

## Aesthetics of Comfort: A Third Moment in Costa Rican Histories of Tropical Architecture

*L'esthétique du confort : troisième ère de l'architecture tropicale au Costa Rica*

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# Aesthetics of Comfort: A Third Moment in Costa Rican Histories of Tropical Architecture

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Recent debates about architecture in Costa Rica, in professional circles and some academic ones, have centered on the adaptability of the architecture to its natural environment. More specifically, discussions have been oriented towards exposing architecture's need to provide physical comfort in tropical climates. In these discussions, insolation, rain, and heat emerge as the main aspects to be considered when designing in Costa Rica.<sup>1</sup>

A survey of professional journals, such as the *Revista Habitar*, the official journal of the Colegio de Arquitectos de Costa Rica (CA, or Costa Rica's professional association), and commercial magazines, such as *Su Casa* (ceased publication in 2014), exposes the relevance of notions of comfort in professional circles from 1990. In these media, a recurring concern about the relationship between design, built forms, and the tropical environment is expressed in editorials, essays, and in published architectural projects. Its preponderance points to the emergence of a professional narrative—one that shapes how architecture is practiced in Costa Rica—constructed around notions of adaptation to the tropical climate. The tropical environment is also associated with concepts such as critical regionalism, in publications like *Tropical Architecture: Critical Regionalism in the Age of Globalization*, edited by Alexander Tzonis, Liane Lefaivre, and Bruno Stagno. In the first portion of the text, Tzonis and Lefaivre claim that “throughout the area we call the tropics, people share the problem of having to cope with extreme conditions of hot and humid climate.”<sup>2</sup> Since this narrative—present in professional

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1 Natalia SOLANO-MEZA, “Narrativas del ambiente tropical y la consolidación de ciertos discursos disciplinares en la revista *Habitar* (Costa Rica, 1990-2012),” *Revista Bitácora Arquitectura*, vol. 43, 2019, p. 110-117. DOI: <http://dx.doi.org/10.22201/fa.14058901p.2020.43.72949>.

2 Alexander TZONIS and Liane LEFAIVRE, “Tropical Critical Regionalism: Introductory Comment,” in Alexander TZONIS, Liane LEFAIVRE and Bruno STAGNO (eds.), *Tropical Architecture: Critical Regionalism in the Age of Globalization*, Chichester; New York, NY: Wiley-Academy, 2001, p. 2.

56 | circles and seemingly validated by international voices through association with widespread, complex, and even problematic terms such as regionalism—explicitly calls for architects to acknowledge the country as a tropical one, its complexities and historical implications cannot be ignored: tropical also signifies non-European. In other words, notions of the Tropics are inevitably placed within global histories because, as Hilde Heynen asserts, they are constructed from a European perspective.<sup>3</sup>

From our ongoing analysis of archives, interviews, and publications, we have identified comfort as one of the key elements constituting this professional narrative.<sup>4</sup> We claim that the notion of comfort has aesthetic implications, suggesting the emergence and consolidation of what we will refer to as an aesthetics of comfort: a set formal principles and images underlying and guiding the work of (many) architects in Costa Rica. These principles seem to be underpinned by the idea that adaptation to the physical tropical environment is intrinsic to architectural practices in Costa Rica. They also appear to be entangled with images of exuberance and bountifulness. These images have historically been informed by experiences of European travelers, multinational corporate operations—such as the United Fruit Company (UFCO)—and international cooperation programs in the post-1945 era.

In our work, comfort operates as a multilayered concept, especially when linked to ideas regarding the Tropics and to histories of tropical architectures. It is affected by scientific knowledge on climate, and by industry-related standardization (such as those from the American Society of Heating, Refrigerating and Air Conditioning Engineers, or ASHRAE), applied in Costa Rica.<sup>5</sup> Comfort is also shaped by geopolitical histories and by subjectivities associated with colonial and postcolonial experiences.<sup>6</sup> Given their scope, these geopolitical and postcolonial complexities are not discussed in Costa Rican architectural journals, which tend to present current professional interests as if they were inherent to the practice of architecture in the country.

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3 Hilde HEYDEN, “The Intertwinement of Modernism and Colonialism: A Theoretical Perspective,” *Docomomo Journal*, vol. 48, no. 1: Modern Africa, Tropical Architecture, 2013, p. 10-19.

4 In the text, the pronoun “we” refers to the main author and to a student research team assisting in a three-year research project on tropical architecture in Costa Rica. See also the acknowledgements.

5 According to Dr. Emily Vargas Soto, appointed coordinator of the Laboratorio de Arquitectura Tropical (LAT) and the Master Program in Tropical Architecture at the School of Architecture of the University of Costa Rica, the application of these normative standards in Costa Rica needs to be challenged or at least questioned. From non-recorded conversations with the author, San Pedro, Montes de Oca, San José, Costa Rica, 2019.

6 Amal TREACHER, “On Postcolonial Subjectivity,” *Group Analysis*, vol. 38, no. 1, 2005, p. 43-57. URL: <https://journals.sagepub.com/doi/pdf/10.1177/0533316405049365>. Accessed 21 July 2020.

Despite the treatment of comfort as an ahistorical—or entirely technical—concept in the press, we claim that comfort can be understood as a historical and aesthetic concept. As a historical concept, comfort can be traced to the idea that tropical weather was harmful to Europeans. Consequently, current notions of comfort and physical contentment cannot be dissociated from concerns with health, disease and with the development of tropical medicine during colonial times.<sup>7</sup> Similarly, contemporary scholarship on comfort and architecture in the Tropics can be related to production of technical knowledge on architecture and climate in the postwar era.<sup>8</sup> Furthermore, it can be linked to colonial building practices, often marked by concerns with health and hygiene.<sup>9</sup> As an aesthetic concept, comfort can be related to what Nancy Leys Stepan refers to as the “imaginary construct of the Tropics” in which vast and heterogeneous tropical regions were, and still are, presented as places of inherent wilderness, lushness, untamed nature, chaos, fertility, and exuberance; but also as places of danger, disease, disaster and discomfort.<sup>10</sup> These representations were shaped by colonization processes: commercial enterprises, scientific expeditions, health surveys and architectural projects.<sup>11</sup>

In this case, as we will attempt to expose, practices and discourses about comfort in Costa Rican architecture have been informed mainly by two previous occurrences: the arrival of the United Fruit Company (UFCO) in Costa Rica in 1889, and the relationship between the country’s first school of architecture, Escuela de Arquitectura (EA), at the University of Costa Rica, with Otto H. Koenigsberger and the staff of the Department of Development

7 About Costa Rica, see Steven PALMER, “Central American Encounters with Rockefeller Public Health, 1914–1921,” in Emily S. ROSENBERG, Gilbert M. JOSEPH, Catherine LEGRAND and Ricardo D. SALVATORE (eds.), *Close Encounters of Empire: Writing the Cultural History of U.S.-Latin American Relations*, Durham, NC: Duke University Press, 1998, p. 311-332 and David ALIANO, “Curing the Ills of Central America: The United Fruit Company’s Medical Department and Corporate America’s Mission to Civilize (1900-1940),” *Estudios Interdisciplinarios de América Latina y el Caribe*, vol. 17, no. 2, 2006, p. 35-59.

8 See Hannah LE ROUX, “The Networks of Tropical Architecture,” *The Journal of Architecture*, vol. 8, no. 3, 2003, p. 337-354; IDEM, “Building on the Boundary—Modern Architecture in the Tropics,” *Social Identities Journal for the Study of Race, Nation and Culture*, vol. 10, no. 4, 2004, p. 439-453; Ola ODUKU, “Modernist Architecture and ‘the Tropical’ in West Africa: The Tropical Architecture Movement in West Africa, 1948-1970,” *Habitat-International*, vol. 30, no. 3, 2006, p. 396-411. <https://doi.org/10.1016/j.habitatint.2004.11.001>, and Mark CRINSON, *Modern Architecture and the End of Empire*, London: Ashgate, 2003 (British Art and Visual Culture since 1750. New Readings).

9 Jiat-Hwee CHANG, “Building a Colonial Technoscientific Network: Tropical Architecture, Building Science and the Politics of Decolonization,” in Duanfang LU (ed.), *Third World Modernism: Architecture, Development and Identity*, London; New York, NY: Routledge, 2010, p. 211-235.

10 Nancy Leys STEPAN, *Picturing Tropical Nature*, London: Reaktion Book, 2001 (Picturing History), p. 11.

11 See also David ARNOLD, *The problem of nature: Environment, culture and European expansion*, Oxford: Blackwell Publishers, 1998 (New Perspectives on the Past).

