations. My answer may differ from that of people living in the North of Chile.

Countries in South America are different from the North Hemisphere, Europe, and North America. Each South American country has a capital city that originated when the Spanish conquerors arrived in the continent. The capital city centralizes political and economic power, and most of the region's population lives there. We have seven million inhabitants in Santiago, and the overall population is almost nineteenth million. This is similar to Buenos Aires, Montevideo, Rio de Janeiro, Sao Paulo, and Lima.

In this context, the PhD program has institutional relations with programs in Latin America and Europe. There are joint advisories, and there is participation in networks. Our students hold multidisciplinary workshops and invite key figures from the social sciences, anthropology, and political debate.

PhD programs in Argentina, Uruguay, Brazil, and other South American countries are centralized in their capital city and form a network with other PhD programs. This centralization

facilitated institutional relations with programs in Latin America. We collaborate with a PhD program at the University of Chile and *Universidad del Bío-Bío*. Another PhD program in Chile, at the *Pontificia Universidad Católica de Valparaíso*, focuses on Naval design.

We have connections with research centers like the National Research and Development Agency (*Agencia Nacional de Investigación y Desarrollo*, ANID).<sup>40</sup> For over a decade, we organized a program called *The City and the Words (La Ciudad e las Palabras)*. We invite internationally recognized writers and filmmakers to present their views of the city, the territory, or the map, in a public lecture or an interview. This year we had the participation of three Nobel Prizes, Maria Vargas Llosa,<sup>41</sup> Orhan Pamuk,<sup>42</sup> and John Coetzee,<sup>43</sup> who is a South African writer. Coetzee created a program for children and public schools, where children compete by writing short stories. It became essential to develop a general policy for low-income families. We also invited Werner Herzog, Alessandro Baricco, Nanni Moretti, Paul Auster, Siri Hustvedt, and many others. Michel Houellebecq introduced his book, *The Map and the Territory*.<sup>44</sup> Auster spoke about the connection between the age of people and the city.

[NAR] Are there lessons for the twenty-first century that can be derived from the study of urban plans from the beginning of the twentieth century?

[JRV] Urban plans and drawings of the first half of the century consolidate urbanism as a science, and constitute a "case text," giving information about the history of urban operations that formed our cities, where the ideas that made them possible can be visualized. Over ten years, our research group discovered several maps of Santiago that helped understand how the city evolved as a palimpsest, including historical stratigraphic layers, in vertical and horizontal planes. For us the maps are analytical and interpretive cartographies. The urban fabric is a consequence of its history and the actions of different actors, including natural catastrophes.<sup>45</sup>

[NAR] What are the key elements that define urban experience?

[JRV] Experience is a form of knowledge derived from observation and participation in space over time. The key elements defining urban experience depend on geography and history and determine urban order and topography. I am not talking about an original topography, but the topography that has been modified by human settlements and is determined by typologies, land use, densities, and the social actors participating in space production. The places that embody these concepts are "episodes of cities" that could be referred to as "urban facts" formalized at an intermediate scale and strategically located in the spatial organization combining programmatic elements.

[MI] In your opinion, what was the role of the grid in the development of Santiago? Do you think the grid is an effective approach to urbanism?

[JRV] Since 1541 and up to the early twentieth century, the city's growth system has been based on the grid or declinations of this. The city's grid has been used to give shape to residential neighborhoods. Ever since the end of the nineteenth century, other growth schemes have also been in place. The grid's advantage as a planning tool is valid due to its capacity to accept an assortment of parceling variables, urbanization, building, and extension.

There is no documentation of our first map in 1541, when the city was founded. We only have an interpretation of it. Nevertheless, we still have the same grid, but it has been transformed through different operations. The lesson of the twenty-first century is a consequence of the past. The city's origin produces an emergent system. On this topic, I recommend reading a book by an MIT author, Steven Johnson, *Emerging Systems: The Connected Lives of Ants, Brains, Cities, and*

*Software*.<sup>46</sup> He used computer software to make a comparison with the city and account for progressive evolution (urban metabolism). In this context, the contemporary city is a consequence of the original city. One could say that the original Spanish grid forming blocks and streets with an orthogonal matrix is a monotonous geometrical pattern incapable of transformation. Still, the city's genetic matrix originated a radial form that orients the city's growth in the North, East, West, South directions, with the capacity for expansion in the territory.

