

Redefining the *Técnico's* task: *Arquitectura Técnica* and the Claim to Governance

Redefiniendo la tarea del técnico: arquitectura técnica y el reclamo de gobernabilidad

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Image: Alberto Odériz, Casa manifesto 03
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ARTÍCULO

Abstract

This essay offers context for the establishment of the discourses of technical architecture (*arquitectura técnica*), integral planning (*planificación integral*), the appearance and rise of the *técnico* and mid-century Mexican architects' jurisdictional claims in the realms of politics and governance. I show how certain architects working as planners during the 1920's and a younger generation of socially conscious architects emerging in the 1930's claimed that members of the profession had a duty to work in collaborative environments and to directly engage with the state, not only as technical experts or specialists, but more importantly as general managerial figures as a means of advancing their professional prestige, social agendas and political aspirations. Furthermore, this work introduces the role of language in the expanding and at times divergent professional trends in Mexican architecture during the period. I explore the creation and use of neologisms and politicized terms such as *planificación* as well as the word '*técnico*', in the professionalization of architecture and its intersections with Mexican political society and post-revolutionary state construction. I argue that the use of these words by certain members of the profession aided some in making claims to the responsibility and right to govern and eventually contributed to a collective mobility project that sought to fill political/administrative posts with architects/planners.

Key words: *planificación, integral, técnico, técnica, state construction, political society, professionalization, expertise, specialization, management, administration*

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Resumen

El presente artículo muestra un panorama acerca de la instauración de los discursos de la arquitectura técnica, la planificación integral, la aparición, el desarrollo y establecimiento del técnico y las demandas jurídicas de algunos arquitectos mexicanos a mediados de siglo xx en los ámbitos político y gubernamental. Además, muestra como ciertos arquitectos ya consolidados en la década de 1920 dedicados a la planificación de la ciudad, y una generación más joven que estudió en la década de 1930, afirmaron que, como miembros de la profesión, tenían el deber de trabajar de manera colaborativa y relacionarse directamente con el Estado, no solo como técnicos expertos o especialistas, sino también para aspirar a puestos políticos y en la administración pública y cómo medio para ganar prestigio profesional y hacerse de relaciones públicas.

Asimismo, en este trabajo se explora el papel que jugó el lenguaje en el ámbito arquitectónico y en las tendencias que imperaban en aquella época; desde la creación de neologismos y términos politizados cómo: planificación, así como la palabra técnico, que se introdujo en campos como en la profesionalización de la arquitectura y en la sociedad política mexicana para la construcción del nuevo Estado posrevolucionario. Se sostiene que el uso de estas palabras por parte de ciertos miembros de la profesión ayudó a que algunos pudieran reclamar el derecho a gobernar y por ende su responsabilidad que, finalmente, contribuyó a un proyecto de movilidad colectiva que buscaba que arquitectos / planificadores ocuparan puestos políticos / administrativos.

Palabras Clave: *planificación, integral, técnico, técnica, construcción estatal, sociedad política, profesionalización, expertise, espacialización, management, administración*

From the late 1930s to the mid 1950s, the Mexican state and its political structures underwent a process of consolidation that at once opened the doors of political society to a largely civilian leadership as it did enable the continuation of single-party rule for the greater part of the Twentieth-Century.¹ During this period, some members of the architectural profession - mindful of being in competition with other professions within the expanding bureaucratic-authoritarian state - sought to achieve greater political agency via achieving higher levels of leadership.² By the mid-century, certain architects had - at least momentarily - achieved just that. Carlos Lazo Barreiro (1914-1955), who was until his death the head of the *Secretaría de Comunicaciones y Obras Públicas* (SCOP), or Pedro Ramirez Vázquez (1919-2013) an "architect of State" who held numerous political posts following his coordination of the Olympics in 1968, are paradigmatic examples of the accommodation of the architectural profession in the bureaucratic structures of the Mexican state.³ This strategy of power within the nascent post-revolutionary state sought to defend