58 | and Tropical Studies (DDTS) at the Architectural Association School of Architecture in London, who collaborated in the school's opening in the 1970s.<sup>12</sup> From this perspective, our article offers insights from an ongoing exploration of the relationship between built architectural objects and ideas about the tropical environment in Costa Rica. In that regard, it is relevant to note that scholarship on tropical architecture histories is only now emerging in the country. Our research has been supported by a rigorous archival review, and in the case of more recent events by semi-structured interviews, conversations, systematic observation, and site visits. From our examination, we have identified ways in which architectural elements commonly associated with tropical architecture (such as stilts, louvers, perforated facades, verandas, wide hip roofs) combined with certain materials and site management strategies (such as landscape, vegetation, use of topography) to create a particular form of aesthetics that was disseminated from the 1990s.<sup>13</sup>

During the 1990s, in the midst of sociopolitical transformations triggered by an economic crisis in the early 1980s, the Colegio de Arquitectos de Costa Rica (CA) began to systematically promote a cluster of topics related to regionalism, architectural identity, and the tropical environment.<sup>14</sup> These themes were promoted through seminars, conferences involving international experts, activities with the participation of architecture schools,<sup>15</sup> publications in *Revista Habitar* and the creation of the CA's most important event, the Costa Rican Architecture Biennale (AB), first held in 1992. Some of these ideas were previously present in professional circles but they merged only in the early 1990s. Also, in late 1990s, Costa Rica's tourism industry grew significantly,

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12 Natalia SOLANO-MEZA, "Tropical Dissidence: The Creation of the School of Architecture of the University of Costa Rica at the Department of Development and Tropical Studies," *Fabrications, The Journal of the Society of Architectural Historians, Australia and New Zealand*, vol. 27, no. 2, 2017, p. 177-199. DOI: <https://doi.org/10.1080/10331867.2017.1297065>.

13 For example: Fabiola VARGAS, "Arquitectura tropical penetra en mercado de la construcción." URL: [https://www.larepublica.net/noticia/arquitectura\\_tropical\\_penetra\\_en\\_mercado\\_de\\_la\\_construccion](https://www.larepublica.net/noticia/arquitectura_tropical_penetra_en_mercado_de_la_construccion). Accessed 12 May 2020; and Carlos ÁLVAREZ GUZMÁN, "Fragmentos de una década entre la sostenibilidad y la diversidad," *Revista Habitar*, no. 72, 2011, p. 42-46.

14 For a brief history of the period in question, see: Iván MOLINA JIMÉNEZ and Steven PALMER, *Costa Rica del siglo XX al XXI: historia de una sociedad*, Sabanilla, Montes de Oca: Editorial de la Universidad Estatal a Distancia, 2013; and Iván MOLINA JIMÉNEZ, *Identidad nacional y cambio cultural en Costa Rica durante la segunda mitad del siglo XX*, San Pedro, Montes de Oca: Editorial de la Universidad de Costa Rica, 2015 (Cuadernos de Historia de las Instituciones de Costa Rica, 11).

15 A second architecture school opened its doors in 1979, and since then, private architecture schools have begun operations. Currently, there are approximately ten schools of architecture in the country. Besides the EA at the UCR, only one other institution, namely the School of Architecture at Instituto Tecnológico de Costa Rica, is linked to a public university.

creating new commissions for architectural firms and the appearance of new typologies, such as the luxury resort.

## Images of the Tropics

Nancy Leys Stepan asserts that tropical spaces constitute a modern ensemble of “plants and animals (as well as peoples and diseases), represented via a repertoire of images” that can be immediately identified by the public as “tropical.”<sup>16</sup> As Leys Stepan suggests, “the notion that there is something distinctive about hot places is a very old one, going back to the Classical Antiquity.”<sup>17</sup> Consequently, the idea that hot temperatures affect the way of life is essentially constructed from a European perspective, and is therefore subject to narratives related to imperialism, colonialism and, most relevantly, to the ways in which knowledge about the Tropics was produced and disseminated.<sup>18</sup> Leys Stepan points that “the transfer to natural history, geography and anthropology of the political terminology of the eighteenth century—“kingdom,” “nation,” “province,” and “colonist”—indicates just how closely the notion of a distinctive tropical nature was tied to political empire and the geopolitical concerns of the day.”<sup>19</sup> The idea of the Tropics is, thus, more complex than a simple geographical location: “the Tropics signified a place of radical otherness to the temperate world, with which it contrasted and helped to constitute.”<sup>20</sup> European representations of the tropical conjugated many different values with non-permanent hierarchies: heat and warmth, dangerous diseases, wild specimens, superabundance, fatality, lazy sensuality and degeneration.<sup>21</sup> Weather components, temperature, humidity, and rain became associated with social and cultural conditions, untameable natures, intrinsic wilderness, inherent

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16 Nancy Leys STEPAN, *Picturing Tropical Nature*, *op. cit.* (note 10), p. 15.

17 *Ibid.*, p. 17.

18 For further scholarship on the topic, refer to Jiat-Hwee CHANG, “Building a Colonial Technoscientific Network: Tropical Architecture, Building Science and the Politics of Decolonization,” *op. cit.* (note 9); Iain JACKSON, “Tropical Architecture and the West Indies: From Military Advances and Tropical Medicine, to Robert Gardner-Medwin and the Networks of Tropical Modernism,” *The Journal of Architecture*, vol. 18, no. 2, 2013, p. 167-195. DOI: [10.1080/13602365.2013.781202](https://doi.org/10.1080/13602365.2013.781202); and Hannah LE ROUX, “The Networks of Tropical Architecture,” *op. cit.* (note 8).

19 Nancy Leys STEPAN, *Picturing Tropical Nature*, *op. cit.* (note 10). The author is referring to the work of Janet BROWNE, “A science of empire: British biogeography before Darwin,” *Revue d'histoire des sciences*, vol. 45, no. 4, 1992, p. 425-475. URL: [https://www.persee.fr/doc/rhs\\_0151-4105\\_1992\\_num\\_45\\_4\\_4244](https://www.persee.fr/doc/rhs_0151-4105_1992_num_45_4_4244). Accessed 25 July 2020.

20 Nancy Leys STEPAN, *Picturing Tropical Nature*, *op. cit.* (note 10), p. 16.

21 *Ibid.*, p. 21.

60 | chaos and disease.<sup>22</sup> These notions marked the development of science and medicine. As Jiat-Hwee Chang and Tim Winter affirm, once the miasmatic theory became obsolete and was replaced by germ theory, “the tropics was in turn seen as unfavourable to the comfort and productivity of the European.”<sup>23</sup> Consequently, the development of building technologies was often oriented towards easing life in tropical places. In the case of Costa Rica, the idea that the tropical climate affected production and had to be dominated has been present since the earlier constitution of the Nation-State, towards the middle of the nineteenth century. This idea led governments to invest in the creation of institutions dedicated to collecting environmental data.<sup>24</sup> Dominating tropical weather became an idea linked to progress, and government efforts aided in the establishment of commercial liaisons. In the famous chronicle *Conquest of the Tropics: The Story of the Creative Enterprises Conducted by the United Fruit Company*, Frederick Upham Adams (1859-1921) praises the diligence of both the UFCO and the government in efforts towards achieving development through agricultural production and infrastructural and building construction, which were seen as means of dominating the adverse conditions produced by the tropical weather, and also understood as symbols of progress.<sup>25</sup> As the work of Anthony Goebel McDermott has pointed out, the role of North American and European travelers, such as Upham Adams, was instrumental in shaping notions of development, tropical nature and comfort in Costa Rican environmental histories, suggesting once again that comfort, in the case of Costa Rican architecture, is a notion that cannot be detached from geopolitical histories nor from the construction of sensuous images about the Tropics.<sup>26</sup> (fig. 1)

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22 Jiat-Hwee Chang explores the construction of the concept as articulated from a European perspective and its complex aesthetic implications: “lurking behind the affirmative characterization of the tropics as an earthly paradise was a recurrent sense of repugnance and disdain. [...] While paradisiacal, the tropics were also irredeemably backward and lacking in civilization.” Jiat-Hwee Chang, *A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience*, London; New York, NY: Routledge, 2016, p. 7 (Architext series).

23 Jiat-Hwee CHANG and Tim WINTER, “Thermal modernity and architecture,” *The Journal of Architecture*, vol. 20, no. 1, 2015, p. 96. URL: <https://doi.org/10.1080/13602365.2015.1010095>. Accessed 24 July 2020.