[NAR] Looking to the future, how will the Santiago of 2110 differ from the Santiago of 1910?

[JRV] The contemporary city is an important issue. The most remarkable change will be in scale. In contrast to 1910, the current archipelago of Santiago has a new scale and size. Nevertheless, the city's changes in the last quarter of the nineteenth century were defined by the 1875 plan of Benjamín Vicuña Mackenna (1831-1886), a well-known political and cultural personality from Chile's oligarchic aristocracy. This happened simultaneously to changes taking place in Barcelona, Vienna, Paris, Chicago. Vicuña Mackenna's transformation plan marks today the centennial of the Republic. For this reason, together with Josep Parcerisa Bundó from the *Laboratorio de Urbanismo* from the *Escola Tècnica Superior d'Arquitectura de Barcelona*, we wrote a book called *The Republican Canon at a Distance of Five Thousand*.<sup>47</sup>

The year 1910 marks the beginning of the modern city with the consolidation of the 1541 grid. A concentric model developed until 1979, despite changing planning policies. It is possible to recognize how the city center, from 1541 to 1850, is still the center of Chile's capital city today. The Plaza originates in the Spanish grid, and it is the zero point in urbanization. The block partitioning determines the evolution from a simple block to a complex block, including the galleries, facades, and network of roads.

Our research group worked with authors from the Venice school, Saverio Muratori (1910-1973), Aldo Rossi (1931-1997), and Philippe Panerai from *Le École nationale supérieure d'architecture de Versailles (ENSAV)*, and Manuel de Solá Morales and Joan Bousquet of the *Laboratorio de Urbanismo* in Barcelona. I recommend reading André Corboz (1928-2012), about his concept of order and disorder in the city,<sup>48</sup> and Marcel César Poëte (1866-1950), as well as Pierre Lavedan (1885-1982), from the French school, about the law of permanence in the urban plan.<sup>49</sup> According to them, the streets are the city's original marks, and if you can read them, you can understand how a city is formed.

It is difficult to answer questions about future urban development, but I can share an idea. With the twentieth-century lessons, we may recover natural space and increase density in a vertical and integrated city to bring changes and address social equality problems in our country. We live in a mountain valley, and we must have a mountain front. The new generation of architects will consider geography and history better. This would be a tremendous cultural change and a possible one.

[NAR] Regarding the manifestations and eruption of violence in October 2019 in Santiago, what happens when the city becomes the medium for social expression?

[JRV] Regarding the manifestations, we should note that public space has embraced them. Nevertheless, I do not believe that violent attacks on buildings, public space, private facilities, parks, squares, monuments, and other urban elements are the medium of social expression. Still, I understand that this is the consequence of social inequalities.

We thought that we were living in a progressive country and city, but in October 2019, Santiago changed the view of itself. We have a city with seven million inhabitants. About 70% live in the periphery and work in the city center. We do not have good public transportation and a significant

percentage of the population in Santiago earns low wages and pays too much for transportation. It was a spontaneous, uncontrollable reaction. Now, with the Coronavirus, the city center is empty.

We have a neoliberal model that is not equipped to give opportunities and enhance health, education, and housing. The massive manifestations are real and vital, and we must understand this situation. This frequently occurs in South American cities, but it is a consequence of a neoliberal model in our country.

[KW] Can architecture be understood without addressing the urban context?

[JRV] For me, the context of an environment, ambiance, or atmosphere is fundamental in understanding urban architecture. Christian Norberg-Schultz (1926-2000) wrote about the *genius loci* as the spirit of a place.<sup>50</sup> Every building is a consequence of a previous condition and requires a deep understanding of place.

