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ARQUISUR VIRTUAL NETWORKED STUDIO: A LATIN AMERICAN CHAIR FERNANDO MARTIN SPERANZA, HELENA AYOUB SILVA, ROBERTO LONDOÑO, LUCIMEIRE DE LIMA



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Abstract

TOne of Arquisur's Virtual Workshop (TVR, from its acronym in Spanish) goals is to bring Latin American architecture schools together using Information and Communication Technologies, promoting exchanges among students, and highlighting the importance of recognizing multiple perspectives as elements for knowledge building. For the 2020 edition, we proposed a focus on Latin American cities, their usual problems and other issues worsened by COVID-19. This paper discusses the changes brought on by the pandemic in relation to the teaching of architecture and urban design. The paper presents the pandemic paradoxical condition as a fact that forced us to find new ways of thinking about the city and the traditional teaching-learning models. The urban problems of Latin American cities are addressed as general contents and converted into didactic formulations which different academic groups in many architecture schools can deal with. In the conclusion, we suggest some assumptions indicating points of change, and also of continuity, regarding traditional teaching models.

Keywords: Networked Virtual Workshop, Collaborative Didactic strategies, Information and Communication Technologies, Latin America, Design teaching

1 Introduction: Arquisur and a pandemic that makes the rejected visible

Arquisur¹ – Association of South American Public Architecture Schools and Colleges – was founded in 1992 to promote cultural exchanges among Latin American architecture students. Currently, the network is part of the Unesco, City, and Design Program, and gathers 28 educational institutions, with 6 participating countries: Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay. Arquisur builds an academic space based on scientific, technological, educational, and cultural cooperation of all its members. Its main activities are Meetings, Conferences, and the Virtual Workshop (TVR), events that have themes related to the social role of Architecture. After the identification of a core problem, a subject is proposed for each conference with the aim of reflecting on issues that impact the whole Latin American Region. The TVR is an academic space annually held for the meeting of the Arquisur colleges, adopting a workshop format in which specific urban topics are addressed. The 2020 edition of the conference proposed different ways of thinking about Latin American cities: *Arquisur City Cartographies - A project-based view of urban space in Pandemic times*² (SPERANZA et. al., 2020).

In this specific scenario, we as inhabitants of Planet Earth are facing many problems in multidisciplinary and multidimensional terms. We must thus discuss them and raise questions. Covid-19 is invisible to our eyes but, on the other hand, allows us to make things visible, to unveil pre-existing problems and new structural issues.

The pandemic has shown us how devastating the absence of the State can be to humanity. Such is the case, for example, of the outsourcing and privatization of the healthcare system in the Western capitalist world, which now struggles to cope with an overwhelming demand. This is also the case of issues of absolute priority, such as global warming, child malnutrition, lack of food, the high concentration of wealth in an ever-expanding system leveraged by unprecedented differences between the extremes of incomes of the planet's inhabitants. In addition to these inequalities, the negligence of certain rulers has led to levels of transmission and mortality that we are all aware of.

We may also face conflicting situations in the disciplinary sphere: many architects and urban planners, such as Richard Rogers, Rod Burgess, Mike Jenks, in England; Peter Newman and Jeffrey Kenworthy, in Austria; Jan Gehl, in Denmark; Salvador Rueda, in Spain; Henri Ascelrad, Marta Romero, and Frederico de Holanda, in Brazil, have suggested for years³ that cities should become denser (Pescatori, 2014) while today it seems that the solution to the health crisis lies in social distancing. We must also consider the environmental and sociocultural losses implied by the regression to a model of urbanism that replaces the city-person relationship with the city-car relationship (Montaner, 2014). Since the pandemic began, many urban planners have been concerned with understanding if there is a direct relationship between population density and transmission. However, Raquel Rolnik (2020a) warns that the numbers that we have available so far do not imply a direct relationship between these two factors⁴.