24 See Anthony Goebel McDERMOTT and Ronny J. VIALES HURTADO, “Blaming It on the Weather: The Role of ‘Inclement’ Rainfall in Society-Nature Relations in Liberal Costa Rica (1860-1940),” *Global Environment*, no. 6, 2011, p. 8-67. URL: [http://www.environmentandsociety.org/sites/default/files/key\\_docs/ge6\\_goebel-viales.pdf](http://www.environmentandsociety.org/sites/default/files/key_docs/ge6_goebel-viales.pdf). Accessed 24 July 2020.

25 Frederick Upham ADAMS, *Conquest of the Tropics: The Story of the Creative Enterprises Conducted by the United Fruit Company*, Leopold Classic Library, 2014, (Romance of Big Business, 1), [first published New York, NY: Doubleday Page & Company, 1914].

26 Anthony Goebel McDERMOTT, “Historia ambiental, representaciones sociales y exploración





Figure 1: United Fruit Company Farm, Limón, Costa Rica.  
Source: San José (Costa Rica), Archivo Nacional de Costa Rica.

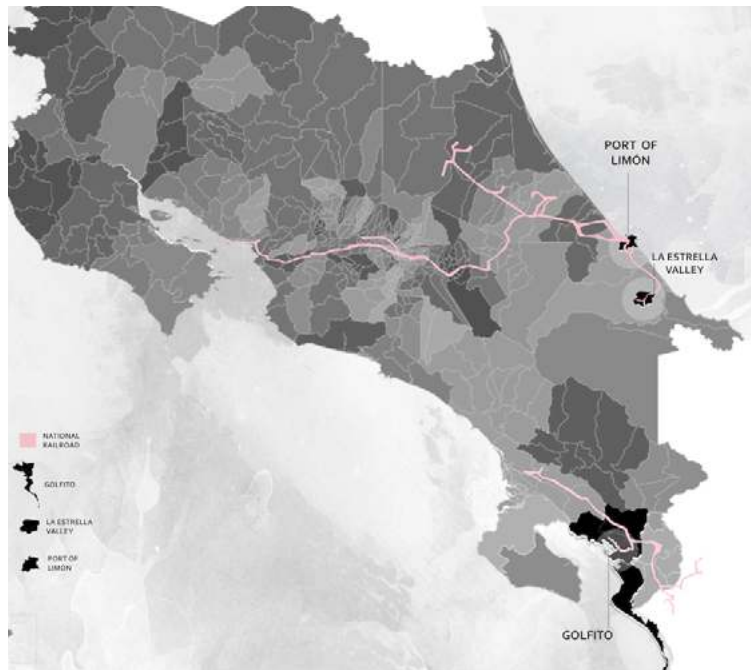


Figure 2: Map of the Costa Rican Railway.  
Source: Zetty Alonso Young, 2019.

decimonónica: elementos conceptuales y empíricos para el estudio del imaginario ambiental de la Costa Rica del siglo XIX,” *Diálogos*, vol. 9, no. 2, 2008, p. 26-53.



## 62 | From enclave architectures to contemporary discourses

The United Fruit Company began operating in Costa Rica in 1899,<sup>27</sup> following the merger of the Boston Fruit Company and the Tropical Trading and Transportation Company. The UFCO was founded after negotiations between Minor Cooper Keith—also a key figure in the construction of the railroad between the capital city of San José and the Caribbean port town of Limón—and the government of Costa Rica, represented by the figures of liberal presidents Tomás Guardia, Bernardo Soto, and Próspero Fernández.<sup>28</sup> Its settlement impacted agricultural production, labor policies, the configuration of productive landscapes and, as Keller Easterling terms it, their “disposition.”<sup>29</sup> (fig. 2)

The enclave—a spatial and territorial unit enclosed within a culturally and socially different territory—and its building types: foremen’s residences, bachelors’ dormitories, superintendent offices and health facilities, can be understood as alien spatial organizations visually integrated into the tropical landscape. However, enclaves also represent order, control, and progress. In other words, enclaves and their architectures constituted a controlled spatial order in which the rhetoric of progress was constantly present, along with the ideological and economic agenda of the UFCO: production and extraction. The disposition of the enclaves within the banana plantations was carefully planned to offer the zone spatial advantage and visual control over the plantations, their workers, and the “civil towns”—towns outside the enclave. As Kevin Coleman affirms, “the enclave as a visual regime authorized oversight of the community while regulating what could flow in and out of the protected space and [...] was an architectural arrangement that enabled ideas,

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27 Banana production was introduced to Costa Rica decades before the consolidation of the UFCO. However, its spatial organization is commonly associated with the UFCO’s operations.

28 Minor C. Keith’s uncle, Henry Meiggs (1811-1877), signed a contract with president Tomás Guardia (in office from 1870-1876 and from 1877-1882) to build a railroad connecting the capital city of San José and the Caribbean port of Limón. The enterprise faced numerous complications related to labor and disease, forcing the North Americans to bring workers from the Caribbean Islands (West Indies), Italy, and China. In 1882, the Costa Rican administration defaulted on payments, forcing a negotiation between President Próspero Fernández (in office 1882-1885) and Minor C. Keith. As part of the negotiation—known as the Soto-Keith contract, in reference to president Bernardo Soto (in office from 1885-1889) who was State Secretary at the time, the Costa Rican government granted Keith 3200 square kilometers of tax-free land along the railroad.

29 As Keller Easterling defines it: “Disposition, in common parlance, usually describes an unfolding relationship between potentials. It describes a tendency, activity, faculty, or property in either beings or objects—a propensity within a context.” The author asserts: “Disposition is immanent, not in the moving parts but in the relationships between the components.” in Keller EASTERLING, *Extrastatecraft: The Power of Infrastructure Space*, London: Verso Books, 2014 [digital book, n.p.].

orders, and commands to flow out from the superintendent's house [...]."<sup>30</sup> If visually analyzed, enclaves are framed within nature, but their disposition suggests a tendency towards enabling and exposing various forms of spatial power, including its buildings' responses to weather conditions. As Jensen Pennington establishes when analyzing the spatial disposition of the Golfito enclave: "terrain, vegetation, flora, fauna and climate served as organization variables of social relationships and the same time physical territoriality was reorganized through socio-technical means."<sup>31</sup>

In the enclave buildings, both as individual and formal units and as part of a greater context, there was an expressed concern with hygiene, sanitation, and control of tropical diseases. Regarding building technology, the architectures incorporated components dedicated to offering shelter and relief from tropical rain, humidity, and heat: the prominent hip roofs with overhangs, the use of petatillo to promote cross ventilation, and the veranda. The enclave typology has been praised for its application of scientific knowledge and its considerations regarding comfort in the tropical context. Specifically, architect Bruno Stagno (1943-) has produced essays in which he directly addresses the importance of enclave architectures as objects that influence contemporary architectural practices.

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30 Kevin P. COLEMAN, *A Camera in the Garden of Eden: The Self-Forging of a Banana Republic*, Austin, TX: University of Texas Press, 2016.

31 Henning Jensen PENNINGTON, "Space Syntax and Narrative Power: Architecture in Golfito," *Revista Reflexiones*, vol. 91, no. 1, 2012, p. 202.

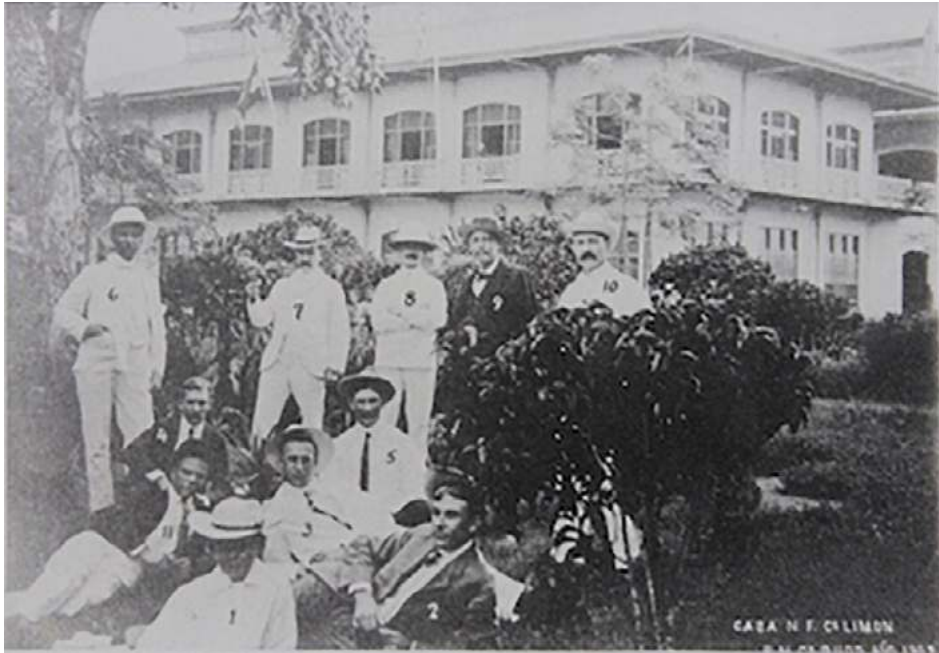


Figure 3: Officials of the United Fruit Company in Limón, showing Charles White (no. 3), John Beal (no. 4) and William Seaman (no. 7), 1902.