1. For a study on Mexican political society that largely looks at elite structures of power and elaborates on the civilian transfer to power see: Peter H. Smith, *Labyrinths of Power: Political Recruitment in Twentieth Century Mexico* (Princeton: Princeton University Press, 1979).
2. For an explanation of the bureaucratic-authoritarian state and what this means for governance in the mid-century Mexican state, see: Alan Knight, "The Modern Mexican State: Theory and Practice," in *The Other Mirror: Grand Theory through the Lens of Latin America*, edited by Miguel Angel Centeno and Fernando López Alves (Princeton, NJ: Princeton University Press, 2001), 177-218.
3. The political projects of Lazo during his tenure at the SCOP are a major focus of my dissertation, *The Integrated State: Architecture, Planning, and Politics in Mexico: 1938-1958*. An excellent investigative antecedent to this - his work as *Gerente general* of the construction of the *Ciudad Universitaria* of the UNAM can be found in Alfonso Pérez Méndez, "Conceptualization of the Settlement of El Pedregal: The Staging of the Public Space in the Master Plan of the Ciudad Universitaria," in *Living CU 60 years*, edited by Salvador Lizárraga Sánchez and Cristina López Uribe, (Mexico City: Universidad Nacional Autónoma de México, 2014), 37-83. The political nature of the work of Ramirez Vázquez is excellently covered by Luis Castañeda. See: Luis Castañeda, "Pre-Columbian Skins, Developmentalist Souls," in *Latin American Modern Architectures: Ambiguous Territories*, edited by Patricio Real and Helen Gyger Helen, (London: Routledge, 2012), 93-114; and especially Luis Castañeda, *Spectacular Mexico: Design, Propaganda, and the 1968 Olympics*, (Minneapolis: University of Minnesota Press, 2014).

the architect within this bureaucratic labyrinth from the competition offered by alternative professional experts, largely composed of lawyers, engineers and, to an extent, economists.⁴ This essay thus attempts to offer a response to the question: how did architects achieve such prominence as members of this increasingly bureaucratized ruling class? More importantly: how did architects - members of a profession of some privilege and respectability in Mexican society, but not traditional recruits for public office – manage to be persuasive in regards to their indispensability in the construction of Mexico's new *political* society?

I argue that one of the strategies utilized by certain architects in their attempt to carve out a space for themselves within this society was the construction and mobilization of a professional language that allowed for the abstraction and expansion of its traditional areas of expertise.⁵ Rather than focus on the built works of architects in this chapter, I privilege the written and spoken language of the Mexican architects participating in the discourse of the profession, since in the political field –to paraphrase Pierre Bourdieu– spoken speech and written texts are actions possessive of a special symbolic power which, in turn, can increase the power of the user.⁶ In Mexico, words, perhaps more so than the images or buildings of the architect, were deeply engaged in a labor of representation that sought to form and realize their professional visions by mobilizing a consensus and a vote of confidence. Because the Mexican government was ostensibly of a republican nature, this consensus still required members from a broader public, including non-political elites, other professionals (including other architects) and, to an extent, the general electorate, as evidenced by the forums utilized by

4. The profession of the economist - a position that would later become synonymous with the label 'técnico,' was still ill-defined in Mexico prior to the late 1950s, though both foreign and home-grown expertise was rapidly defining a school of developmentalist economic thought that would propel the management of the Mexican state well through the last quarter of the Twentieth Century. For more on the emergence of economists in Mexico's political economic management, see: Sarah Babb, *Managing Mexico: Economists from Nationalism to Neoliberalism*, (Princeton: Princeton University Press, 2001).

5. Andrew Delano Abbott, *The System of Professions: An Essay on the Division of Labor*, (Chicago: University of Chicago Press, 1988), 9, 30.

6. Pierre Bourdieu, *Language and Symbolic Power*, translated by J. B. Thompson, edited by G. Raymond and M. Adamson, (Cambridge, England: Polity Press: 1991).

these certain architects to communicate their arguments for a more expansive (and perhaps not too disinterested) culture of political inclusion.⁷ However, because inclusion within an exclusive group largely depends upon the will of its already initiated members, the language of politically driven architects primarily had to mobilize a vote of confidence from the pre-existing members of Mexican political society upon whom their rise to power ultimately depended.⁸

By adopting the notion of *técnico* in the description of the professional role of the architect, Mexican architects began to identify their discipline as one of a technical, scientific and, above all, rational nature. This was, to an extent, a rhetorical move paralleling the language games of coercion, co-option, and the struggle for power in Mexican politics in the decades that followed its revolution (1910-1920). Use of this designation was a critical component of a professional and political collective mobility project, which is to say that it was intended to increase the status of architects through the expanded definition of their work and body of knowledge.⁹ Use of the term obfuscated the traditional and largely artistic boundaries of the profession's expertise that could impede their adjustment to and integration within the country's shifting