Latin America has been observing the events in Europe and trying to learn from the mistakes and successes made by the Northern Hemisphere regarding this pandemic. Nevertheless, these are decisions related to

socioeconomic inequality, and here we cannot have the same recovery process that central European economies have. A quick look at the situation in the most vulnerable neighborhoods will suffice to understand the magnitude of the problem. It is time now to stop looking the other way, reorganize the people, and not deny a right to a city that not only dignifies the individual, but enables a return to normality in cases like this.

The same applies to the concept of solidarity, which has been distorted given that today it is understood as an emergency aid, while societies overflowing with economic surplus drains other societies lacking in terms of resources. Solidarity, in these terms, hides the absence of the State and ensures the maintenance of the status quo. As architect Raquel Rolnik (2020b) states, this is a middle-class perspective of reality⁵. Solidarity, in urban planning terms, should be grounded on the government resources and on citizens' rights. The interest of all citizens should be thus considered, either in terms of taxes, generationm and recovery of urban capital gains, or social awareness of their equal rights to the city and the resources that it requires⁶. In summary, COVID-19 can reveal many pre-existing urban inequalities that are now inconceivable. As in all crises, this is a situation in which we are all involved and in which creativity and the ability to establish and develop a new paradigm are put to the test.

2 First line of inquiry: knowledge on urban issues

Urban issues in Latin American cities are characterized by a diversity of circumstances. This diversity, in principle, means that any approach must consider differences rather than similarities, particularities rather than generalizations. In this sense, proposals and topics from TVR editions were used to understand how these problems arise and how they could be tackled in terms of design and methodology⁷. It is worth noting that the topics that generated the most discussion were sustainability, urban-social vulnerability and, in the last edition, the Covid-19 pandemic.

With the purpose of addressing these problems, the academic community has compiled different kinds of data in accordance with the goals of UNESCO, City, and Design Program. It has also created means and strategies to establish a basis for the study of cities. Everything converged to the creation of a digital platform that unites the aforementioned material. We have called it "Contextoteca" (a neologism for "context library"). We organized this data under two main axes: on the one hand, we have genealogical information corresponding to the historical, economic, and sociocultural perspective, toward a broader understanding of the complexity and particularities of each city. The name "genealogical" is given precisely because this data represents the chain of facts, events, and circumstances that make up each urban reality. The second set refers to the geological construction, that is, of a series of layers that describe different subsystems operating on the general city plan. The idea was to obtain a series of common layers (12 on average) from each city to interpret issues from multiple combinations and perspectives. This geological and genealogical database is understood as an active instrument and the basis for the method that has been tested in different TVR editions. We used it to establish potential relationships or problematic situations, which we call design hypotheses.

In the 2020 edition of TVR, we decided to also include the so-called Soft Layer, a perspective that, based on the reading of hard layers and on the knowledge of the city, would allow highly visible design interpretations without compromising precise technical and formal definitions. Something like a cartography, synthetic and with powerful plastic eloquence, that allows the displaying of different perspectives on the incidence of the pandemic in urban and rural centers which set up the nodes of the network.

3 Second line of inquiry: current conditions for online teaching of the program

This second line of inquiry deals with the way the program may incorporate these problems, allowing their management, discussion, and adaptation. First, we must begin by saying that in-person attendance in architectural and urban design is still irreplaceable and necessary. There are still bodily, manual, and phenomenal aspects involving the five senses without which students cannot accomplish tasks. We acknowledge issues raised by colleagues from different architecture schools when facing the online/in-person attendance dilemma. Without a doubt, one of the recurring problems is inclusion: understood as a solidary concern with others, with those who are left out due to lack of access to the internet, housing, family ties, psychological structure, economic resources, and so forth.

Another problem detected in our pedagogical context refers to the institutions: we have never worked in such a unique and intense way as now, having to adapt to new forms of interaction. All within the same contractual terms. We are aware of the challenges that this new normal brings with it: our own and others' fears, uncertainties, including difficulties in carrying out professional assignments outside the institutions, which is the labor condition of many professors. We must keep up with the dizzying pace of events: two years ago, we were in what we would call the old normal. Now, we are faced with the task of reestablishing groups and social

relations in general, which were affected by these changes. In other words, we believe that a design approach is necessary to transform the aforementioned problems into a potential opportunity: that is, recognizing and varying the factors of change.