Ludwig Mies van der Rohe (1886-1969) produced a workshop exercise called the patio house. He asked students in the Bauhaus to design a house without considering the facade, using only the plan and section. The rule was that a wall would enclose the house, and one could open a window only when the context was acceptable. This early twentieth-century exercise questions the context. This is even more important now.

However, I am not talking about contextualism. The notion of context I am interested in is part of cultural studies. Context is about how inhabitants manifest their acts in space. Context is cultural, social, economic, and psychological.

In our country, we have nine different indigenous groups recognized by the state, but the relation between state power and indigenous people is problematic. Professor, Diego González who studied in Sheffield, England, proved that the Aymara have several traditional patterns.<sup>51</sup> When they arrived in Arica and Iquique, they included these patterns in their new houses. If architects, urbanists, and social scientists could deeply study inhabitation forms, our answers to housing problems would be better.

[KW] Considering the urban context, do you think that the way it is represented and how it is planned affects the potential of sites? Do you believe that the representation of urban spaces affects architecture and *vice versa*?

[JRV] The new generations have many tools to obtain useful information about the context: photography, sketching, drawing, Google Earth images, satellite views, etc. You can visit a city without entering it to obtain information and produce evidence of it. It is not only information that forms the basis of our work, which includes the legal aspects, urban planning, and clients' opinions. Indeed, scale remains fundamental.

[MI] Can you define what gives the city the "impression of a western social and cultural center?"<sup>52</sup>

[JRV] We have a visible and an invisible city. Santiago has a concentration of elements that identify it socially and culturally as a Western city. The artifacts of globalization of the nineteenth and twentieth centuries give the city that image. However, there are adjacent spaces where local characters exist and manifest other cultural identities.

The cultural transference process of European and North American architectures was adapted to the existing city and greatly influenced typologies and layouts. Santiago is a radio-centric city that occupies a territory in the valley of Mapocho. In the West, there are the Andes mountains. The hill of San Cristóbal is in the middle of the city. The Mapocho River coming from the mountains crosses Santiago and ends in the Pacific Ocean. Our city is forty-five kilometers north-south and of equal size in the east-west direction. The population must spend one or two hours to arrive at the

city center with public transportation from the south peripheric areas. An essential part of the global city is in the north-east quarter.

The city expands over a vast geographical area where most of the population lives in housing conditions that make evident socio-economic segregation and inequities. It is necessary to visit all the neighborhoods, to obtain a realistic image of the visible and the invisible city. At night or during the day, it is different. The center of the city in the day is a business district. Two-million people of different social classes traverse the city center. At night the informal city emerges, along with the immigrants, Peruvian, Columbian, and Dominicans. The city changes with the seasons too. Santiago is in a constant state of flux. It is a characteristic of South America.

[MI] What is the importance of public space historically? Are there new paradigms of public space?

[JRV] As I said, historians and urbanists Poëte and Lavedan contributed the idea that the streets as an open space mark a level in the city. If you look at it historically, the principal avenues, the views, the roads, the nodes allow you to understand a city's origin. Public space is a foundational element of urban form, especially in terms of social and cultural integration, critical to how a municipality segregates on the socio-economic level.

During the colonial period and the Bourbon modernization of the second half of the eighteenth century, Santiago's public space had vital importance in its morphological configuration. It was reinforced in the nineteenth and twentieth centuries, as can be seen in the layout of streets, avenues, ring roads, squares, and urban parks that connect and determine the spatial organization.

Today, the new paradigms of public space are represented by large shopping malls. This phenomenon began in the 1980s when the neoliberal model was introduced. In this radio centric model, the periphery changed from a public civic center to a private shopping mall. Of course, we have many rural and natural public places, such as San Cristóbal Hill, Santa Lucía Hill, the Andes mountains, the Mapocho torrent, the Maipo torrent. The Quinta Normal Park was created in 1841 in the east part of the city, providing natural agricultural production in Chile. It was a "cultural dispositive," as said Adrián Gorelik.<sup>53</sup> It was important because personalities like Domingo Faustino Sarmiento (1868-1874), who became president in Argentina (1868-1874), understood the role of public spaces and transformed this idea into new parks in Buenos Aires.