7. Mexican architects from the 1930s to 50s made extensive use of professional journals, professional conferences, magazines, newspapers and, by the 1950s, television to share topics from architectural discourse to a wider audience.
8. While certain Mexican architects sought entry into Mexico's political and administrative organization, their desire for this level of inclusion did not necessarily mean that architects in general had no direct contact with political society or weren't already involved within Mexico's revolutionary and post-revolutionary projects of statecraft. The political figures that emerged out of the Mexican Revolution needed architecture for the construction of the symbolic and functional tools of the new Mexican state - one must only consider Mexico City's imposing *Monumento a la Revolución* or the large-scale campaign to build schools throughout the country for the educational plans of the *Secretaría de Educación Pública*. Likewise, large-scale architectural projects served the increasingly civilian political class and dominant political party during the post-revolutionary period, as evidenced by the widespread participation of architects in the *Ciudad Universitaria* of the *Universidad Nacional Autónoma de México* (UNAM).
9. For more on the concept of a 'collective mobility project,' see: Magali Sarfatti Larson, *The Rise of Professionalism: A Sociological Analysis*, (Berkeley: University of California Press, 1977), 67.

political structures. In turn, it could distinguish the architects that opted for its use in a manner that shrouded them with an aura of modernity and a political-economical purpose that spoke to the larger project of industrialization and socio-economic development pursued by a number of governments after the revolution. In short, the language of the discourse of *arquitectura técnica* was constructed in order to expand the jurisdiction of architecture so as to qualify the profession as a whole - in the eyes of the established political leadership and, to an extent, civil society and a questionably enfranchised electorate as being eligible if not critical actors in modern Mexican statecraft.

The *técnico*: professional language and the emergence of a new concept

What was a *técnico*? And more importantly, who could be defined as one? To answer the 'what' and 'who' in the definition of the *técnico* during this period it is important to stress that the word '*técnico*' was conceptually layered, re-brandable and, multivalent.¹⁰ What the word meant in 1925 was different from what it meant in 1932 or 1938, and certainly from what it turned into by the early 1950s. To gain a sense of the complex political connotations of this word, why mid-century Mexican architects so strongly identified with it and what changes to the profession that it implied, it is necessary to briefly expand the purview of this history. The development of the professional title and Spanish noun /*técnico*/ (roughly equivalent to the term 'technician') shares much with the semantic shifts of another noun: /*técnica*/ (a term that is roughly equivalent to the term 'technique, but can also imply the concepts of rationalization and technology); as well as with the adjective /*técnica*/o/ (translatable as 'technical'). A shift occurred in the use of the Spanish word during the first third of the Twentieth Century that, in many ways, reflected the evolution of the late Nineteenth Century German discourse of /*die Technik*/ and its importation into the writings of early Twentieth

10. The rebrandable quality of words is discussed in "On Truth and Lying in a Non-Moral Sense," in Friedrich Nietzsche, *The Birth of Tragedy and Other Writings*, (Cambridge, UK: Cambridge University Press, 1999), 145; for more on the temporal nature of language and the ideological multivalency of words, see: J.G.A. Pocock, *Politics, Language, and Time: Essays on Political Thought and History*, (London: Methuen & Co, 1972), 19.

Century social scientists from the United States.¹¹ In this shift, the connotations of individual technique or purely investigative and consultative functions in the adjective form of the word began to break down. Instead, the word took on a complex meaning that referred to the general rules, procedures and skills required for achieving specific constructive goals, a systemic conceptualization of the individual utilitarian arts as a whole, as well as a concern for the material means of their production.¹²

In a more localized context, the semantic development of this constructive term was significantly shaped by the aftermath of the Mexican Revolution. The drastic upheaval caused by the revolution created new conditions, demands and roles within Mexican social, economic and cultural systems. Powerful historical conditions such as industrialization or civil and political conflict were typical causes for what Leo Marx has referred to as 'semantic voids' - an awareness of certain novel developments in society and culture for which no adequate name was yet available.¹³ After the revolution, and especially during the presidency of Plutarco Elías Calles (1924-1928) and his pseudo-dictatorship known as the Maximato (1928-1934), the semantic void that existed due to the urgent need for a comprehensive reconstruction and industrialization of the war-torn country was gradually filled as new definitions were layered upon previous meanings of the word '*técnica*'.¹⁴

Técnica carried other connotations that lent themselves to the revolutionary leadership's constructive promises and the growing ethos of a general modernization that could be found in the language of its ideologues. Some of its adopters gradually applied a deterministic understanding of the concept of /*técnica*/ that was already present in the American English usage of the word 'technology' by the late 1920s. This interpretation firmly linked all matters related to *técnica* with the

11. Eric Schatzberg, "Technik Comes to America: Changing Meanings of Technology before 1930," in *Technology and Culture* 47, no. 3. (2006): 486-512.