We think that to change an institution, society, disciplinary field, or line of work, the first step must be building a great vision for the future. The more seductive, attractive, true, possible that new horizon is, the more people will adhere to it, and change will come. The second factor is dissatisfaction. The greater the group's dissatisfaction, the faster and more effective a proposed change shall come given that the current situation is experienced by this group. The third factor is the cost of the process. The more it costs, the less feasible or the slower it will be. On the other hand, if making the change requires fewer resources, the change shall come more easily.

In each of the three factors, the time variable should be the one necessary for one of the three positions to prevail. The same happens with the other two factors. In architectural design terms, this kind of equation can be put forward as follows: the factor of change would be the production of the design, it demands an idea, in accordance with a schedule of needs and resources that make it feasible in a given time period.

4 Assumptions on the ways of teaching design

First, it is important to clarify that what is developed in this section is not only validated by research with corresponding results and didactic evidence, but also from what is stated by programs and professors. We have been denouncing it and demanding the need for change in their practices (Speranza, 2021). Change the design teaching model based on teachers and apprentices, a model still used as a solution for design processes in workshops and that must be thought from different perspectives (Masdéu, 2016). In this sense, we propose the following assumptions, which refer to certain critical aspects of design teaching as a definition of a first general framework for discussion.

Change university policies to allow unrestricted access (this implies a socially inclusive University) and a restricted egress (as a counterpart that assures a quality of professional output). Providing design workshops with a disciplinary perspective, but also an interdisciplinary scope. In this way, the design concept might have a plural perspective when compared to a concept focused solely on the job market (Rogers and Bremner, 2013). It means to bridge the communication gaps between different areas, with programs that consolidate knowledge acquired by the students in the design workshop and in their design processes. This may lead to a more experimental work in the initial years, promoting innovation through short, quick didactics. This would build a design knowledge that endows the student with design self-esteem. Conversely, creating strategies for advanced courses that consolidate the student's abilities and design methods with tasks like those of their professional life. Therefore, more complex and elaborated tasks over a longer period.

Regarding the methodology, we should emphasize the importance of the design process over the product, bearing in mind, however, that every process leads to a product. This means that making mistakes, trying, and experimenting allow us to build a type of personal knowledge different from the pragmatism that gives guarantees or gets things right, giving precise answers. This leads to the necessity of rethinking the role of the teacher as a facilitator of meaningful learning (Ausubel, 1963), with rotating roles, attempting to avoid the narcissistic silent student, teacher-apprentice attitude, in which the teacher vertically imparts knowledge that the student lacks.

Meaningful learning is also associated with the consideration of the student's previous repertoire in the teaching-learning process, towards the joint construction of knowledge. Freire (1996) argues that the role of the teacher is to establish the link between naive curiosity and epistemological curiosity. Therefore, using experienced reality to enter the universe of scientific/academic knowledge. In this way, changing this unidirectional and hierarchical attitude on the part of the teacher means enabling autonomy in learning, making individual processes become recognized in their context. It is therefore essential to introduce the notion of the city, its experience and meanings, at all points of the teaching-learning process in the design workshop: the perceived city, the experienced city, and the conceived city.

We need to propose new theoretical contributions in the field of urban planning to re-signify our understanding of Latin America. By doing so, we may overcome cultural colonization imposed upon us, in which the image of the European or North American city remains the dominant reference. These models cannot be the only ones that architecture students come to know during their education.

Regardless of the mode of dissemination, communication, production, and interaction, the model on which architecture workshops operate must be revised. Present circumstances bring with them new variables. In this sense, Bender and Vredevoogd (2006) established early on the main differences between the traditional

classroom-based and the modified ICT-based workshop. Today we may point to hybridization as a solution to enhance these two modalities.