Source: San José (Costa Rica), Archivo Nacional de Costa Rica.



Figure 4: La Luisa Farm, property of the United Fruit Company, Instituto Costarricense de Ferrocarriles.

Source: San José (Costa Rica), Archivo Nacional de Costa Rica.

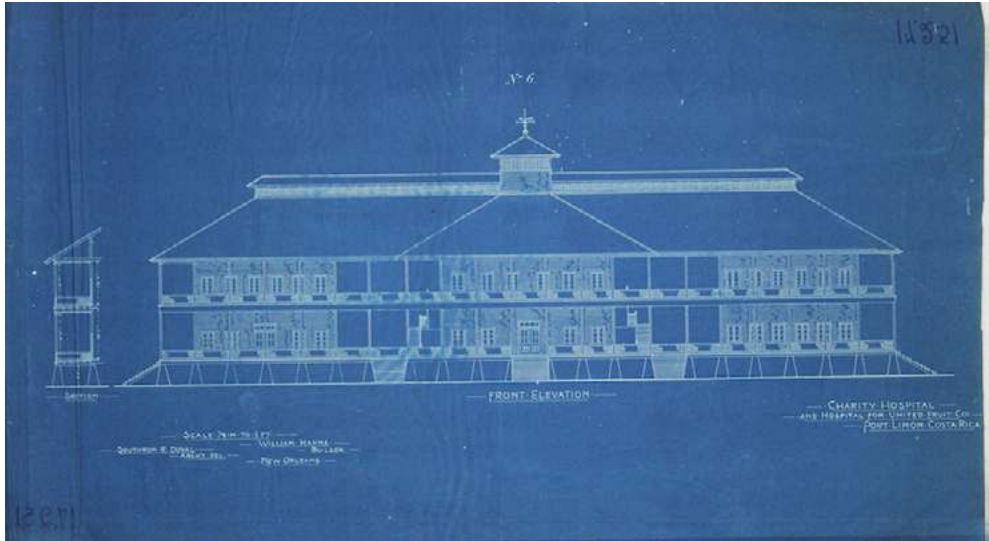


Figure 5: Drawing for the Limón Charity Hospital by the United Fruit Company, Ministerio de Obras Públicas. Source: San José (Costa Rica), Archivo Nacional de Costa Rica.

## The case of Bruno Stagno and the Instituto de Arquitectura Tropical

In 1994, two Chilean architects based in Costa Rica, Bruno Stagno and partner Jimena Ugarte, founded the Instituto de Arquitectura Tropical (IAT). According to Ugarte, the IAT stemmed from their need to understand the country's climate, different from the temperate environment in Chile, where they were trained. Ugarte points out that they discovered that in tropical climates, finding shade and protection from the sun and the heat were the key points to provide contentment.<sup>32</sup> The IAT, an NGO, is dedicated to producing research and disseminating knowledge on tropical architecture, as it is understood by its founders, Ugarte and Stagno.<sup>33</sup> It also serves as an editorial and research hub. IAT hosts an online and physical library related to tropical architecture, organizes international events, known as Encuentros de Arquitectura Tropical and has made efforts towards the implementation of *reset*, a manual for “sustainable architecture” in Costa Rica. Beyond those efforts, the IAT has had another strategic function: the deployment and promotion of a discursive structure about tropical architecture in which concepts such as sustainability,

32 Jimena UGARTE, “Interview with Jeremy Salazar,” IAT Headquarters, San José, Costa Rica. 2019.

33 As stated by the IAT's website, one of the institution's objectives is related to promoting research. URL: <http://www.arquitecturatropical.org/acerca.html>. Accessed 12 May 2020.

66 | bioclimatism, and environmental responsibility appear entangled. These ideas are organized mainly around the figure of Bruno Stagno and his works.<sup>34</sup> In media, his built projects are often presented as canonic examples of a deep understanding of tropical climate (fig. 6). Stagno's architecture makes use of certain elements: wide overhangs, hip roofs, perforated facades and efficient water collection systems.<sup>35</sup> However, even when the architect makes use of these elements his work cannot be considered a nostalgic interpretation of enclave or colonial architectures. On the contrary, Stagno's work develops its own language by relying, successfully, on building technology and local materials (fig. 7). Alternatively, Stagno has made use of vegetal facades, by designing light structures with attached climbers, incorporating another visual component in which exuberant vegetation plays a role, both in providing comfort and in reinforcing a tropical imagery (fig. 8).

The work of Stagno and Ugarte has been seminal in the creation of a Costa Rica-based professional network on tropical and subtropical architecture and building practices, mainly by organizing the Encuentros de Arquitectura Tropical. These Encuentros constitute a good example of how the IAT connects professionals with heterogenous interests on tropical and regional architectures. So far there have been five Encuentros: 1998, 2001, 2004, 2007, 2014. Liane Lefavre, Alexander Tzonis, Ken Yeang, Roberto Segre, Hugo Segawa, Glenn Murcutt, Philip Cox, and Rahul Mehrotra are all among the architects who have attended and given lectures. Kathy McDonald, Édgar Brenes, Rolando Barahona, Pietro Stagno—the son of Jimena Ugarte and Bruno Stagno and partner to Luz Letelier in the architecture studio Luz de Piedra—, Benjamín García, Juan Robles, and Bruno Stagno have participated as locals. After the first Encuentro,<sup>36</sup> Stagno, Tzonis, and Lefavre edited the aforementioned book *Tropical Architecture*. In the book's introductory chapter, Tzonis and Lefavre refer to the colonial heritage of tropical countries as a “precious precedent,” asserting that it constitutes a “design experience of great value for contemporary practice.”<sup>37</sup> Notably, they refer to the importance of bioclimatic adaptation achieved by foreigners in tropical regions. Adaptation,

34 By Stagno's “works,” we mean all of his written essays, conference participations, and studio projects.

35 At least, discursively, his works step away from the use of air conditioning systems. This calls for future research regarding the use of mechanical and air conditioning equipment in work accompanied by certain discourses.

36 Funding was obtained through the Prince Claus Fund. URL: <https://princeclausfund.org>. Accessed 4 June 2020.

37 Alexander TZONIS and Liane LEFAVRE, “Tropical Critical Regionalism: Introductory Comment,” *op. cit.* (note 2), p. 10-11.

thus, is rendered as common ground: one that enables the application of regionalism to architectural practices in the Tropics,<sup>38</sup> but tends to ignore political tensions deriving from extractive colonial pasts and the consolidation process of postcolonial national identities.<sup>39</sup>

The Encuentros, and their resulting publications, are presented as globalized trans-regional encounters, transcending sociocultural differences, focused on the relationship between nature and architecture.<sup>40</sup> However, given their purpose, genealogical accounts related to colonial and imperial histories of power are often absent from discussions. For example, in his opening lecture at the V Encuentro, Stagno cites Benjamin Kidd's work *The Control of the Tropics* (published in 1898) regarding questions of development and climate. Stagno asserts that Kidd's arguments are still valid today. However, the fact that Kidd's text argues in favor of geographical and ethnical superiority of the temperate zones—and their inhabitants—over the Tropics is neither explored nor acknowledged. Instead, Stagno focuses on the importance of studying the tropical weather and in architecture's ability to provide comfort in the Tropics by applying accumulated technical knowledge.<sup>41</sup>

In a published essay, when describing the spatial impact of the banana enclave, Stagno and Rowe assert that “at the end of the last century, when Costa Rica is [*sic*] still a dormant country, the arrival of the banana industry gives it the opportunity to undergo a development until then unknown.”<sup>42</sup> They praise the enclave for bringing order and development to the hinterlands: “Built in the middle of nowhere, on lands then covered by tropical forests, virgin and fertile zones situated in the well-drained lower parts of valleys, these cities imagined by North-American and European engineers represent a crossbred architecture born from the marriage between a modern occidental concept with the extreme conditions of a tropical country.”<sup>43</sup> Enclave buildings are presented as examples of dominion over tropical climate and praised for

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38 *Ibid.*, p. 3.

