

Architecture and Globalization, a very intimate relationship

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Abstract

The invitation to write this article gave rise to a review of my studies and writings produced in the last twenty-five years about the approximation between architecture and globalization. If in the 1990s the texts referred to the dissemination of Brazilian modern architecture in different parts of the world, by the turn of 1990s to the 2000s, they focused on the popular dissemination of elements of modernism in Brazil, with an interest in expanding the architectural scholarship limits in two directions: 1) vertically, discussing high-low relationships unfiltered or controlled by trained architects; and 2) horizontally by challenging the North Atlantic canon to debate the global reach of the Brazilian case. Reviewing these studies today allowed us to dialogue with contemporary reflections that involve an effort at epistemic decolonization, starting from the understanding that the understanding of globalization was closely related to the emergence of abstraction in the 16th century, a phenomenon that killed relational processes themselves, but which should be urgently recovered nowadays, making us unlearn the intimate relationship between architecture and globalization.

Resumo

O convite para a escrita deste artigo ensejou uma retomada dos meus estudos e escritos produzidos nos últimos vinte e cinco anos acerca da aproximação entre arquitetura e globalização. Se nos anos 1990 os textos referiam-se à disseminação da arquitetura moderna brasileira em diversas partes do mundo, já na passagem dos anos 1990 para os 2000, concentraram-se na disseminação popular de elementos do modernismo no Brasil, com o interesse em expandir os limites da erudição arquitetônica em duas direções: 1) verticalmente, discutindo relações alto-baixo não filtradas ou controladas por arquitetos treinados; e 2) horizontalmente ao desafiar o cânone norte-atlântico para debater o alcance global do caso brasileiro. Rever esses estudos na atualidade permitiu dialogar com reflexões contemporâneas que envolvem um esforço de descolonização epistêmica, a partir da compreensão de que o entendimento da globalização estava intimamente relacionado ao surgimento da abstração no século XVI, um fenômeno que matou os próprios processos relacionais, mas que deveriam ser urgentemente recuperados nos dias atuais, fazendo-nos desaprender a relação íntima entre arquitetura e globalização.

Palabras clave:

Arquitectura y globalización,
Modernidad y colonialidad,
Descolonización epistémica.

Resumen

La invitación a escribir este artículo dio lugar a una reanudación de mis estudios y escritos producidos en los últimos veinticinco años sobre la aproximación entre arquitectura y globalización. Si en la década de 1990 los textos se referían a la difusión de la arquitectura moderna brasileña en diferentes partes del mundo, en el paso de la década de 1990 a la de 2000, se centraron en la difusión popular de elementos del modernismo en Brasil, con interés de ampliar los límites de la erudição arquitectónica en dos direcciones: 1) verticalmente, discutiendo las relaciones altas-bajas sin filtrar o controladas por arquitectos capacitados; y 2) horizontalmente desafiando el canon del Atlántico Norte para debatir el alcance global del caso brasileño. Revisar estos estudios hoy nos permitió dialogar con reflexiones contemporáneas que implican un esfuerzo de descolonización epistémica, a partir del entendimiento de que la comprensión de la globalización estuvo íntimamente relacionada con el surgimiento de la abstracción en el siglo XVI, fenómeno que mató los propios procesos relacionales, pero que urge recuperar hoy en día, haciéndonos desaprender la íntima relación entre arquitectura y globalización.

The invitation of Professor Ana Maluenda gave me an opportunity to reflect on what I would argue is an intimate relationship between architecture and globalization, something that have always been part of my scholarship. Looking back into my writings of the last 25 years my very first publication was on a book with “globalization” in the title¹ but I find that I circled around the issue of and never really directly addressed it until recently. I also learned, in this quarter-century-long research that what I first learned about globalization does not help me read the world anymore, and that there is much that I need to unlearn. So, allow me to reminisce a bit about writings that slowly built my current understanding of architecture and globalization, from the late 1990s to the present in 2022.