Standard Workshop

Modified Workshop

The Professor introduces assignments, and the students submit them before the end of the class.	Professors assign work that can be submitted online 24-48 hours before class.
One Professor is responsible for a group of 15-20 students and may be responsible for more than one section of the same course.	Class size remains the same. However, Professors can teach several sections assisted by lecturers and instructors.
The Professor does not usually share with the class the feedback on the quality of each student's work, making it necessary to repeat comments and what common mistakes were made.	Students receive feedback on online sessions and group feedback weekly during classes.
Critique repeatedly corrects the same or similar student's mistakes.	Feedback on student's mistakes just need to be given once.
Competitive nature of students does not encourage sharing and fosters individualism.	Students improve their design skills in a collaborative knowledge building environment.
Students must attend classes and cannot analyze feedbacks given by the Professor.	Students have on demand access to critiques and can attend sessions remotely.
The appointment of visiting professors usually implies costs and time spent in classes.	Visiting Professors can analyze projects and provide an audio critique for a better time optimization.
Work done on workshops is often the result of a collaborative effort between the student and the faculty member. In many cases, it leads to an asymmetric relationship.	Professors do not support their students individually but support the whole group instead.

Table 1: Differences between traditional and the modified workshops. Source: Bender and Vredevoogd, 2006.

Even as a possible experience in our present contexts, TVR remains as an alternative to instigate students and professors to understand Latin American cities and their problems differently. Despite the distance, today we have tools such as Google Earth and Google Maps that help us visualize other realities, helping the exchange of information between students who live in the analyzed city and those who are getting to know it and analyzing it. Then, we add to more globalized information, more specific information, explained and contextualized by its inhabitants.

5 Recommendations to improve potential online approaches for design teaching

We have noticed, in these eight years of TVR existence, specifically regarding online teaching, that every premise must start by assuming a change in mentality, making use of experience but also of the possibilities offered by online environments. This involves assuming that temporal and spatial conditions have changed and that these relationships must be understood from a different perspective. On this basis, the following points indicate the specific conditions established by online teaching:

- $+ \ {\tt Not\ to\ mindlessly\ transfer\ old\ habits,\ practical\ works,\ or\ in-person\ attendance;}$
- + Migrate to online environments, whether these are networks or web services, used by students;
- + Promote the construction of autonomy in learning using contents made available diachronically in alternation with synchronous meetings;
- + Create a community: retention versus attrition. Seeking to establish an environment of belonging, safety, and recognition;
- + Build design self-esteem. Starting with jobs where professors are certain that the production will be potent in the face of a collective, legitimate, and empowering recognition of future work. Keep track of the

students, being inclusive, permissive, and comprehensive without decreasing academic quality;

- + Know your interlocutor, their needs, resources, belongingness, potentialities. Establishing online contact distant from the role, but in a friendly way. Examples include interviews, online group work, student presentations. It would be ideal to intersperse moments of in-person attendance, even if they are few;
- + Design student recovery systems. As there are no open offices where the student may obtain information, doubling the efforts to recover students who do not attend meetings or who do not submit their work;
- + Create a system to analyze statistics of participation, attendance, and production, sharing conclusions.

Regarding methodology and contents:

- + Think contents and programs from the perspective of non-face-to-face teaching or simulated attendance;
 - + Change discursive genre, producing short communications, visual and conceptual dynamics;
- + Value the material produced by the professors. Upload and receive material in the previously agreed deadlines;
- + Build intuitive processes, then introduce the theory, in order to ultimately apply the said theory in design production;
- + Avoid the creation of groups of students with a single professor. We propose a general collaborative work, returning assignments worked on with the teaching staff;
 - + Rotate with teachers to make comments, suggestions, and appraisals related to design processes;
- + Choose paradigmatic works that include in their typology what is presented by all students. That is, stick to significant didactic evidence;
- + Remember that online attendance lacks the intimacy of face-to-face workshops. Most likely, students' relatives or roommates are unseen and behind the camera, witnessing debates, theoretical feedback, and assignments;
- + Unfold the discursive genre: on the one hand, the person of the professor (academic authority, respect for the activity, institutionality). On the other hand, the avatar of the professor (greater complicity, facilitator, generous, answers questions, avoids conflicts, plays a role), the avatar can be removed but the professor is permanent;
- + Design a control and follow-up system. It should have coded lists to identify the quality of production, deviations, absences, attendances, everything that allows the student teaching-learning process to be understood in its context. Managing and completing the list should be shared among professors;
 - + Stick to didactic evidence: individual, collective, and of the program as a whole;
- + Use a tag to identify the task in all classes. Even if there are no activities or during holidays, use the tag in such a way that any student can easily keep up with assignments. This creates autonomy and reduces distress;
 - + Use tutorial logic. Be explicit about what is required;
- + Explicitly establish goals for assignments, their mechanics, deadlines and formats for the submission of each practical work request;
- + Create and post the theoretical material produced by the program that validates what has been done;
 - + Create conceptual, visual, dynamic theory sheets, and, if possible, multimedia material;