12. Schatzberg, "Technik Comes to America", 487, 494.

13. Leo Marx. "'Technology': The Emergence of a Hazardous Concept" in *Technology and Culture* 51, no. 3 (2010): 561-577.

14. For more on this period of reconstruction and its effects on architecture and construction, see: Patrice Elizabeth Olsen, *Artifacts of Revolution: Architecture, Society, and Politics in Mexico City, 1920-1940*, (Lanham, MD: Rowman & Littlefield, 2008).

idea of progress.¹⁵ As exemplified by its usage in early mid-century Mexican architectural discourse, the new professional categorization of the *técnico* emerged out of this general technical discourse as the qualified steward of this material advancement, thereby linking them with an expanded interpretation of political economy.

Political economy was a much more general concern during the early mid-century, however. It was a matter of direct inquiry, projection and construction for numerous disciplines and professional organizations in Mexico as they reassessed their priorities and areas of expertise after the revolution and during the global depression. To be labeled a /técnico/ provided a new means of professional prestige founded upon systematic training, expertise, registration and licensing. By the mid-century, as the Mexican state shifted towards a largely university educated civilian leadership, these credentials became prerequisites for entry into Mexico's traditionally exclusive political society.¹⁶ As a result, numerous professions competed for inclusion within this emergent technical class as they sought the political ability to impose their idealized and, to an extent, self-serving, conceptualizations of economy, governance, and reconstruction upon the early post-revolutionary Mexican nation. The early inclusivity of the concept and role of the /técnico/ was therefore as broad in as much as a profession could argue that their skill sets contributed to the "scientific" and "technical" aspects of the planning projects necessary for modern state formation. Given the inextricable ties between the early theorizations of the technical with the utilitarian arts, industry and engineering, it was of no surprise that the most successful amongst these professions were engineers.¹⁷ Engineers usually held about ten percent of the nation's highest leadership positions (within the cabinet, for example), and twenty percent of other upper-level posts (within the state's managerial bureaucracy). While engineers had proven themselves politically loyal to the revolution, given their tactical role during the hostilities, their capacity for organization, management and in turn, leadership likely contributed to the situation where a

15 Schatzberg, "Technik Comes to America," 488.

16. Sarfatti Larson, *The Rise of Professionalism*, 67-68.

17. Schatzberg, "Technik Comes to America," 494.

member of the profession, Pascual Ortiz Rubio, the former Communications and Public Works Secretary Pascual Ortiz Rubio, briefly held the presidency during the *Maximato*.¹⁸

The conceptualization of the *técnico* gradually and unevenly included a loosely interpreted 'cultural' component, particularly as Mexico's revolutionary leadership struggled to address issues of education, social responsibility, and national identity in the project of state reconstruction. Because of this, professions rooted in the social sciences gradually accrued technical merit. By extension, by invoking the notion of 'technique,' along with arguments as to the sociological merits of their work, artists and architects could be loosely affiliated with this technical identity so long as they could convince Mexico's established political society that their skill sets effectively contributed to the task of satisfying the demands of state formation and economic development. The capability of these professions to make their arguments depended very much on the language that they used, however. For the architectural profession in particular, its interpretation, or rather, abstraction, of the word *técnico* was critical in this claim-making act of political speech.

18. Smith, *Labyrinths of Power*, 91. Despite his technical credentials as a topographic engineer who graduated from the National Mining School, his political expertise was cast in to doubt by his contemporaries, some of whom considered him to be a "mild and ineffectual party hack." These opinions may have been colored by his running against former Education Secretary José Vasconcelos, as well as his anti-corruption platform directed toward the political machine of the /Maximato/. Following an assassination attempt in 1930, on the day of his inauguration, Ortiz Rubio returned to the presidency and managed to modestly continue the state's social programs. By the end of his term, political ineffectiveness due to the continued interference by Plutarco Elías Calles and the onset of the crippling world-wide economic depression left the economy in shambles. He resigned in 1932. See: Olsen, *Artifacts of Revolution*, 62-63.