In the last decade of the 20th century I found myself dealing with a very specific kind of globalization, the dissemination of Brazilian Modernism around the planet and deep into its own working-class neighborhoods. My doctoral research being pursued at the University of Michigan (1996-2001) was looking at the popular dissemination of modernist elements in Brazil². However, instead of focusing exclusively on how European concepts were adopted and adapted in Brazil, I was more interested in pushing the boundaries of architectural scholarship in two directions: 1) vertically by discussing high-low relationships not filtered or controlled by trained architects; and 2) horizontally by challenging the North-Atlantic canon to debate the global reach of the Brazilian case³.

Examples of the first are the articles on Brazilian Popular Modernism, first presented in conferences⁴ and later published⁵. Interesting enough, the popular appropriation

of modernist elements, technology and spatiality was received with suspicion and outright refusal in some circles. I have a stack of letters from conferences and journals starting with the dreadful “regret to inform” sentence. I don’t know where I found the strength to be resilient, but it took a good decade until popular modernism was published in a major journal⁶.

The same traditional scholarship that refused to engage with buildings not designed by architects was also quite interested in the Brazilian manifestations, as long as it complied with the European narrative of Corbusier in the tropics. As the reader can imagine I was not at all interested in that aspect of Brazilian architecture and started very early on to discuss the agency of the Brazilian themselves⁷, and the global reach of such architecture despite its peripheral location⁸.

Those two trends of my scholarship, the high-low relationship in Brazil and the global reach of those successful architectures started to merge around 2004 when I was interviewing humble construction workers in the Brazilian favelas and realized that modernist technology and spatiality was at the root of their building strategies. Presenting in Toronto in 2005⁹, I advanced for the first time two ideas: 1) that the Ame-

appropriations of modernist vocabulary,” paper presented at the conference on Transcultural Architecture in Latin America, London, Institute of Romance Studies, University of London, November 20, 2001; “Modernist Heritage: the Spread of Modern Architecture in Brazil,” paper presented at XXI World Congress Of Architecture - UIA, Berlin, July 10, 2002.

⁵ Early publications on Brazilian Popular Modernism were: Dissemination of Design Knowledge: Evidence from 1950s Brazil, **The Journal of Architecture**, vol. 11, n. 2, Summer 2006, p. 241-255; Brazilian Popular Modernism: Analyzing the Dissemination of Architectural Vocabulary. *Journal of Architectural and Planning Research*, 23:2, Summer 2006, p. 91-112;

⁶ LARA, F. Modernism Made Vernacular: the Brazilian Case. **Journal of Architectural Education**, v. 63/1, Fall 2009, p. 41-50.

⁷ LARA, F. One Step Back, Two Steps Forward: The Maneuvering of Brazilian Avant-Garde. **Journal of Architectural Education**, v. 55/4, May 2002, pp. 211-219.

⁸ LARA, F. **Beyond Frampton’s Critical Regionalism: a reflection of multiple architectural worlds**, paper presented at the Conference First World/Third World, Universidad Politecnica de Puerto Rico, October 9, 1999.

⁹ LARA, F. **Americanization or Brazilianization? Architectural Exchanges Between Brazil and U.S., 1939-1947**. Conference on the Americanization of Postwar Architecture, University of Toronto, December 2, 2005.

¹ LARA, Fernando. Popular Modernism: The Brazilian Experience. DADENKAR, H. (ed.). **City, Space and Globalization**. Ann Arbor: University of Michigan, 1998, p.122-125.

² LARA, F. **Popular Modernism: an Analysis of the Reception of Modern Architecture in 1950’s Brazil**. University of Michigan PhD dissertation, Ann Arbor: TCAUP, 2001.

³ In a recent article published at JSAH in 2022 I elaborate on what I mean by horizontal and vertical expansions of buildings and sites worth of study. Lara, F. “What Frameworks Should We Use to Read the Spatial History of the Americas?” Roundtable editor introduction, **Journal of the Society of Architectural Historians**, 81/2, June of 2022, pp. 134-136.

⁴ Conference presentations on popular modernism at the time were: “Beyond Frampton’s Critical Regionalism: a reflection of multiple architectural worlds” paper presented at the Conference First World/Third World, Universidad Politecnica de Puerto Rico, October 9, 1999; “Modernism before Modernity: Traces of Avant-garde in Brazilian Modern Architecture,” paper presented at the Society of Architectural Historians Meeting, Miami, FL, June 13, 2000; “**Brazilian middle-class**

ricas were Brazilianized before it was North-americanized; and 2) that Corbusier's DOM-INO was the spatial DNA of the favelas. Both ideas were furiously refuted by a senior scholar who was the keynote speaker at that event, and I was advised to "avoid difficult topics" if I wanted to publish and get tenure. The difficult topic, I now understand, was the audacity to challenge traditional architectural scholarship by pushing the boundaries of what is considered worthy of study. I was trying to decolonize myself before reading most of the decolonial theory¹⁰.