39 Keith EGGNER, “Placing Resistance: A Critique of Critical Regionalism,” *Journal of Architectural Education*, vol. 55, no. 4, 2002, p. 228-237. URL: <https://doi.org/10.1162/104648802753657932>. Accessed 24 July 2020.

40 This network is presented as a more “global” one and is different from the “Latin American” approach.

41 Bruno STAGNO, “Opening Lecture,” *Proceedings of V Encuentro de Arquitectura Tropical (San José Costa Rica, 2014)*, San José: Instituto de Arquitectura Tropical, 2016.

42 Bruno STAGNO and Philomène ROWE, *Arquitectura de las ciudades bananeras*, San José: Instituto de Arquitectura Tropical and Prince Claus Fund, n.d. URL: <http://www.arquitecturatropical.org/EDITORIAL/documents/CIUDADESBANANERAS.pdf>. Accessed 12 June 2020.

43 *Ibid.*



68 | their capacity to offer comfort by applying building technologies to tropical constructions. The description of the buildings—in this case a foreman’s residence—is limited to the built form:

The roof which extends quite a bit outward from the sides of the house, procures enough shade so that the sunlight coming in from the large windows and openings, does not disturb the occupants with neither its gleam nor heat. The sunlight is softened but still warm, and the floor reflects it onto the lightly painted walls. The main body of the house being off-white (therefore light) and the exterior pillars in green and in the shade, give the impression that the house is in suspension, protected and shielded. The underlying base on the ground level is of ochre- glazed cement which reflects the varying light. <sup>44</sup>

References to UFCO architectures are analyzed in relation to their response to natural and climatic conditions. They are described as the cause of a “metamorphosis of the local architecture.” Stagno affirms that these buildings were key in bringing to Costa Rica notions of hygiene, comfort, and well-being, suggesting a strong correlation between physical contentment and health.<sup>45</sup> The text also suggests a separation between technical knowledge and nature: “The relationship with nature is permanent, but it is not one of mixing or marriage, rather a relation of observation, admiration, and respect.”<sup>46</sup> When referring to Stagno’s work, Tzonis and Lefaivre claim that Stagno’s “regionalist findings were the result of intensive study of precedents well adapted to the tropical region,” specifically the colonial Spanish houses and the UFCO building typologies, which they praise as examples of adaptation and building technology.<sup>47</sup> However, no references are made to the geopolitical complexities that come with them in relationship to power, territory, building tradition, or aesthetics.

Ugarte’s historical accounts also refer to colonial architectures. In a 2007 text entitled *Notas sobre el Trópico Americano*, Ugarte examines built exemplars from the British, Dutch and French colonial regimes in the West Indies.<sup>48</sup> In her essay, the result of her travels in the region, she points to the use of verandas, stilts, and louvers, presenting them as the constitutive

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44 *Ibid.*

45 *Ibid.*

46 *Ibid.*

47 Alexander TZONIS and Liane LEFAIVRE, “Tropical Critical Regionalism: Introductory Comment,” *op. cit.* (note 2), p. 10-11.

48 Jimena UGARTE, *Notas sobre el Trópico Americano*, San José: Instituto de Arquitectura Tropical, 2007. URL: <http://www.arquitecturatropical.org/EDITORIAL/documents/NOTASSOBREELTROPICOAMERICANOELCARIBE.pdf>. Accessed 12 June 2020.



elements of building in tropical contexts with colonial pasts.<sup>49</sup> She refers to Victorian architectures as typologies brought to the Americas by Europeans in their need to adapt to the hostile tropical climate. A central aspect of her conclusions is the need to provide comfort in hot and humid environments. The work of the IAT and its directors, Stagno and Ugarte, offers an account of certain historical moments in Costa Rican architecture—such as the UFCO settlement—which is almost always oriented to promote discourses and practices built around the desire to understand the tropical climate. As stated, their research has a strategic function. For example, the description of the components of the UFCO buildings serves to validate their contemporary versions technically and aesthetically. Their focus on climatic adaptation tends to leave the complexities underlying the UFCO's enterprises in Costa Rica unacknowledged. These issues, related to geographic determinism, extractivism, cultural dominion, ethnicity, and gender, have for quite some time now been addressed in other disciplines.<sup>50</sup>



Figure 6: Holcim Building, by Bruno Stagno, San Rafael de Alajuela, Costa Rica, 2003.  
Source: Sergio Pucci, courtesy of the architect.

49 Jimena UGARTE, “Interview with Jeremy Salazar,” *op. cit.* (note 32).

50 See Lara PUTNAM, *The Company They Kept: Migrants and the Politics of Gender in Caribbean Costa Rica, 1870-1960*, Chapel Hill, NC: University of North Carolina Press, 2003; Aviva CHOMSKY, *West Indian Workers and the United Fruit Company in Costa Rica, 1870-1940*, Baton Rouge, LA; London: Louisiana State University Press, 1996; Philippe I. BOURGOIS, *Ethnicity at work: Divided labor on a Central American banana plantation*, Baltimore, MD: Johns Hopkins University Press, 1989 (Johns Hopkins in Atlantic History and Culture).



Figure 7: Instituto Centroamericano de Administración de Empresas Building, by Bruno Stagno, La Garita, Alajuela, Costa Rica, 2015.

Source: Sergio Pucci, courtesy of the architect.





Figure 8: Tribu Advertisement Agency Building, by Bruno Stagno, San Antonio de Belén, Heredia, Costa Rica, 2003.

Source: Sergio Pucci, courtesy of the architect.

## 72 | Comfort: from the DDTS to current practices in the School of Architecture at the University of Costa Rica

Between April to May of 1970, Otto H. Koenigsberger visited Costa Rica as a delegate of the “Central America Technical Assistance Programme” of the British Council and as director of the Department of Development and Tropical Studies (DDTS).<sup>51</sup> His visit was part of efforts oriented to the opening of the first school of architecture in the country. The following year, school did open, linked to the Faculty of Engineering at the University of Costa Rica. Koenigsberger was impressed with the country’s natural landscape, and assigned Costa Rica’s future architects the duty to protect them, through “environmentally conscious” design principles and the development of land policies.<sup>52</sup> His report presented a detailed list of subjects to be included in the future architecture course, similar to the fields studied by the DDTS: climatic design, landscape design, human ecology, site analysis. However, the report’s most relevant aspect, mentioned in its last pages, was the proposal for the establishment of a collaboration between the DDTS and the new school. It suggested a certain interest in expanding influence over Latin American countries in the postcolonial era.<sup>53</sup> The proposal included supervision in the creation of the curriculum, a visiting academics’ program, and scholarships for Costa Rican architects.<sup>54</sup> Three of the four architects who traveled to the DDTS in August of 1970 to attend the Teaching Methods Course are considered the intellectual founders of the EA:<sup>55</sup> Rafael Angel “Felo” García (1928-), Jorge Bertheau (1937-) and Édgar Brenes (1943-).<sup>56</sup> After the DDTS was dissolved and the Development Planning Unit (DPU) was founded, another group of architects and future teachers traveled to London to pursue graduate studies: Franz Beer (1937-), Randolph Von Breymann (1949-), Rafael

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51 At the time, Koenigsberger was interested in the impact of land planning strategies on the development of “Third World” countries. His proposals regarding the EA were consistent with his interests and coincided with the creation of the Development Planning Unit under his directorship at London College. From a review of the Otto H. Koenigsberger Papers Collection (currently without a catalogue) at the Architectural Association Archives, documents retrieved in 2014.

52 Otto H. KOENIGSBERGER, *A School of Architecture for Costa Rica*. Report, 1970. London (United Kingdom), Architectural Association Archives, Otto H. Koenigsberger Papers Collection.

53 Natalia SOLANO-MEZA, “Against a pedagogical colonization: the case of the School of Architecture at the University of Costa Rica,” *Charrette*, vol. 4, no. 2, 2017, p. 40-58.

54 Otto H. KOENIGSBERGER, *A School of Architecture for Costa Rica*, *op. cit.* (note 52).

55 The fourth, Santiago Crespo dropped out of the course in 1971.

56 Natalia SOLANO-MEZA, “Tropical Dissidence: The Creation of the School of Architecture of the University of Costa Rica at the Department of Development and Tropical Studies,” *op. cit.* (note 12).

Agüero, Víctor Cañas (1947-) and Gloria Wang (1953-). Cho Padamsee and John-Michael Lloyd from the DPU visited the EA in 1974 and 1979.