Arguing the architect's role as a *técnico*

The Mexican architect's claim of the professional title of *técnico* has its origins in the profession's traditional relationship to the multivalent concept of *técnica*. This relationship has its origins in the late Nineteenth Century when the word was yet to be adopted as an adjective describing the nature of architecture itself, but rather was used to describe the working environments in which architectural practice was expected to operate. It was still loosely connotative of individual specialization and the cross-disciplinary study of the useful arts and applied sciences, as noted in a call in the March 1899 issue of *Arte y Ciencia* for the organization of a *Junta Técnica de Bellas Artes y Obras Públicas* comprised of architects, engineers, painters and sculptors under the direction of a 'wise and honorable' general director.¹⁹ This article hinted at the need for educated and moral managerial figures, thus contributing to a new and expanding definition of *técnica* in Mexico that valued general expertise and systemic organization of the individual utilitarian arts, as well as a vague concern for the ethics involved in their design and implementation. In this sense, architecture was but a component, or individual technique, within a larger project - an incipient conceptualization of systematic planning reflective of the technocratic tendencies of Porfirio Diaz and his *científicos* during the final years of the *Porfiriato* (1876-1910).

The practice in architectural discourse of applying the adjective *técnica* to an administrative council made up of numerous scientific and non-scientific professionals had precedents in Porfirian Mexico. However, its application by architects to their own traditionally non-scientific profession did not really occur to a discipline-changing extent in Mexico until after the revolution. It was the mass destruction from the conflict and a new political imperative to address the daunting social issues of the nation that most directly initiated a process wherein certain architects began to identify with contemporary transnational conceptualizations of what was meant by being 'technical.' In time, some individual architects - most significantly those within the cadre that adopted structural rationalism and architectural functionalism - expressed a desire to expand both the praxis and areas of expertise of the architectural profession towards broader and more diverse ends. This practice was congruent with other

19. "Junta Técnica de Bellas Artes y Obras Públicas," *Arte y Ciencia* 1, no.3 (March 1899): 37-40.

'technical' and specifically constructive professions during the period - namely within the field of engineering as it expanded into the contested practice of building design.²⁰

The application of *técnica* as an adjective to describe architecture was at first indirect, and reflective of a lengthy polemic of professional jurisdictions and regulation between architects, engineers and unlicensed builders that had its origins in the Nineteenth Century. In this context, the Spanish word for engineering –*ingeniería*– was understood not only as a distinct professional label, but as a conceptual placeholder indicative of the defining attributes of *técnica*.²¹ As successive revolutionary governments found themselves tasked with the major project of national reconstruction, a public dialogue emerged regarding a certain correlation: just as the organizational structure of the state needed to be repurposed or rebuilt, so too did its physical structures. This was a position that was volubly argued by Mexican architects. Expediency and efficiency became matters of concerns in the discussions of how best to rebuild the physically - as well as economically - damaged nation, however. Starting in the early 1920s, Mexican structural engineers and a small but vocal group of architects, influenced by advances in industrialized construction techniques as well as by the theories of European functionalist architects, offered opinions regarding the economization of building practices that eventually threatened more conservative interpretations of the role of architecture and statecraft.²²

20. For primary resources that elaborate on the professional expansion and claim making of engineering in comparison with architecture, two important essays - published in the same pamphlet by the Sociedad de Arquitectos Mexicanos - come to mind: Nicolás Mariscal, "No es la Arquitectura Rama de la Ingeniería," *Excelsior*, March 1924; and Alfonso Pallares, "¿Qué es Arquitectura y qué es Ingeniería?," *Excelsior*, May 1926.

21. There are precedents, outside of Mexico, to this conflation of the term *técnica* (technical, technician) and *ingeniero* (engineer), most significantly in Germany, where, since at least the latter part of the Nineteenth Century, engineers became so identified with the concept of *Technik* that German-English dictionaries began to offer "engineering" as a direct translation of the nominative form of this word. Schatzberg, "Technik Comes to America," 494.