[DM] This may be a good closing question because you have done this interview in two languages.<sup>54</sup> Do you see language as a barrier, a challenge, or an opportunity? Is the meaning of the work lost in translations?

[JRV] A good translation allows broader readership on a global scale. Language can be a barrier, but it is not when there is volition to communicate. In South America, but also in Europe, we have curiosity, and we assume that English is an important language, but often others do not make an effort to talk in Spanish. This interview brings into contact two realities that did not have a relation a year ago. Communication is vital in our discipline.

Many doctoral programs have English as a second language because many texts are in English. Still, if you want to study Latin America, you should read Spanish. It is impossible to translate everything into English because the Spanish language is a way of thinking. In South America, or Mediterranean countries, language is expansive, and there are exceptions and particularities. English is synthetic and rational, and the conversation is different.

[FG] I moved from Italy to North America almost twenty years ago, and the translation was not just from one language to another. It was a cultural one, as well. Quite literally, one has to translate the way one thinks. It is not just a matter of translating Italian into English; even how we construct

sentences, or a text is different. If I am reading a text in Italian, it may contain several layers of meaning. One has to deconstruct what the author is saying. I do not expect that an author will be giving unmediated access to what they think. The author invites the reader to participate in the thinking. Moving to North America was a fascinating cultural shift because I started to think differently. But I would not say that it is a limit, rather it enhances creativity.

I have come to believe that the literal translation is not the best way to approach transfer of meaning from one language to another. It is about the creativity with which one is converting the thinking into another culture. I am reading a text by an Italian philologist, Maurizio Bettini, called *Vertere*.<sup>55</sup> He explains that translation is a Renaissance concept. If you go back to antiquity, the idea of translation was akin to *vertere*, which means to turn or convert something. The way we think today about translation as literal and accurate is quite another idea. A year ago, we interviewed Dr. Stan Fung. He teaches at the Chinese University of Hong Kong and the Harvard GSD and underscores the importance of translations to and from English. We started to think that if we have the capacity, we should try to do interviews in two languages, and I am grateful for the first opportunity to do this.

[JRV] I think you clarified the idea because *vertere* has the same root as the Spanish *verter*, *vertir*, and *vertirs*. We pour water (*viertes agua*), a liquid in a glass, and you say *versare* in Italian. The liquid is contained in the glass, and when you *vertere* the water, it covers the surface and takes another form. It is a process of transformation. When I was invited to do a workshop at the College of Architecture Planning and Landscape in Arizona, it was a beautiful experience to live in a typical North American middle-class city. I communicated with the students by talking and drawing. I used sketches as words.

I am happy to share ideas in another language, even with this interview. Many hands molded this conversation. Your idea to publish a book of interviews observing the PhD programs' reality was interesting because there are many research forms. This is a way to produce a network, and I congratulate you on this idea.

[FG] Indeed, this process was based on the idea of multidirectionality in research. Even in this interview, there is a multi-directionality, with several interviewers with diverse backgrounds. We are trying to draw knowledge out and open it up for a broader context reflecting on the interviewees' perspectives. The book had the same intent by questioning architecture research from different viewpoints, to allow for the emergence of an image of what research in architecture is right now and what it could be in the future.

[JRV] Italian historian Manfredo Tafuri (1935-1994) wrote about polycentric research. When you have a problem in architecture and urbanism, you must look at it all around, from different viewpoints.

[FG] Regarding the book cover of *InterVIEWS* (Routledge 2019), my original choice was an image of the pointing machine (*macchinetta di punta*) used in full relief sculpture (*tutto tondo*) to measure every point accurately. The idea was that each measurement is equivalent to an interview, offering a precise VIEWpoint on research. I want to thank you for the opportunity to learn about your PhD program.

[JRV] For me, our doctoral program, and University, it was a great pleasure to have this contact with you and your students, Federica. You are invited to travel and visit Santiago to get to know our faculty and students in our program.