As a result of this exchange, climatology has been present in the EA since its opening.<sup>57</sup> Historically the subject focused on climate chart reading and understanding passive solutions, such as cross ventilation, rather than producing data and measuring information regarding bodily responses to various Costa Rican micro-climates. This situation created dependence on access to updated information and scholarship on the subject, which was often produced abroad. In addition, research on comfort was often subjugated by one of the EA's more persistent discourses: the need to engage in a wide range of development policies and practices associated with, but not limited to, land planning, the building materials industry, urban design, and efficiency.<sup>58</sup>

Of the group that attended the DDTS and DPU, Édgar Brenes, a graduate of Catholic University of America in Washington D.C., is the architect usually associated with tropical architecture, partially because he developed projects in the province of Limón and because of his interest in energy efficiency and understanding of climatic responses.<sup>59</sup> Brenes's own reflections on his career make frequent reference to his exposure to the principles of tropical architecture at the DDTS, and their impact on notions of controlling insolation, light, rain, and heat in tropical scenarios. Brenes claims that understanding the difference in temperature between day and night in the tropics has been a key component in his design decision process. Despite references to scientific data, his professional practice seems to rely on intuitive decision making. His approach is partially influenced by his encounter with British tropical architecture while attending the DDTS, and can be examined in the building he designed for the EA, located in the Ciudad Universitaria Rodrigo Facio (**fig. 9**). The building is made of a prefabricated concrete system manufactured by a Costa Rican company, Productos de Concreto. Brenes designed a steel structure which allows for an open facade. He also made use of coloured acrylics which were intended to play with tropical lights and shades while generating various openings to allow a constant air flow.<sup>60</sup>

57 The original curriculum of the School rejected a subject-by-subject structure, hence climatology principles were not necessarily taught on specific courses. See: Natalia SOLANO-MEZA, "Against a pedagogical colonization: the case of the School of Architecture at the University of Costa Rica," *op. cit.* (note 53).

58 Natalia SOLANO-MEZA, "Tropical Dissidence: The Creation of the School of Architecture of the University of Costa Rica at the Department of Development and Tropical Studies," *op. cit.* (note 12), p. 183-184.

59 During his career, Brenes has lived and worked in the Caribbean, becoming interested in its culture.

60 Édgar BRENES, interview by Natalia Solano-Meza, San Pedro de Montes de Oca, San José, Costa Rica, 2014.





Figure 9: The School of Architecture Building, by Édgar Brenes, Ciudad Universitaria Rodrigo Facio, San Pedro de Montes de Oca, San José, Costa Rica, 1978-1983.  
Source: Courtesy of the School of Architecture at the University of Costa Rica.

In Brenes's work, the use of scientific information occupies a secondary position, although it appears entangled with experience-based decisions such as those present in his own house in the Caribbean town of Puerto Viejo: Casa Manyahnille (**fig. 10**). The house was built in the 1990s in the southeast of Limón Province, a town with strong cultural influences from British Caribbean. It is made of concrete, steel, and wood. Wood is used in the local building tradition, a fusion of indigenous and Caribbean British culture. When referring to the house, Brenes asserts that for him architecture in Costa Rica must be reduced to its relationship to context. He cites a series of "climatic rules" that must be followed, to ensure contentment and protection from natural elements, specifically heat and rain.<sup>61</sup> In his intervention in the II Encuentro de Arquitectura Tropical, he made references to Caribbean culture, the influence of British architecture and its encounter with indigenous tradition, while presenting a sample of his projects in the Caribbean: from the aforementioned private home to his work with caribana—later purchased by Chiquita Corporation—and Finca San Alberto in Siquirres, Limón, in designing housing for banana plantation workers.<sup>62</sup>

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61 Daniela FERNÁNDEZ and Édgar BRENES, "Édgar Brenes: Oportuno e Inconsciente," *Su Casa*, no. 64, 2011, p. 84-85.

62 Daniela FERNÁNDEZ and Édgar BRENES, "Acieros y Desaciertos de la Arquitectura Tropical," *Proceedings of II Encuentro de Arquitectura Tropical (Museo de Arte y Diseño Contemporáneo, San José, Costa Rica, 2001)*, San José: Instituto de Arquitectura Tropical, 2008.





Figure 10: Casa Manyahnille, by Édgar Brenes, Puerto Viejo de Talamanca, Limón, Costa Rica, c. 1990. Source: Originally published in *Su Casa*, vol. 52, 2010, p. 60, photo by Carla Saborío. Retrieved from the Archive of Biblioteca Teodorico Quirós, School of Architecture, at the University of Costa Rica and Biblioteca Nacional de Costa Rica in 2019.

Brenes was involved in the creation of a Master's Degree in Tropical Architecture as part of the Masters Program at the EA in 2003. In the beginning, the Masters in Tropical Architecture approached environmental and comfort-related problems more intuitively. In late 2000s, a change in the staff saw the emergence of comfort-oriented research. Under the directorship of Eugenia Solís (1953-), who is part of the first generation of architects trained in Costa Rica at the EA, a laboratory of tropical architecture was created in 2009 under the name Laboratorio de Arquitectura Tropical (LAT) and technical equipment for

assessing and aiding climatic design was purchased: heliodons, wind tunnels and others (**fig. 11**).<sup>63</sup> These events mark a shift from the previous approach to knowledge transfer from laboratories to design studios, which was previously rooted in professional experience rather than in data analysis. Gradually, the broad concern with aiding development, originally the core of the EA, was replaced by specific contributions on the effects of temperature on everyday activities. Currently, in the research produced inside the LAT, temperature and bodily responses to it occupy a central position, but historical analysis around them has been almost nonexistent.<sup>64</sup>



Figure 11: Laboratory of Tropical Architecture.

Source: Courtesy of the School of Architecture at the University of Costa Rica, 2019.

63 From non-recorded work sessions with M. Arch. Eugenia Solís and Dr. Emily Vargas Soto with the author, San Pedro de Montes de Oca, San José, Costa Rica, 2018-2019.

64 A few academics with expertise on data production offer consultancies to professional firms on climate adaptation and the use of passive strategies. These exchanges may begin to transform common assumptions regarding comfort, and thus may begin to impact an institutionalized aesthetics, which the work of certain figures has helped to popularize. From non-recorded conversations with Dr. Emily Vargas, San Pedro, Montes de Oca, San José, Costa Rica, 2019.

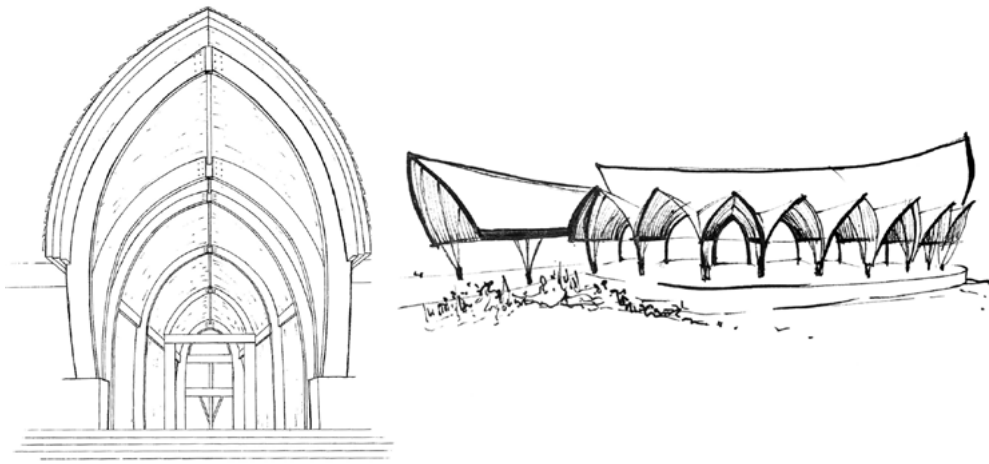


Figure 12: Formal studies of the Four Seasons Golf Club, Península de Papagayo, Guanacaste, by students.  
Source: Left: Front entrance by Jeremy Salazar Aguilar, 2020. Right: General view by Zetty Alonso Young, 2020.

During the 1990s, the Costa Rican government began to promote tourism, and private investors responded. This led to the development of tourism-related infrastructure that came accompanied by images of comfort and luxury.<sup>65</sup> An example can be found in the work of the Costa Rican firm Zurcher Arquitectos and its principal, Ronald Zurcher (b. 1952-) for the Four Seasons Resort in the Papagayo Peninsula (2005). The hotel rooms, ballroom, spa, and golf clubhouse were designed by Zurcher's firm, one of the first in Costa Rica to transform itself into a corporate structure. The Golf Club, also widely published, became an exemplar of controlled exuberance (**fig. 12**). Its structure emulates and exaggerates forms present in nature, in the same way that artists from the nineteenth century exaggerated features of certain botanic specimens to comply with the expectations of the public.<sup>66</sup> Images of comfort became essential in guaranteeing the experiences of “controlled exuberance” demanded by North-American and European tourists. In other words, architectural objects began to be presented in relationship to their surroundings in a way in which comfort, hygiene, and integration with nature could all be anticipated visually.