22. The origins of Mexican functionalism, much like the broader international movement and praxis, had both material and intellectual roots, owing as much to advances in the cement industry in Mexico as it did to the importation of European architectural thought. Cement companies such as Tolteca S.A. advocated a structural rationalism through the relatively high dissemination of its magazine *Cemento*, in turn promoting their industrial interests. Meanwhile, the theory and language of modernist architecture was fomented by forward-thinking practitioners/theorists as early as 1915, with the architect and instructor Eduardo Macedo y Arbeu's introduction of the writings of Otto Wagner to his students through the magazine *Moderne Bauformen*. A diverse range of foreign influences, mediated through imported journals such as *L'Architecte*, *Architecture Vivant* and *Architectural Record*, as well as a variety of books, would have been available to them given the cosmopolitan and well-travelled culture of Mexico's intellectual elites, to which architects belonged. Architects such as Le Corbusier and Walter Gropius are the functionalist architects most typically cited by the first generation of Mexican functionalists - copies of Le Corbusier's *Vers une Architecture* were present in Mexico City by 1924, as attested by the architect Juan O'Gorman in his biography, while also claiming to have obsessively read his first-edition French copy. The architect, engineer and urbanist José Luis Cuevas later translated this book in Spanish. The principal functionalist architects in this early phase of Mexican modernist architecture were José Villagrán García (1901-1982), professor of architecture at the *Escuela de Bellas Artes*, later the *Escuela Nacional de Arquitectura*, and students of his, such as the painter Juan O'Gorman (1905-1982), Álvaro Aburto and Juan Legarreta. Together, they argued against academicism and economically wasteful projects in historicist styles. Eventually, many of them found work with the Mexican State through the support of Health Secretary Narciso Bassols: Villagrán found employment as an architect for the *Departamento de Salubridad Pública* between 1924 until 1935; Juan O'Gorman became Director of the Building Department for the *Secretaría de Educación Pública* between 1932 and 1935, and Juan Legarreta worked variously in the construction section of the *Departamento del Distrito Federal* and the projects section of the building department of the *Secretaría de Comunicaciones y Obras Públicas* (SCOP). For a rather comprehensive, often cited, though poorly referenced book on the arrival of modernist and functionalist architecture, see: Rafael López Rangel, *La modernidad arquitectónica mexicana: antecedentes y vanguardias, 1900-1940*, (Mexico: Universidad Autónoma Metropolitana, 1989). For recent work in English, see: "Chapter 1: La revolución constructiva," in Olsen; *Artifacts of Revolution*, 1-45; and "Against a New Architecture: Juan O'Gorman and the Disillusionment of Modernism," in Luis E. Carranza, *Architecture as Revolution: Episodes in the History of Modern Mexico* (Austin: University of Texas Press, 2010), 118-167. For a brief, well-researched, and informative synopsis, see: María Fernández's entry "Architecture: Twentieth Century," in *Concise Encyclopedia of México*, edited by Michael S. Werner (Chicago; London: Fitzroy Dearborn Publishers, 2001), 34-36.

Arquitectura técnica: social utility and political constituency

The architectural profession's claims to governance have their precedent in Mexico with the arrival of the modern planning movement.²³ As far as the mid 1920s, architect/planners such as Carlos Contreras Elizondo (1892-1970) began to craft new roles for architects. Contreras's writings on national planning administration firmly placed them within the role of technical consultation. The ideal planner in his writings (which we can assume had an architectural background, and was likely a position that he was creating for himself) was in turn supposed to devote

23. Many of these proponents were architects acting as planners, some of whom were actively working and implementing their ideas in Mexico at the time. One of these was José Luis Cuevas Pietrasanta (1881-1952), noted for his design of the garden-city influenced layouts of the *Lomas de Chapultepec* (1922) and Colonia Hipódromo (1926) neighborhoods in Mexico City. Another notable architect who actively ventured into urbanistic and planning discourse was Alfonso Pallares, who had been writing and publicly presenting work reflective of the ideas of Ebenezer Howard, Tony Garnier, Camillo Sitte and Arturo Soria y Mata on zoning and urban aesthetics as early as 1911. See: Elisa Drago Quaglia, *Alfonso Pallares, sembrador de ideas* (Mexico City: Universidad Nacional Autónoma de México, 2016), especially the section "Principios de urbanismo moderno y la arquitectura cívica en México," 175-220. A third critical architect was, of course, Carlos Contreras Elizondo. Reflective of how a collective growth of professional prestige within what sociologist Magali Larson terms "collective mobility projects" can often be distributed towards individual benefits for particular members within the profession, it is important to note that Contrera's early proposals for a centralized planning commission were likely meant to further his own career as much as they were meant to abstract and expand the architectural profession's claim to expertise. His efforts led to him being named coordinator of the *Comisión de Programa* of the *Secretaría de Comunicaciones y Obras Públicas*, then led by the engineer Javier Sanchez Mejorada - a position from which he was able to organize the nation's first planning congress. For more on Contreras's advocacy and early career trajectory, see: Gerardo G. Sánchez Ruiz, "El contexto que rodeó a las propuestas de planificación del arquitecto Carlos Contreras," edited by Gerardo G. Sánchez Ruiz and Rafael López Rangel, *Planificación urbanismo visionarios de Carlos Contreras: escritos de 1925 a 1938*, (Mexico City: Universidad Nacional Autónoma de México, 2003), 9-24. For more on collective mobility project, see: Sarfatti Larson, *The Rise of Professionalism*, 66-79.