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<sup>1</sup> Interviewers in order of participation: [FG] Dr. Federica Goffi, Professor, PhD and MAS Program Co-Chair, Azrieli School of Architecture and Urbanism (ASAU), Carleton University (CU); [NAR] Nicolas Arellano Risopatron PhD student ASAU, CU; [DM] Devon Moar MAS student ASAU, CU; [MI] Marco Ianni PhD student ASAU, CU; [KW] Kristin Washco PhD student ASAU, CU.

<sup>2</sup> The term "Unthinkable Doctorate" that Dr. José Rosas Vera used to describe a new horizon for the PhD program at UPC was used in a 2015 Colloquium at the Hogeschool voor Wetenschap & Kunst, School of Architecture Sint Lucas, Network for Theory, History and criticism of Architecture, Bruxelles). See the proceedings of the colloquium "The Unthinkable Doctorate," Sint-Lucas Brussels, April 14-16, 2005. <https://arch.kuleuven.be/onderzoek/publicaties/unthinkable-doctorate>, accessed November 27, 2020.

<sup>3</sup> PUC includes eighteen Faculties.

<sup>4</sup> <http://arquitectura.uc.cl/escuela/profesores/959-perez-oyarzun-fernando.html>, accessed September 25, 2020.

<sup>5</sup> Dean Ugarte was the Rector of the University and kept contacts with the highest governing body in the university, which was fundamental for the doctorate, during the first seven years after its approval, when I was in office as Dean.

<sup>6</sup> The School of Architecture and Urbanism at PUC is accredited by RIBA.

<sup>7</sup> Ranking QS 2018/2019.

<sup>8</sup> Schlögel, Karl. 2016. *In Space We Read Time: On the History of Civilization and Geopolitics*. Translated by Gerrit Jackson. New York: Bard Graduate Center.

<sup>9</sup> <https://www.uchile.cl/postgrados/138819/territorio-espacio-y-sociedad>, accessed September 15, 2020.

<sup>10</sup> Lecaros, María Luisa and José Luis Romero, eds. March 2011: 24-25. *Ex Corde Ecclesiae, sobre las Universidades Católicas*. Santiago: Publicaciones Pastoral UC. <http://pastoral.uc.cl/archivos/pontificios/ex-corde-ecclesiae.pdf>, accessed October 13, 2020.

<sup>11</sup> Goffi, Federica, ed. *InterVIEWS: Insights and Introspection in Doctoral Research in Architecture*. London and New York: Routledge.

<sup>12</sup> Pérez Oyarzún Fernando and Jose Rosas Vera. 2011: 172-176. "Mapping Latin America: Portraying and Planning a City." In *Mapping Latin America*. Edited by Jordana Dym and Karl Offen. Chicago and London: The University of Chicago Press.

<sup>13</sup> <http://doctoradofadeu.uc.cl/es/personas/estudiantes/>, accessed October 10, 2020.

<sup>14</sup> Vila, Waldo. 2014. *La urbanización obrera en Santiago sur, 1905 - 1925. De arrabal decimonónico a periferia proletaria*. Doctoral Dissertation, UPC. <http://doctoradofadeu.uc.cl/es/tesis/tesis/la-urbanizacion-obrera-en-santiago-sur-1905-1925-de-arrabal-decimononico-a-periferia-proletaria>, accessed October 10, 2020.

<sup>15</sup> Castillio, Simón. 2011. *El río Mapocho y sus riberas: Espacio público e intervención urbana en Santiago de Chile (1885-1918)*. Doctoral Dissertation, UPC. <http://doctoradofadeu.uc.cl/es/tesis/tesis/el-rio-mapocho-y-sus-riberas-espacio-publico-e-intervencion-urbana-en-santiago-de-chile-1885-1918>, accessed October 10, 2020.

<sup>16</sup> Mardones, Marcelo. 2017. *Trabajadores tranviarios e intervención pública en el transporte colectivo*. Santiago, 1937-1953. Doctoral Dissertation, UPC. <http://doctoradofadeu.uc.cl/es/tesis/el-estado-sobre-ruedas-trabajadores-tranviarios-e-intervencion-publica-en-el-transporte-colectivo-organizacion-sindical-politica-publica-y-cuestion-urbana-santiago-1937-1953>, accessed October 10, 2020.