Five years later I had the opportunity to travel to literally the other side of the planet, presenting at a conference organized by William Lim and Jiat-Hwee Chang in Singapore. The impact of that meeting would stay with me until today, for it was there that it became clear to me that the Eurocentric canon was absolutely insufficient to explain architectural manifestations outside of the North-Atlantic, and that we should look for local concepts to analyze each architectural manifestation. I had already criticized the sterility of Critical Regionalism and its insistence in the architect as the only possible filter between high and low building cultures, elaborating that:

Despite originally meaning just a direction, the term West became synonymous with a system of values originated in Europe that now includes also the United States, Canada and Australia. That those are all previous British colonies is no coincidence. The cultural system that supposedly¹¹ evolved from Greco-Roman heritage has been clearly appropriated and celebrated by the Anglo idea of the "west", while other significant contributions are discarded or made oblivious. For instance, I frequently encounter the exclusion of Latin America from the so-called "west", despite its common history. By the end of the 20th century the "west" has become synonym with NATO (North Atlantic Treaty Organization) and we shouldn't be surprised because as demonstrated by Edward Said 30 years ago¹², the act of labelling is unequivocally an act of power

[Therefore] we need to look vertically and not horizontally to find diversity and invention. The unprecedented scale and speed on flow of information have indeed homogenized the world's architecture, making the east-west dichotomy irrelevant. But that happens only if we insist on looking at the elite architecture built for wealthy clients, high-brow cultural institutions and global corporations. Look a bit down the social strata and you start to see the real diversity. The world might be flat on the top but very deep once you look into local appropriations (LARA, 2011, p.69-78).

¹⁰ I want to register here my conversations with Fernando Coronil at Michigan between 2005 and 2007. Besides teaching me the meaning of the word "tocayo", Coronil introduced me to the works of Mignolo and Dussel.

¹¹ DUSSEL, Enrique. Europe, Modernity and Eurocentrism, **Nepantla**: Views from South vol 1 n.

Decolonization had finally entered my scholarship with Said, Mignolo, Dussel and finally Escobar. I had spent a decade "adjectivizing" modern architecture in order to explain the Latin American manifestations, until Arturo Escobar explained that there is no modernization with colonization and it is like a bright light went on in my analysis of the built environment. Another decade passed until I was invited by the Journal of the Society of Architectural Historians to elaborate on what concepts we should to read the built environment of the Americas I started precisely from that risky but so worthwhile "expansion" that defines my scholarship in the last quarter century. In my own words:

I believe we have, by now, a disciplinary consensus in that our traditional Eurocentric canon of architectural history is insufficient (albeit fundamental), and that we are indeed making an effort to fill such gaps. The expansion of our knowledge base has been significant in the twenty first century. The Berkeley school of vernacularism, for instance, have trained two generations of scholars devoted to the study of the totality of our built environment, although it is still very USA-centric. On the East Coast, MIT's Global Architectural History Teaching Collaborative (GAHTC) has successfully pushed the Anglo scholarship on another direction, expanding its geographical scope. Such expansion efforts, whether vertical (high-low brow) as Berkeley or horizontal (geographical) as MIT/GAHTC have limited transformational powers because they do not tell us what to unlearn (LARA, 2022, p. 135).

In this short essay I argue that we need to unlearn the traditional relationship between architecture and globalization in order to build a new, more instrumental decolonized understanding on how architecture is both the result and the instrument of this 500 years process that we call modernization, colonization or globalization. As I wrote earlier this year in the JSAH piece,

Unlearning is one of the most urgent issues of our times, a question that we should all ask ourselves, and my own answer gravitates around the decolonial theories that emerged from Latin America in the last decades. Latin American intellectuals elaborated an extensive body of work that taught me the most about what I need to unlearn, and I need to briefly cite the most important works to frame the argument that drove this roundtable conversation¹³. In the late 1950s Edmundo O'Gorman demonstrated that it was the encounter with the Americas that triggered European modernization and not the other way around. In the 1970s Anibal Quijano in Peru, Milton

3, 2000.