- + Use group conference calls as a semi-face-to-face environment;
- + Theory classes should be short, lasting no more than thirty minutes. Otherwise, break them down into sections. Try to include graphic, dynamic, and highly visual material.
- + Seek to surprise and excite the students. In each class, teach a "Pearl" in the shape of a necklace. That is, the class portfolio. Students feel recognized when they see their product as the result of an exposed and valued process;
- + Begin each practical work, topic or didactic explanation using an intuitive approach, and, if possible, from a playful assignment;
- + Assign academic tutors for each section to avoid finding unwanted posts or unanswered questions in the subsequent classes;
 - + Always create analogies with other subjects, especially arts subjects;
 - + Share links as examples, project references, authors, bibliography etc.;
- + Aim at multidimensional exchanges (with other subjects), multiscale exchanges (with other colleges), multidisciplinary exchanges (with other classes).

Perhaps this is a great opportunity before we can return to the workshop, in which old habits can be transformed into good practices. That is, to break with the Epistemic Doxa as conceived by Bourdieu (1978). We must recognize the equality of intelligences, a philosophical proposition defended by Jacques Rancière (2017) that induces a change of stance among teachers, recognizing the active role of students as subjects of learning. He based his considerations on the perception that individuals learn all the time and that teachers have the discrete, but important, function of facilitating the process of appropriation of knowledge. In this way, the position of the master-explainer is replaced by that of the facilitator, removing the learner from the silent learner situation and encouraging their active stance. This happens in many ways, such as asking empowering questions that make interlocutors think, opening space for students to express themselves. Anyhow, the teacher gives students a unique learning experience, treating them as equals. To do this, we propose a series of actions that place us in what we have called good practices in design teaching:

- + Eliminate answer sheets. Replace it with an orderly discussion, in which the professor as a facilitator controls time and interventions;
- + Channel anxiety and the student's search for recognition, creating for them a space, moments of synthesis, exposure, portfolios. In this sense, withdrawing the teacher from the role of the correcting tutor, since the notion of correction presupposes that something is wrong beforehand. This is a prejudice that generates its effects before it is known;
- + Try not to find answers to the student's design. That is, not specifying prospects, compositional systems, formal distribution, technology to adopt etc. Allow students to make their own discoveries;
 - + Be design-minded instead of pragmatic. Suggest project problems instead of looking for solutions;
- + Always propose a scope of design alternatives, of possible worlds, from which the student can choose autonomously. Show the student that the same design idea has as many and varied possibilities as they may want;
- + Eliminate the guiding idea of modernity in design teaching. Recognize the "Partí" as a tool or perspective that does not involve people or the context;
 - + Understand the design program as emerging from the process itself;
 - + Encourage experimentation and innovation in first years of the introductory cycle;
 - + Not freely associate complexity with scale;
- + Understand the degree final project as a professional job. It must comprise knowledge built throughout the course and conceptually establish problems with scientific rigor and communicative eloquence;

- + Our students are unique: we should value diversity;
- + Spread the pleasure of knowledge, avoiding the tragedy of having to do for the happiness of doing;
- + Try never to have a single design reference to ensure a translation instead of a copy. In this sense, open the discussion for new architectural and urban types;
 - + Differentiate notions of space, place, site, and location;
 - + Identify the phenomenology, syntax, and semantics of the design;
- + Always work from experience to the program, from perceptions to meaning, from emotion to concept.