<sup>17</sup> [http://www.catedrasabertis.com/en/publications\\_/](http://www.catedrasabertis.com/en/publications_/), accessed October 10, 2020.

<sup>18</sup> Paulette Landon. 2017. "Zona Sur: barrios, infraestructura y movilidad cotidiana Estrategias de apropiación y capital de movilidad familiar en barrios fragmentados. El caso de la Autopista Acceso Sur de Santiago de Chile." PhD Dissertation, PUC. <http://doctoradofadeu.uc.cl/es/tesis/estrategias-de-apropiacion-y-capital-de-movilidad-familiar-en-barrios-fragmentados>, accessed October 10, 2020.

<sup>19</sup> <https://madera.uc.cl/es/>, accessed October 10, 2020.

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- <sup>20</sup> <https://www.dezeen.com/2014/11/05/elemental-innovation-center-uc-anacleto-angelini-university-concrete-santiago-chile/>, accessed September 23, 2020.
- <sup>21</sup> *Centro de Desarrollo Urbano Sustentable* (CEDEUS, PUC, Santiago, Chile). <https://www.cedeus.cl/en/about-us/the-centre/>, accessed October 11, 2020.
- <sup>22</sup> *Centro UC Patrimonio Cultural*, PUC, Santiago, Chile. <http://vivo.uc.cl/vivo/individual?uri=http%3A%2F%2Fvivo.uc.cl%2Fvivo%2Findividual%2Fc26>, accessed October 11, 2020.
- <sup>23</sup> <https://coes.cl>, accessed October 10, 2020.
- <sup>24</sup> 2015, Rosas, Republican Canon and 2011, Pérez and Rosas, Mapping Latin America: Portraying and Planning a City.
- <sup>25</sup> Schlögel 2016: 13.
- <sup>26</sup> Schlögel, Karl. 2014. *Moscow 1937*. Translated by Rodney Livingstone. Cambridge, UK: Polity Press.
- <sup>27</sup> Rosas Vera, José. 1986. "Morfología urbana y Tipología Edificatoria: El Centro de Santiago 1930-1960." Doctorado en Arquitectura, Escuela Técnica Superior de Arquitectura de Barcelona, Universidad Politécnica de Cataluña. Rosas Vera, José. 1985. "La partición de la manzana. Cómo se modernizo el centro de Santiago." *UR* 3, Barcelona. Rosas Vera, José. Diciembre 1989. "La vivienda moderna en el centro de Santiago, una experiencia aleccionadora de tradición y vanguardia." *Revista Colegio de Arquitectos de Venezuela* 52.
- <sup>28</sup> Rosas Vera, José and Fernando Pérez Oyarzún. 2002. "Cities within the cities. Urban and architectural transfers in Santiago de Chile, 1840 1940." In *Planning Latin America's Capital Cities 1850-1950*. Edited by Arturo Almandoz. London and New York: Routledge.
- <sup>29</sup> Cerdà, Ildefons. 2018. *General Theory of Urbanization 1867*. Edited by Guallart Vincente. New York: Actar.
- <sup>30</sup> The Transactions of the Royal Institute of British Architects Town Planning Conference, London, 10–15 October 1910. [https://www.academia.edu/2289847/Transactions\\_of\\_the\\_1910\\_Town\\_Planning\\_Conference](https://www.academia.edu/2289847/Transactions_of_the_1910_Town_Planning_Conference), accessed October 13, 2020.
- <sup>31</sup> Garcés Feliú, Eugenio, José Rosas Vera, Elvira Pérez Villalón and Camilo Pardo de Castro. September 2020. Urban Modernization and Heritage in the Historic Centre of Santiago de Chile (1818-1939). *Planning Perspectives* 35, 1: 91-113.
- <sup>32</sup> Rossi, Aldo. 1984: 22, 99. *The Architecture of the City*. Cambridge, MA: The MIT Press.
- <sup>33</sup> The rectangular block could contain two or three patios.
- <sup>34</sup> The Doctoral Program in Architecture and Urban Studies is part of the Faculty of Architecture, Design and Urban Studies.
- <sup>35</sup> *Manuel Solà-Morales i Rubió et. al.* May 1996. "La distance, paramètre majeur de la composition complexe." *A PROJET URBAIN* 8: 5-7.
- <sup>36</sup> <https://www.youtube.com/watch?v=OfKBhvDjuy0>, accessed September 25, 2020.
- <sup>37</sup> <http://doctoradofadeu.uc.cl/en/programa/fundamentacion>, accessed September 25, 2020.
- <sup>38</sup> With Phillip Blanc and Fernando Pérez, we built a new building for the Faculty of Engineer, called STEM (Science, Technology, Engineering, and Mathematics), on the San Joaquín Campus, south of Santiago center. This building required the coordination of different specialties.
- <sup>39</sup> Regions (*Regiones*) is the political division of Chile, the country tends to be very centralized in Santiago.
- <sup>40</sup> <https://www.gob.cl/en/news/science-ministry-presents-new-national-research-and-development-agency-anid/>, accessed September 26 2020.
- <sup>41</sup> 2010 Nobel Prize in Literature.
- <sup>42</sup> 2006 Nobel Prize in Literature.
- <sup>43</sup> 2006 Nobel Prize in Literature.
- <sup>44</sup> Houellebecq, Michel. 2012. *The Map and the Territory*. Translated by Gavin Bowd. New York and Toronto: Vintage Books.
- <sup>45</sup> In the twentieth century, we have had 80 earthquakes. In 1960 we had the most significant earthquake in the world. It was an 8.8 earthquake on the Richter scale, and in 2010, we had one of the most significant earthquakes in a century.
- <sup>46</sup> Johnson, Stephen. 2002. *Emergence: The Connected Lives of Ants, Brains, Cities, and Software*. Scribner.
- <sup>47</sup> Rosas Vera, José and Josep Parcerisa Bundó. 2015. *El canon republicano, y la Distancia Cinco Mil*. Santiago: Ediciones Universidad Católica de Chile.
- <sup>48</sup> Corboz, André. 1983. "The Land as Palimpsest." *Diogenes* 31, 121: 12-34.