¹² SAID, Edward. **Orientalism**. New York: Vintage, 1979.

¹³ Felipe Hernandez and Juan Luis Burke's essays in this roundtable also elaborate on different as-

pects of Latin American decolonial theory that speak directly to the history of architecture.

Santos in Brazil and Pablo Gonzales Casanova in Mexico were all working on different aspects of colonialism as the basis for underdevelopment and persistent inequality. By the turn of the millennium the work of Walter Mignolo, Arturo Escobar, Silvia Rivera Cusicanqui, Maria Lugones and Denise Ferreira da Silva helped me break the epistemological barriers that defined the architecture not done by European-white-males as peripheral, dislodging my own scholarship. As an expert on 20th century Latin America, I wrote extensively on the need to include that region into a broader conversation, but I realize that I spent two decades adjectivizing modernization in order to explain those manifestations. I wrote about Latin American modern architecture being peripheral, or conservative, or insufficient. After reading Mignolo and Escobar I understood that coloniality is inherent to any modernity, and that our national boundaries are colonial legacies that erase a common past shared by the totality of the Americas (LARA, 2022, p. 134).

So with apologies for the brief introduction that fits the space of this essay (this topic deserves a whole book that I am working on right now), let me explain what I think we need to unlearn and what is the new knowledge that we need to articulate.

The history of architecture written in the 19th century insisted in the centrality of the European experience and treated all the other parts of the globe as colonial extensions of France, England and Germany, the military and economic powerhouses of that time. For the Banister Fletchers, the globe was divided into those that had a history, meaning Europe and their Mediterranean predecessors, and those who did not, meaning all the other parts of the planet. As Gusum Nabantoglu wrote almost 25 years ago, 'Western architecture' and 'historical styles' "are constructs constituted through the force of exclusion. These are terms that produce a constitutive outside as the condition of their existence".

Such blatant racism survived the early decades of the 20th century and was avoided by the main authors of the 1950s and 60s - Pevsner, Giedion, Summerson and Ackerman – by excluding the majority of the world and focusing on Europe only. A real attempt to engage the whole world would have to wait for Spiro Kostof's book, *A History of Architecture, Settings and Rituals* published in 1985, which I consider the first successful attempt of an inclusive not-so-Eurocentric survey. Kostof's effort, ho-

¹⁴ ESCOBAR, Anibal. Worlds and knowledges otherwise: The Latin American modernity/coloniality research program. *Cultural studies*, vol 21.2-3, 2007, p. 179-210; MIGNOLO, W. *The Darker Side of Western Modernity*: Global Futures, Decolonial Options, Durham: Duke University Press, 2011; PADRON, R. *The Spacious Word*: Cartography, Literature, and Empire in Early Modern Spain. Chicago: University of Chicago Press, 2004.

¹⁵ BURKE, Juan Luis, *La Teoría Arquitectónica Clásica En La Nueva España y Los Tratados*

wever, fell short when trying to discuss the impact of the European occupation of the Americas in architectural theories after the 16th century. In the words of Kostof: "the rediscovery of the classical past was one of the two great adventures that informed the Renaissance. The other was the exploration and the conquest of America" (KOSTOF, 1985, p. 433). This statement alone is more than all previous authors ever said about the relationship between the European occupation of the Americas and the Renaissance, and consequently about the rise of architecture as an autonomous practice. All architectural history scholarship before the 21st century either ignored the Atlantic encounter or minimized its role in European developments. Kostof deserves the credit for being the first historian to break away from that ideology. Previous authors were deeply embedded in the traditional European narrative about the Americas acting as a secondary outcome of European modernity and therefore not worthy of much attention. The fact that Kostof did not ignore it was a significant advancement, but one paragraph down on the same page he held steady in his Eurocentrism by elaborating that:

(...) these newfound cultures should have proved that the worth of Western achievement was only relative, and forced it into fresh channels. They did not. The riches of the conquered New World added nothing to the enrichment of the Christian west except in the material sense (KOSTOF, 1985, p. 433).