much of their efforts to management and advocacy.²⁴ In practice, however, these early planning bodies were designed more for pragmatistic or technocratic governance, rather than the decisionistic models followed by the authoritarian leadership of the revolutionary-era.²⁵ Despite this, the call for architects to engage in matters of governance by having a direct hand in social organization and political economy only became more explicit, especially after some of their members had already been given posts within various *secretarías* of the Mexican government.

In 1932, during the presidency of Abelardo L. Rodríguez (1889-1967) and the tenure of the socialist ideologue Narciso Bassols as head of the *Secretaría de Educación Pública* (SEP), architect and painter Juan O’Gorman (1905-1982) drafted his *Programa de Teoría de la Arquitectura*, which outlined a technical curriculum for the new Higher School of Construction. In this brief document, he emphasized a series of objectives for a new architecture that contributed to the evolving understanding of the concept of *técnica* and the role of a *técnico* by defining technicism as a praxis with specifically social ends. Keenly aware of the need for large-scale construction to satisfy the revolutionary leadership’s constructive promises, he echoed similar socially conscious inter-war European modernist architects’ declarations that collective human utility was a fundamental principle for technical architecture.²⁶ He elaborated his ideas regarding the new architecture publicly and within the forums of the architectural profession, such as his involvement in the *Pláticas sobre Arquitectura* (Talks on Architecture) that were organized by the *Sociedad de Arquitectos Mexicanos* in 1933. In his presentation, he elaborates on his previous arguments on the economization of architectural production and the idea of human utility by implying that the technical architect pos-

24. Carlos Contreras, "La planificación de la República Mexicana," and "Asociación Nacional para la Planificación de la República Mexicana", edited by Gerardo G. Sánchez Ruiz and Rafael López Rangel, *Planificación urbanismo visionarios de Carlos Contreras: escritos de 1925 a 1938* (Mexico City: Universidad Nacional Autónoma de México, 2003).

25. My use of the terms 'technocratic,' 'decisionistic' and 'pragmatistic' are derived from Jürgen Habermas, "The Scientization of Politics and Public Opinion," in *The Habermas Reader*, edited by William Outhwaite (Cambridge, UK: Polity Press, 2007), 45-46.

26. Juan O’Gorman, "Programa de Teoría de la Arquitectura: Escuela Superior de Construcción," edited by Ramón Vargas and J. Víctor Arias Montes, *Ideario de los arquitectos mexicanos*, Volume 3 (Mexico City: Instituto Nacional de Bellas Artes y Literatura, 2011), 49.

sessed rational judgment and a direct political-economic responsibility. He emphasizes a materialistic view of the world, the role of technology and its effect on constructive techniques and the rationality of its human practitioners to economically resolve problems:

Life imposes economic, social and material conditions. It falls upon *técnica*, with its means, to resolve it in the best manner: by the best way, the maximum of efficiency for the minimum of effort. This is to proceed reasonably.²⁷

He went on to elaborate on the arguably political role of the technical architect (*arquitecto técnico*) in this matter and his responsibility to fulfill individual and collective needs: "The *técnico* [is] useful to the majority...[he] serves the majority of needy individuals that only have material needs."²⁸

While O'Gorman treated the technical architect as an international archetype, there is little doubt that, when speaking of a *técnico* as the servant of a disadvantaged class, he was referring to himself and his fellow Mexican functionalists and their recent projects of note -public schools and mass housing - and how these were completed as an ostensibly altruistic service to the 'majority' of Mexico's citizens.²⁹

These *pláticas* were given in 1933 and were published in 1934 - an election year. While the value of the vote in Mexico was and remains in question today - Lázaro Cárdenas, after all was Plutarco Elías Calles hand-picked candidate - it is quite possible that the utilization of this mass political and electoral language (e.g. 'majority') was related to political strategies

27. "La vida impone sus condiciones económicas y sociales y sus condiciones materiales. A la técnica con sus medios le toca resolverlas de la mejor manera. Por la mejor vía, el máximo de eficiencia por el mínimo esfuerzo. Esto sí es proceder razonablemente." Juan O'Gorman, "Intervención en las pláticas sobre arquitectura en 1933," in *Ideario de los Arquitectos Mexicanos, tomo III, Las nuevas propuestas*, edited by Ramón Vargas Salguero and J. Víctor Arias Montes, (Mexico City: Instituto Nacional del Bellas Artes y Literatura, 2011), 144.