In the field of high-end residential buildings, the designs by Victor Cañas Office have also been catalogued as “tropical.” Cañas's work has been recognized

65 These tourism-oriented architectural objects require a more detailed and focused research as links to early twentieth century tourism could be made.

66 See Nancy LEYS STEPAN, *Picturing Tropical Nature*, *op. cit.* (note 10), p. 45-53.

by the Costa Rican Architecture Biennale (AB) at least ten times. His firm has won three Grand Prize awards, in 1998, 2004 and 2010, and received several honorary mentions. The architect claims that he does not necessarily feel comfortable with this labelling of his work. For Cañas, comfort goes far beyond offering bodily contentment, and relates to creating a full sensory experience for his clients, which requires rigorous site observation at the outset.<sup>67</sup> Cañas's high-end residential projects have also been widely published in mass-market magazines, such as *Su Casa*, and are often presented as examples of innovation in the application of building technologies for Costa Rica. Despite the frequent use of wide overhangs and stilts, these elements do not reference indigenous or traditional architectural objects. In fact, his work seems essentially modern, in the sense that it is rendered as the result of objective site observation and because it relies on the application of technology.<sup>68</sup> Cañas's residential projects are characterized by visual integration with the surrounding landscape. It is this integration that conveys images of comfort and beauty (figs. 13 and 14). Cañas's approach differs from other approaches to tropical weather, such as those presented by studio Luz de Piedra—Pietro Stagno and Luz Letelier—in the Casa Atrevida, built mainly in bamboo in the Península de Osa in Puntarenas (fig. 15). Their differences suggest that professional narratives and media tend to use tropical architecture as an “umbrella” term in which heterogenous architectural languages are grouped together based on their supposed relationship to natural settings and to the concern they express with adaptation to hot and humid climates. Following these narratives, these examples could also fit in the regionalist discourse that has been associated with architectural practices in the Tropics. However, such categorization would also imply a tendency to homogenize diverse contemporary practices and to oversimplify the intersections between certain buildings—particularly those presented as examples of “correct” practices—, colonial histories, tradition, technology, and adaptation.

In his intervention at the V Encuentro de Arquitectura Tropical, Pietro Stagno—who also partners with his father in the joint enterprise Stagno Studio—refers to climatic comfort and sensory images about the Tropics: “There is no time when you are not aware of the atmospheric conditions: moments of tranquility and the moments where you simply can't comprehend how you can be dry, calm and comfortable inside the house, yet outside there's a thunderstorm (and it) seems the world is about to end.”<sup>69</sup>

67 Víctor CAÑAS, interview with Natalia Solano-Meza, San Pedro de Montes de Oca, San José, Costa Rica, 2019.

68 See: Mark CRINSON, *Modern Architecture and the End of Empire*, *op. cit.* (note 8).

69 Pietro STAGNO, “Sincronizar los sentidos con la naturaleza,” *Proceedings of V Encuentro de Arquitectura Tropical (San José, Costa Rica, 2014)*, San José: Instituto de Arquitectura Tropical, 2016.





Figure 13: Portas Novas House, by Víctor Cañas Arquitectos.  
Source: Jordi Miralles, Guanacaste, Costa Rica, 2005, courtesy of the architect and the firm.



Figure 14: Holmes House, by Víctor Cañas Arquitectos.  
Source: Paul Aragón, Guanacaste, Costa Rica, 2004, Grand Prize at the International Costa Rican Biennale, courtesy of the architect and the firm.

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URL: <https://docplayer.es/77849163-Sincronizar-los-sentidos-con-la-naturaleza-pietro-stagno.html>.  
Accessed 24 June 2020.



Figure 15: Casa Atrevida, by Atelier Luz de Piedra, Pietro Stagno, and Luz Letelier.

Source: Sergio Pucci, *Península de Osa*, Puntarenas, Costa Rica, 2012, Grand Prize at the International Costa Rican Biennale 2012, courtesy of the firm.

## Conclusion

Our research allows us to draw various preliminary conclusions regarding current architectural practices in Costa Rica. First, we have determined that tropical architecture is used as an “umbrella term” for a variety of practices, perspectives, and architectural objects. Two of the concerns connecting them are adaptation to the tropical climate and visual integration with the building site. Despite the diversity of approaches, leading to a extremely different architectural results, comfort emerges as a key theme. However, as we have attempted to show, comfort cannot be understood merely as a technical standard. Instead, comfort operates as an idea loaded with historical weight, and is entangled with complex imaginaries of the Tropics. Currently, professional discourses highlight images appealing to the hot and humid weather and the exuberance of nature; for example, Pietro Stagno’s presentation described a certain imaginary in relation to an architectural object. Hence, comfort operates as an aesthetic concept, one that encompasses architectural typologies, images, forms, and building elements.

Sustaining the aesthetics of comfort, a sort of catalogue of built exemplars is presented through specialized media such as *Revista Habitar* and in mass-market magazines, newspapers, and television. Architectural objects that comply with certain criteria—the use of traditional building elements, and visual images suggesting site adaptation or formal references to nature—are presented as exemplars of mastery in climatic adaptation to the tropical environment. These exemplars are also validated through awards, namely at the Costa Rican Architecture Biennale (AB), an event created and organized by the Colegio de Arquitectos de Costa Rica (CA). Future research must take this bias into account in focusing on the normalization of languages and approaches. Exemplars appear to be seminal in the constitution of a highly institutionalized professional narrative about architecture, climate adaptation, and the natural environment. In the early 1990s, social transformation and the growth of industries like tourism made it possible to disseminate this professional narrative, absorbing concerns regarding climate adaptation, national identity, and landscape, but paradoxically making architectural matters essentially apolitical.

Also informing the aesthetics of comfort, enclave architectures like the UFCO's are treated as exemplars of progress in building technology. It is noteworthy that these architectures are seemingly treated not only as historical specimens but as strategic mechanisms aiding in the validation of current practices, languages, and objects. The close ties between enclave architectures and contemporary practices call for more detailed exploration in the future. For example, Bruno Stagno and Jimena Ugarte, through the IAT, have made great contributions towards the dissemination of tropical architecture practices. Since their interest seems to be situated on design and construction aspects, their exploration does not necessarily pay attention to political and historical complexities related to colonialism, extractivism, and in broad terms to asymmetrical power relationships. The lack of a consistent and systematic architectural critique in professional circles and in media has prevented alternative readings of these built forms and their historical and political dimensions. In parallel, the implication that tropical architecture can be understood as a form of critical regionalism, as suggested in the book edited by Tzonis, Lefaivre, and Stagno, carries a series of challenges related to modernity, heritage, building, technology and local identity. Questions can be raised regarding these built examples: What is critical about them? Does tropicalized regionalism operate as homogenizing agent of colonial experiences? In answering those questions, it is relevant to consider that a colonial past does not necessarily imply a "similar" past. In other words, colonial experiences do not necessarily imply shared architectural culture or common building traditions. Hence, when these are



presented as invariable conditions—specifically articulated around comfort and adaptation—there is always a risk to flatten heterogeneous architectural practices and their particular histories.

In the EA, academic research is oriented towards exploring the effects of temperature in the human life. Hence, comfort is often treated as a technical notion subject to standardization and international norms. Critical studies related to the standardization of North American and European standards on comfort and human performance have not been initiated. Despite the growing interest in comfort and knowledge transfer in, for example the EA's design studios, the approach still relies on intuitive methods, which also have aesthetic implications, as students projects tend to emulate the canonical examples shown in exhibitions and publications. This suggests that the aesthetics of comfort is present in pedagogical scenarios, but not necessarily linked to comfort-related research.

In the hospitality business, the use of indigenous materials, the staged visual integration with natural elements, and the references to botanical and animal shapes have served in the formalization of a more specific hospitality-related aesthetics. In this case, comfort is explicitly merged with bountifulness, but careful spatial organisation also makes an appeal to order and hygiene. Our research suggests that these aesthetics have had an impact on architectural practices related to the tourism industry, in the commercialisation of certain building materials, such as bamboo and caña brava, and in the popularisation of certain architectural types. As in the case of enclaves, further research will be necessary on this topic.