Much to the contrary, the occupation of the Americas was central to the development of European architectural theories in the 16th century. Arturo Escobar, Walter Mignolo, and Ricardo Padron¹⁴ have already demonstrated that the encounter of 1492 and the territorial occupation that followed played a central role in the development of Western culture in general. Facing the challenge of occupying and colonizing the vast territories of the Americas (soon to be extended to South and Southeast Asia), the European empires and their mercantile elites used architecture as a tool for controlling spaces, narratives, peoples and goods, optimizing the binomial modernization/colonization as framed by Arturo Escobar. Juan Luis Burke, among others, have shown how architectural treaties were used as important tools of colonization in Me-

Arquitectónicos Como Artefactos Colonialistas. *Bitácora Arquitectura* 0, n. 43, March 13, 2020, p. 70-79.

¹⁶ LOW, SETHA M. Indigenous architecture and the Spanish American plaza in Mesoamerica and the Caribbean. *American Anthropologist* 97, n. 4, 1995, p. 748-762.

xico¹⁵. Setha Low wrote decades ago about the Mesoamerican plazas influencing the construction of Plaza Mayor in Madrid¹⁶. In 2014 Kathleen James-Chakraborty's *Architecture after 1400* broke the European stronghold that narrows our understanding by starting her book with a comparison between the tomb of Timur in Uzbekistan (1404) and Lina Bo Bardi's Casa de Vidro in São Paulo (1950). James-Chakraborty then continues with a chapter devoted to Ming and Qing China and another one devoted to Tenochtitlan and Cuzco. The marked change from previous surveys is significant. In James-Chakraborty's book, the Western construction of Egypt-Greece-Rome-Gothic-Renaissance is still central, but the readers are constantly reminded that this is one tradition among many.

And finally, in 2018, Richard Ingersoll cemented that into canonical architectural history by writing that

(...) the contact between Europe and the Americas thus represents the turning point for modernity. The victory of the pragmatic moderns began to shift the focus of architecture away from a cosmological center to other priorities geared to the individual, political goals, and social pathologies" (INGERSOLL, 2018, p. 427).

All of the scholars discussed above, from Banister Fletcher at the end of the 19th century; to Mumford, Pevsner, Summerson, Ackerman, and Kostof in the 20th century; to James-Chakraborty, Ingersoll, Ching, Jarzombek and Prakash in the 21st century, agree that something major happened in the 16th century that differentiated Brunelleschi and Alberti, who were still very close to the medieval mode of operation, from Bramante, Michelangelo and Palladio.

All of them use the term "rise of abstraction" to explain such a change. In the history of Western ideas, the rise of abstract thought was systematized by Descartes' *Discourse of Method* and other lesser-known 16th century scholars, all strongly influenced by the intellectual tsunami that was the encounter and the occupation of the Americas. My contribution to the debate is to hypothesize that the European colonization of the Americas impacted the architectural theories of Serlio, Scamozzi, Palladio and Vignola, something that none of those authors developed yet.

¹⁷ SEED, Patricia. *Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640*. New York: Cambridge University Press, 1995.

Those thoughts were systematized in an article published at *The Plan Journal* in 2020. In that publication I departed from the decolonial theories of Mignolo, Escobar and Dussel to argue that the occupation of the Americas impacted the 16th century systematization of architecture as a tool to control spaces removed from them, something usually attributed to Alberti but only operationalized decades later. The core of the argument is the development of spatial abstract representation as a result first of open ocean navigation and later of American occupation and territorial control. Geographers illuminate the intellectual path here. First Patricia Seed who explained how the Portuguese created a triangulation of points in space (*padrões*) to map and represent their territorial claims¹⁷. Then Ricardo Padron explains the difference between an itinerary, in which the one enacting the representation is IN the register; and a map in which the one enacting the representation is removed from it¹⁸. Finally Doreen Massey published *For Space* in 2005, elaborating on how spatial abstraction evolved into the main instrument of power and control during the 16th century, culminating with Descartes *Cogito Ergo Sum*¹⁹.