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<sup>49</sup> Terranova, Charissa. September 2008. "Marcel Poete's Bergsonian urbanism: vitalism, time and the city." *Journal of Urban History* 34: 919-943. Lavedan, Pierre. 1960. *Les villes françaises*. Paris: Vincent, Fréal et Cie.

<sup>50</sup> Norberg-Schulz, Christian.

<sup>51</sup> González Carrasco, Diego. 2016. "Inhabiting in the City: the Aymara People in Arica, Chile. Social and Cultural Factors in Government Housing Programmes an Interdisciplinary Study." PhD Thesis. University of Sheffield, UK.

<sup>52</sup> Garcés Feliú, Rosas Vera, Pérez Villalón and Pardo de Castro, September 2020: 13.

<sup>53</sup> Gorelik is an Argentine academic and researcher. The notion of "cultural dispositive" refers to the Quinta Normal in Santiago. The grid and the park. See Gorelik, Adrián. 1998. *La grilla y el parque: espacio público y cultura urbana en Buenos Aires, 1887-1936*. Buenos Aires: Universidad Nacional de Quilmes.

<sup>54</sup> Nicolas Arellano Risopatron translated the questions of the interviewers into Spanish and conducted the first version of this interview with Dr. José Rosas Vera in Santiago on December 20, 2019. The Spanish audio version can be found at: <https://www.criptic.org/listen-interview>, accessed November 30, 2020. The answers and content of the two interviews differ in part.

<sup>55</sup> Bettini, Maurizio. 2012. *Vertere: un'antropologia della traduzione nella cultura antica*. Giulio Torino: Einaudi Editore.