6 Final considerations: towards online didactics for the integration of Latin America

The Online Workshop (TVR) has become an opportunity for Latin American integration using digital tools in distant contexts. It is now able to institutionally link professors from different cities. For eight years, workshops have had approximately fourteen participating schools each year, with a total of two hundred and sixty students and about seventy professors. Coordinators, professors, and guests are virtually connected in a collaborative format (TVR, 2020).

The possibility of developing online didactics in design teaching will require a change of mentality. It must lead to a different idea of Design Workshop that does not try to emulate it in its present form (Qian and Westermann, 2020). Along with this emerging idea, we must imagine how to break with the supposed great truths that, ultimately, are pedagogical and didactic problems to overcome.

In other words, it means to find in new practices, good practices that critically question those that we repeat without debate. However, we know that sooner or later we must modify them in response to the dynamics of the present. Perhaps today it may seem to us that changing these practices and immersing ourselves in a digital world will not be easy, practical, nor affordable, but essential, given the sanitary situation we are currently facing. However, this can be a way to democratize knowledge in the long term, in constructive terms and applied particularly to the Latin American context. It may also expand communication channels, as well as improve the quality and quantity of content, seeking effective dissemination (Rebek, 2020).

In this sense, accepting that things must adapt to current times, it would seem necessary to put an end to certain anachronistic classroom behaviors and habits. We can replace them with others and overcome the dialectical condition of theory and practice. Therefore, the possibility emerges of building knowledge in one's own learning process: increasingly meaningful, richer, and more autonomous. It is with these intentions that the TVR 2020 teaching staff of the UNESCO, City, and Design Program, which brings together twenty Architecture and Urban Design schools, worked towards developing good practices and some convenient strategies for online design teaching. One originated in and that meet more appropriately to the needs of Latin American cities. Such as the obligation of universities and schools of architecture of providing answers to the demands of societies in this diverse and ample territory.

References

ACSA. AA.VV., 2020. Studio-Based Online Learning: Building Community and Engaging Design at a Distance. *Association of Collegiate Schools of Architecture*. [Online]. Available at https://www.acsa-arch.org/webinars/studio-based-online-learning-webinar/. Accessed 01 February 2021.

Ausubel, D. P., 1963. The psychology of meaningful verbal learning. New York. Grune & Stratton.

Bender, D. M., Vredevoogd, J. D., 2006. Using Online Education Technologies to Support Studio Instruction. *Educational Technology & Society*, 9(4), pp. 114-122.

Bernat, M. M., 2016. La enseñanza de la arquitectura en la sociedad actual. La integración de las nuevas formas de práctica profesional en el Taller de Arquitectura | Masdéu Bernat. *Rita 05 revista indexada de textos académicos*. [Online]. Available at http://ojs.redfundamentos.com/index.php/rita/article/view/101/101. Accessed 06 February 2021.

Bourdieu, P. F., 1978. A reprodução: elementos para uma teoria do sistema de ensino. Lisboa: Editorial Veja.

Freire, P., 1996. Pedagogia da Autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra.

Masdéu, B. M., 2016. La enseñanza de la arquitectura en la sociedad actual. La integración de las nuevas formas de práctica profesional en el Taller de Arquitectura. *Rita-05*. Available at http://ojs.redfundamentos.com/index.php/rita/article/view/101/101. Accessed 06 February 2021.

Montaner, J. M., Muxí, Z., 2014. Arquitetura e Política: ensaios para mundos alternativos. São Paulo: Gustavo Gili.

Pescatori, C., 2014. O paradigma da cidade compacta no debate urbanístico contemporâneo. Faculdade de Arquitetura e Urbanismo - Universidade de Brasília. Prof. Orientador Rodrigo de Faria. Anais do VI Seminario Internacional de Investigación en Urbanismo Barcelona-Bogotá 2014.

Qian, B. Y., Westermann, C., (ed.). 2020. Teaching architecture online: challenges and solutions. [En línea]. *Xi'an Jiaotong-Liverpool University (XJTLU)*. Available at https://www.xjtlu.edu.cn/en/news/2020/04/teaching-architecture-online. Accessed 08 February 2021.