From Seed, Padron and Massey I proposed the idea that architecture needs to be understood as a process of spatial abstraction that makes possible the control of spaces from afar. As I wrote in *The Plan Journal*:

(...) from recent scholarship stitching Descartes, Leibnitz, and Newton²⁰ we learn that the rise of abstraction is an index of the modernity/coloniality project, which prompts the question of how the Americas participated in the development of abstract space? Ricardo Padron tells us that the new conception of abstract space "rationalized the known world according to the principals of Euclidean geometry. In this way it spoke of a new order of things, one in which mathematical abstraction promised to make the world apprehensible in ways that it had never been before. This novel, intellectual apprehensibility, in turn, supported an emerging culture of commercial, military, and political expansion". It supported modernity. Or as reminded by Arturo Escobar, it

¹⁸ PADRON, Ricardo. *The Spacious Word: Cartography, Literature, and Empire in Early Modern Spain*. Chicago: University of Chicago Press, 2004.

¹⁹ MASSEY, Doreen. *For Space*. New Delhi: SAGE, 2005.

²⁰ MIGNOLO, Walter; ESCOLBAR Arturo (eds). *Globalization and the Decolonial Option*. London: Routledge, 2013; CAÑIZARES-ESGUERRA, Jorge. *Nature, empire, and nation: explorations of the history of science in the Iberian world*. Stanford University Press, 2006; GROSGOUEL, Ramon. The Structure of Knowledge in Westernized Universities: Epistemic Racism/Sexism and the Four Genocides/Epistemicides of the Long 16th Century: *Human Architecture. Journal of the Sociology of Self-Knowledge*, vol XI, Issue 1, Fall 2013, p. 73-9.

supported both modernity and coloniality, two faces of the same coin.... Architecture have played a central role in this construction and we have only started to properly study it with the lenses of modernity/coloniality (LARA, 2020).

In a series of articles published in the last 3 years I have elaborated on the impact that the occupation of the Americas had on European (therefore “global”) architectural theories²¹. The main point of this piece is propose that we unlearn the traditional narrative that Europe was modernizing therefore conquered the world. Since O’Gorman in 1958 that the order of factor is the reverse: Europe modernized because they launched into the colonial enterprise²². Later at the end of the twentieth century Escobar, Dussel and Mignolo elaborated on the inseparability of modernity and coloniality. Synthesized by Quijano and Wallenberg in 1992, “its not that the Americas participated on the rise of modern capitalism, there would be no modern capitalism if not for the European occupation of the Americas” (QUIJANO; WAL- LERSTEIN, 1992, p. 549).

Now that we could one day unlearn the Eurocentric narrative and depart from the integral role of the colonial American project in the development of modernity at large, we might relearn also the central role of architecture in this process. Here the main point is the rise of spatial abstraction as an instrument of coloniality, the subject of another short piece written by yours truly, published by the online journal Platform Space in 2021. In that article I explain that:

Abstraction is the quality of dealing with ideas rather than events, or something that exists only as ideas. The key question here is which facts have been elevated to the realm of ideas and which facts have been discarded. Modernity was created when we abandoned any relational knowledge and adopted a superficial (what occurs on the surface) understanding of space in which the controlling white man is removed from it, and every non-man and non-white being is reduced to an object to be plotted and thereby controlled. Abstraction had been a tool of coloniality and inequality since the world-system (as defined by Quijano) took shape in the sixteenth century, and architecture is deeply embedded in this process. (LARA, 2021, s/p).

We use abstraction to separate our design students from everything they knew before and immerse them with a new set of values, architectural values. Once delinked from any previous spatial relations, our studio pedagogy teaches them to master abstraction, almost always discarding any site context or content in order to manipu-

late only geometry. Site plans do not register community life. Contours do not tell the history of the land. Plans and sections are arbitrarily narratives that force behaviors on people. Spatial abstraction creates a distance between the ones who are making decisions and the material manifestations of such designs, and this distance is the root of inequalities embedded into architectural processes.

Those are the janus-faced powers of architecture: it could be used to envision a better world but 95% of the time it is used to reinforce the status-quo. If we want to mitigate the erasures imbedded in spatial inequality to keep moving towards more inclusive design processes, we need to understand the history of the relationship between design and exclusion that are at the very root of what we call globalization. The historical roots of globalization are intertwined with the historical roots of architectural design, and the Americas played a central role in that development.