In summary, from our ongoing research, what we refer to as an aesthetics of comfort appears to be a complex concept, deeply rooted in and linked to historical processes, cultural exchanges, visual images and institutionalized architectural exemplars. As we have attempted to demonstrate, images of comfort are intertwined with notions of lushness, exuberance, and bountifulness, but they also intrinsically carry ideas related to hygiene and disease prevention. Seeming to operate strategically in the validation of certain objects, the aesthetics of comfort simultaneously contain many historical and political complexities related to colonialism, geopolitical arrangements and knowledge transfer.

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## Abstract

Histories of tropical architecture in Costa Rica could be constructed around three moments: the settlement of the United Fruit Company (UFCO) in 1889, the visit of Otto H. Koenigsberger, director of the Department of Development and Tropical Studies during the opening of the School of Architecture of the University of Costa Rica in 1970, and finally, the constitution of a set of formal principles and images guiding the work of many architects in Costa Rica and justified by the need to provide comfort—or sensory contentment—in the tropical climate: an *aesthetics of comfort*. Although it is often considered a technical term, in our work, comfort operates also as a historical and aesthetic concept. Our research suggests that the *aesthetics of comfort* has been disseminated through journals and exhibitions since the 1990s, while also absorbing experiences from the two previous moments. Consequently, it cannot be separated from histories of colonialism, extractivism, hygiene, and interventionism. It is present, although in different forms and with different purposes, in the work of architects such as Édgar Brenes, Víctor Cañas and Bruno Stagno. In the media, their prominent achievements are presented as the result of responsiveness to nature, building technology, site adaptation and the ability to offer contentment. From our analysis, we claim that the *aesthetics of comfort* functions as a validation mechanism, one that praises technical knowledge and formal adaptation but tends to ignore histories of colonialism and knowledge production.

## Résumé

L'histoire de l'architecture tropicale au Costa Rica s'est en quelque sorte construite autour de trois événements : l'implantation de la United Fruit Company (UFCO) en 1889 ; la conférence d'Otto H. Koenigsberger, directeur du Département des études tropicales, lors de l'inauguration de l'École d'architecture de l'Université du Costa Rica en 1970 ; et enfin, la création d'un ensemble formel de règles et de représentations visant à garantir confort et bien-être en zone tropicale : une « esthétique du confort », qui inspire encore de nombreux architectes costaricains. Souvent considéré comme un terme technique, le concept de « confort » sera ici envisagé dans ses dimensions historiques et esthétiques. L'esthétique du confort s'est diffusée via la presse et les expositions depuis les années 1990. Elle est cependant l'héritière des deux périodes précédentes, et tributaire de l'expérience historique du colonialisme, de l'extractivisme, de l'hygiénisme et de l'interventionnisme. On la retrouve sous différentes formes et pour différentes raisons, dans le travail d'architectes tels Édgar Brenes, Víctor Cañas et Bruno Stagno, dont les réalisations emblématiques sont présentées dans les médias comme des modèles d'intégration au paysage, de respect de la nature, d'utilisation des nouvelles technologies du bâtiment, sources de confort et de bien-être. Cette étude montre ainsi que l'esthétique du confort permet de valider des savoir-faire techniques et une acclimatation de principe, mais tend à ignorer les conditions historiques et coloniales de leur production.

## Zusammenfassung

Geschichten zur Tropenarchitektur Costa Ricas lassen sich um drei Schlüsselmomente herum anlegen: Die Niederlassung der United Fruit Company (UFCO) 1889, den Besuch Otto H. Königsbergers, des Leiters des Department of Development and Tropical Studies an der Londoner Architectural Association School, bei der Eröffnung

der Architekturhochschule an der Universität von Costa Rica 1970, und zuletzt die Herausbildung einer Reihe formaler Prinzipien und Bilder, die die Arbeit zahlreicher Architekten in Costa Rica geprägt haben und mit dem Bedürfnis nach Komfort — bzw. Behaglichkeit — im tropischen Klima rechtfertigt wurden: eine Ästhetik des Komforts. Obwohl oft als technischer Begriff verstanden, funktioniert Komfort in unserer Arbeit als historisches und ästhetisches Konzept. Unsere Forschungen legen nahe, dass die Ästhetik des Komforts seit den 1990er Jahren durch Zeitschriften und Ausstellungen verbreitet wurde und dabei die Erfahrungen der beiden vorangegangenen Momente in sich aufnahm. Dementsprechend kann sie nicht losgelöst von Geschichten des Kolonialismus, des Extractivismus, der Gesundheitswesens und des Interventionismus betrachtet werden. Wenngleich in abweichenden Formen und Zielsetzungen, ist sie im Werk von Architekten wie Édgar Brenes, Víctor Cañas and Bruno Stagno zugegen. Deren berühmte Leistungen stellen die Medien als das Ergebnis von Natursensibilität, Bautechnik, Ortsspezifik und der Fähigkeit, Behaglichkeit herzustellen, dar. Gestützt auf unsere Untersuchungen vertreten wir die Ansicht, dass die Ästhetik des Komforts wie ein Bestätigungsmechanismus wirkt, der technisches Wissen und formale Anpassung lobend hervorhebt, dabei aber Geschichten des Kolonialismus und der Wissensproduktion weitgehend ausblendet.

#### Resumen

La estética del confort: tercera era de la arquitectura tropical en Costa Rica. La historia de la arquitectura tropical en Costa Rica está construida en torno a tres eventos: la implantación de la United Fruit Company (UFCO) en el 1889 ; la conferencia de Otto H. Koenigsberger, director del departamento de estudios tropicales, durante la inauguración de la escuela de arquitectura de la universidad de Costa Rica en 1970 ; y por último la creación de un conjunto formal de reglas y de representaciones teniendo por objeto garantizar comodidad y bienestar en la zona tropical : “una estética de confort”, que inspira todavía a numerosos arquitectos costarriqueños. A menudo considerado como un término técnico, el concepto de “confort “será aquí considerado dentro de sus dimensiones históricas y estéticas. La estética de la comodidad se ha difundido por la prensa y las exposiciones desde los años 1990. Ella es sin embargo la heredera de dos periodos precedentes y la afluyente de la experiencia histórica del colonialismo, del extractivismo, del higienismo y del intervencionismo. La encontramos bajo diferentes formas y por diferentes razones, en el trabajo de arquitectos como Edgar Brenes, Víctor Cañas y Bruno Stagno, cuyas representaciones emblemáticas son presentadas en los medios de comunicación como modelos de integración del paisaje, del respeto de la naturaleza, de la utilización de las nuevas tecnologías de la construcción, fuente de comodidad y de bienestar. Este estudio muestra de esta manera que la estética del confort permite validar el saber hacer de las técnicas y una aclimatación de principio, pero tiende a ignorar las condiciones históricas y coloniales de su producción.

#### Riassunto

La storia dell'architettura tropicale in Costarica può essere ricostruita a partire da tre eventi: l'insediamento della United Fruit Company (UFCO) nel 1889, la visita di Otto H. Königsberger, direttore del Dipartimento di sviluppo e studi tropicali dell'Architectural Association, in occasione dell'inaugurazione della Scuola di architettura dell'Università

del Costa Rica nel 1970, e infine la creazione di un'estetica del comfort, vale a dire quell'insieme di principi e rappresentazioni formali che guida il lavoro di molti architetti costaricani per soddisfare l'esigenza di comfort — o appagamento sensoriale — nel clima tropicale. Spesso considerato un tecnicismo, il termine comfort è qui impiegato anche come concetto storico ed estetico. L'articolo sostiene che l'estetica del comfort si sia diffusa a partire dagli anni Novanta attraverso i giornali e le esposizioni dopo aver assimilato l'eredità dei due eventi precedenti, e che pertanto non possa essere separata dalla storia del colonialismo, dell'estrattivismo, dell'igiene e dell'interventismo. Sebbene in forme e con scopi diversi, essa caratterizza il lavoro di architetti come Édgar Brenes, Víctor Cañas e Bruno Stagno, le cui opere più illustri vengono presentate dai media come esempi di adattabilità alla natura, tecnologia edilizia, rispetto del paesaggio e capacità di offrire appagamento. L'analisi conclude che l'estetica del comfort agisce come uno strumento di convalida che da un lato esalta le conoscenze tecniche e l'adattabilità formale, ma dall'altro tende a ignorare la storia del colonialismo e della produzione del sapere.

Index by keywords: *Costa Rican architecture, tropical architecture, United Fruit Company, tropics*

Index de mots-clés : *architecture costaricaine, architecture tropicale, United Fruit Company, tropiques*

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