Rancière, J., 2017. O mestre ignorante: cinco lições sobre a emancipação intelectual. Belo Horizonte: Autêntica.

Rebek, B. S., 2020. How hybrid teaching could help reinvent architectural education. *The Architect's Newspaper*. [Online]. Available at https://www.archpaper.com/2020/09/post-pandemic-potentials-hybrid-teaching-reinvent-architectural-education/. Accessed 08 February 2021.

Rodgers, P. A., Bremner, C., 2013. Design Without Discipline. *Design Issues*, 29(3), p. 4-13 Published by: The MIT Press Stable. [Online]. Available at: https://www.jstor.org/stable/24267085. Accessed 05 February 2021.

Rolnik, R., 2020a. *A Cidade é Nossa com Raquel Rolnik #15: Densidade urbana e pandemia, mitos ou verdades?* [Online]. Available at https://www.youtube.com/watch?v=VK87I6S1NPM. Accessed 05 February 2021.

Rolnik, R., 2020b. *A Cidade é Nossa com Raquel Rolnik #7: Para lavar as mãos, primeiro é preciso de água*. [Online]. Available at https://www.youtube.com/watch?v=VK87I6S1NPM. Accessed 05 February 2021.

Sassen, S., 2020. *Conferencia Inaugural Ciudades Comunes 2020*. [Online]. Available at https://www.youtube.com/watch?v=g4D5FPxWqwc. Accessed 02 February 2021.

Speranza, F. M., 2017. *Taller Virtual en Red Arquisur. Ciudades Vulnerables / Hábitat sustentable*. Universidad de Buenos Aires, Facultad de Arquitectura, Diseño y Urbanismo. TVR. Cátedra Speranza.

Speranza, F. M., Castressana, M., Garaventa, H., Londoño, R., 2016. El uso de las tics en la enseñanza del proyecto. Una experiencia docente. Bedoya, A. M., (Ed.). *XII Jornada de Material Didáctico y Experiencias Innovadoras en Educación Superior*. Buenos Aires, Ciclo Básico Común, Universidad de Buenos Aires.

Speranza, F., 2021. La didáctica de la arquitectura, modos estrategias y herramientas aplicadas en la formación básica. *Proyecto UBACyT vigencia 2018 – 2020*. Informe final.

TVR. Arquisur, 2020. (18-8 al 25-8- 2020). Ciclo de conferencias. *Cartografías de la ciudad Arquisur*. Una mirada proyectual del espacio urbano en tiempos de pandemia. [Online]. Available at: https://tallervirtualenredarquisur.blogspot.com. Accessed 03 February,2021.

- 1 See https://arquisur.org/. Accessed 01 June 2021.
- 2 See https://tallervirtualenred.wixsite.com/tvred. Accessed 01 June 2021.
- **3** The resurgence of interest in the compact city paradigm dates from the end of the 1980s, when the United Nations acknowledged environmental problems that were worsened by dispersed cities in the territory. This lead to a heated debate among environmentalists during the 1960s and 1970s, culminating in the creation of the Brundtland Report and the Agenda 21. They were created during the United Nations Conference on Environment and Development, ECO 92 (Pescatori, 2014).

- **4** See the video "A Cidade é Nossa com Raquel Rolnik #15: Densidade urbana e pandemia, mitos ou verdades?". Avaliable at: https://www.youtube.com/watch?v=5MCFY1R-eqA. Accessed 01 Feb 2021.
- **5** See the video "A Cidade é Nossa com Raquel Rolnik #7: Para lavar as mãos, primeiro é preciso de água". Avaliable at: https://www.youtube.com/watch?v=VK87I6S1NPM. Accessed 05 Feb 2021.
- **6** The idea of urban equality is discussed by Saskia Saasen, who places it in the present context and in the case of the United States, where the pandemic has caused major impacts (Saasen, 2020).
- **7** The problems detected are linked to the SDGs set out in Agenda 2030, particularly goals 4, 9, 11 and 13 (Cepal-2020).