Students of architecture know that the process of design abstraction was developed in the 15th and 16th century. It is no coincidence that the European occupation of the Americas happened at exactly the same time. It is a disciplinary consensus that abstraction is the main component of the modern process of architectural design. The very process of slicing an object into plan, section and elevation is a process of reduction. We discard information in order to be able to manipulate what we consider the essence. But what if the treasure lies in the information discarded? We would never know that we through the baby out with bath water if we never accepted that there was a baby there.

In 2021 we celebrated the centennial of Paulo Freire (1921-1997) and scrutinized his works because his genius was the process by which reading is grounded in people’s reality, appropriating abstraction as an empowerment instrument, not a tool for control and exclusion as it operates most of the time. As I wrote at that time:

Freire's genius lies in using the concreteness of the context around the student as a basis for building sound/syllable abstractions. Freire anchored abstraction in everyday life, and in doing so, he empowered subjects from their own reality. At this point, it is worth emphasizing the spatial

Invisibles: Cómo la ocupación de las Américas en el siglo XVI influyó el surgimiento de la arquitectura como una disciplina, **Bitacora UNAM**, vol. 47, October 2021. Reprinted at **Revista ARQ**, nº 110, Santiago, Chile, April of 2022.

²¹ LARA, F. El otro del otro: cómo las historias canónicas de la arquitectura bor- raron las Américas. **Anales del Instituto de Arte Americano**, 51(1), 2021, p. 1-14; LARA, F. Tesoros

²² O’GORMAN, Edmundo. **La invencion de America**: Investigacion acerca de la estructura historica del Nuevo Mundo y del sentido de su devenir. México: UNAM 1958.

dimension of Frerian theory. The closer (spatially) to the student's reality, the better the performance of the concept/term in the literacy process. Proximity and concreteness thus serve as a vaccine against the hegemony of abstraction: small fragments of everyday reality inserted in the process so that the student's body develops familiarity with sounds, letters and ideas (LARA, 2022, s/p).

The point here, learned from contemporary scholars that engage indigenous knowledge in an effort of epistemic decolonization, is that what we understand as globalization is intimately related to the rise of abstraction in the 16th century, a process that killed the very relational processes that we urgently need to bring back to the table.

My argument is that architectural theories were not only a consequence of Descartes synthesis of Cogito Ergo Sum but indeed an instrument of its hegemony. Colin Chamberlain reminds us that in several passages Descartes holds that the self may be considered as a disembodied being without 'hands or eyes, or flesh, or blood or senses. Denise Ferreira da Silva reminds us that: "Descartes needs to articulate extended things (the human body and the sensible objects of knowledge) to write their ontoepistemological irrelevance lest man, the subject of knowledge, also become a thing whose existence and essence is determined from without" (CHAMBERLAIN, 2020, s/p).

The idea of disembodiment is the key here for what the abstract understanding of space does to reality is precisely to remove the mind from it, placing European men above it as *res cogitans* and everything else below as *res extensa*. This is what we have naturalized as globalization.

Architecture have played a central role in this construction and we have only started to properly study it with the lenses of modernity/coloniality. History is telling us that we lost something important when we developed spatial abstraction, and that we should find ways to unlearn that intimate relationship of architecture and globalization.

References

BURKE, Juan Luis, La Teoría Arquitectónica Clásica En La Nueva España y Los Tratados Arquitectónicos Como Artefactos Colonialistas. **Bitácora Arquitectura** 0, n. 43, March 13, 2020, p. 70-79.

CAÑIZARES-ESGUERRA, Jorge. **Nature, empire, and nation: explorations of the history of science in the Iberian world**. Stanford University Press, 2006.

CHAMBERLAIN, Colin. What Am I? Descartes's Various Ways of Considering the Self. **Journal of Modern Philosophy** 2, n. 1, 2020.

DUSSEL Enrique. Europe, Modernity and Eurocentrism. **Nepantla: Views from South**. Vol 1, n 3, 2000.

ESCOBAR, Anibal. Worlds and knowledges otherwise: The Latin American modernity/coloniality research program. **Cultural studies**, vol 21.2-3, 2007, p. 179-210.

GROSGOUEL, Ramon. The Structure of Knowledge in Westernized Universities: Epistemic Racism/Sexism and the Four Genocides/Epistemicides of the Long 16th Century: Human Architecture. **Journal of the Sociology of Self-Knowledge**, vol XI, Issue 1, Fall 2013, p. 73-9.

LARA, Fernando. Popular Modernism: The Brazilian Experience. In: DADENKAR, Ann Arbor. **City, Space and Globalization**. University of Michigan, 1998, p.122-125.

_____. **Beyond Frampton's Critical Regionalism: a reflection of multiple architectural worlds**. Conference First World/Third World, Universidad Politecnica de Puerto Rico, October 9, 1999.

_____. Modernism before Modernity: Traces of Avant-garde. **Brazilian Modern Architecture**. Society of Architectural Historians Meeting, Miami, FL, June 13, 2000.

_____. **Brazilian middle-class appropriations of modernist vocabulary**. Conference Transcultural Architecture. Latin America. London: Institute of Romance Studies, University of London, November 20, 2001.

_____. **Popular Modernism: an Analysis of the Reception of Modern Architecture in 1950's Brazil**. University of Michigan PhD dissertation, Ann Arbor: TCAUP, 2001.

_____. One Step Back, Two Steps Forward: The Maneuvering of Brazilian Avant-Garde. **Journal of Architectural Education**, v. 55/4, May 2002, p. 211-219.

_____. **Modernist Heritage: the Spread of Modern Architecture**. XXI World Congress Of Architecture -UIA, Berlin, July 10, 2002.

_____. **Americanization or Brazilianization? Architectural Exchanges Between**

Brazil and U.S., 1939-1947. Conference Americanization of Postwar Architecture.
University of Toronto, December 2, 2005.

_____. Design Knowledge: Evidence from 1950s Brazil. **The Journal of Architecture**, vol. 11, n. 2, Summer 2006, p. 241-255.

_____. Brazilian Popular Modernism: Analyzing the Dissemination of Architectural Vocabulary. **Journal of Architectural and Planning Research**, 23:2, Summer 2006, p. 91-112.

_____. Modernism Made Vernacular: the Brazilian Case. **Journal of Architectural Education**, v. 63/1, Fall 2009, p. 41-50.

_____. Abstraction is a Privilege. **Platform Space**, Ago, 2021.

_____. El otro del otro: como las historias canónicas de la arquitectura borrarón las Américas. *Anales del Instituto de Arte Americano*, 51, 2021, p. 1-14.

_____. Tesoros Invisibles: como la ocupación de las Américas en el siglo XVI influenció el surgimiento de la arquitectura como una disciplina. **Bitacora UNAM**, vol. 47, October 2021.

_____. What Frameworks Should We Use to Read the Spatial History of the Americas? Roundtable editor introduction. **Journal of the Society of Architectural Historians**, 81/2, June of 2022, p. 134-136.

LOW, Setha M. Indigenous architecture and the Spanish American plaza in Mesoamerica and the Caribbean. **American Anthropologist** 97, n. 4, 1995, p. 748-762.

MASSEY, Doreen. **For Space**. New Delhi: SAGE, 2005.

MIGNOLO, Walter. **The Darker Side of Western Modernity: Global Futures, Decolonial Options**, Durham: Duke University Press, 2011.

MIGNOLO, Walter; ESCOBAR Arturo (eds). **Globalization and the Decolonial Option**. London: Routledge, 2013.

O'GORMAN, Edmundo. **La invención de America**: Investigación acerca de la estructura histórica del Nuevo Mundo y del sentido de su devenir. México: UNAM, 1958.

PADRON, Ricardo. **The Spacious Word: Cartography, Literature, and Empire in Early Modern Spain**. Chicago: University of Chicago Press, 2004.

QUIJANO, Aníbal; WALLERSTEIN, Immanuel. Americanity as a concept, or the Americas in the modern world. **International social science journal** 44, n. 4, 1992, p. 549-557.

SAID, Edward. **Orientalism**. New York: Vintage, 1979.

SEED, Patricia. **Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640**. New York: Cambridge University Press, 1995.

SILVA, Denise F. da. **Toward a Global Idea of Race**. Minneapolis: University of Minnesota Press, 2007.