28. "El técnico [es] útil a la mayoría...[es] para servir a la mayoría de individuos necesitados que sólo tienen necesidades materiales." O'Gorman, "Programa de Teoría de la Arquitectura: Escuela Superior de Construcción," 150.

29. Carranza, *Architecture as Revolution*, 156.

that sought to win mass public opinion and, perhaps, also implied the notion of electoral constituencies. While O’Gorman’s definition of *arquitectura técnica* was intended to answer the needs of the needy majority of Mexican society, it also posited economical construction practices that would materialize the governmental promises of the more progressive factions within the Mexican state. This materialization of promises contributed to the legitimacy of its leadership - a legitimacy founded in a sense of social responsibility and revolutionary loyalty that extended to architects and other builders who were employed by the state.

The definition of technical architecture as a collective practice aimed at addressing the social realities of the majority of Mexico’s citizens situated architecture - here narrowly defined as the edification of buildings - as a discrete component of a state-building project of much larger scale. The architectural projects of Mexico’s vanguards were being thought of not in terms of addressing the needs of individuals or smaller social groups, but in broader demographic terms such, as labor sectors, social classes and the citizenry in general, as evidenced in O’Gorman’s design and building of schools for the SEP and his rhetorical moves of invoking “the majority.” By the mid-1930s, during the term of the left-leaning Lázaro Cardenas (1934-1940), Mexico’s increasingly younger generation of politicized architects began to conceptualize an *arquitectura técnica* with a broader constructive scope that equaled the totalizing implications of *planificación* as envisioned by earlier generations of Mexican architect-planners.

Japanese-Mexican architect Alberto Arai (1915-1959), a critical member of a young and ambitious cohort of architects that came of age towards the end of the 1930s, contributed to the increasingly politicized conceptualization of *técnico/a* by elaborating on the existence and interdependence of multiple constructive techniques within a broad concept of society.³⁰ He tasked the ordering of these to architects in a conference titled *La Nueva Arquitectura y la Técnica* delivered to the *Liga de Escritores y Artistas Revolucionarios* (LEAR) in November 1937. He stated:

30. Key members of this younger cohort, many of whom graduated from the National School of Architecture during the last quarter of the 1930s and first of the 1940s, included Arai, Raul Cacho, Enrique Guerrero, Balbino Hernández, Enrique Yañez, Augusto Pérez Palacios and Carlos Lazo Barreiro

...the concept of *técnica* is dialectic, mobile, within the utilitarian space of a society. *Técnica* is therefore in this elastic sense the series of procedures, socially formed by each other, which are needed to do something, so that various distinct techniques can make up another greater technique, which in turn can be one that makes up an even more ample technique...³¹

For Arai, contemporary architecture was one such technical process, both made up of lesser techniques and also constitutive of what he labeled “the grand technique” of human life. By being a part of the larger technique of human life, the structure of techniques within the architectural discipline were in turn divided into groups: one that concentrated on what he labeled “physical matters,” the other of which focused on ‘Man’.³² Arai’s definition of the new architecture’s preoccupation with ‘Man’ focused on a critical concept that would define the generation of Mexican architects and planners, to which he belonged, for the next two decades:

The human-focused techniques of the new architecture are interested in the whole man, and they desire to develop within the other all of his psychological and physical life, all of his moral and biological life. That is to say, the new architecture, more so than any other in time, is interested in [the whole] man as such given that the conceptual and experimental techniques of our day allows for the most

31. "...el concepto de técnica es dialéctico, es móvil, dentro de la superficie utilitaria de una sociedad. Técnica es, por tanto, en este sentido elástico, la serie de procedimientos que se necesitan para hacer alguna cosa, los cuales socialmente se están constituyendo unos a otros, de modo que varias técnicas distintas constituyen una más amplia, la que a su vez puede pasar a ser una de las que constituyen una más amplia todavía..." Alberto T. Arai, *La nueva arquitectura y la técnica* (Mexico City: DAPP, 1938), 8.

32. La arquitectura actual es una técnica compleja formada por varias técnicas menores; ella a su vez es una particular de la gran técnica que es la vida humana... Las técnicas menores que forman el ángulo diedro de la arquitectura se dividen en dos grupos: técnicas que obran sobre la materia física y técnicas que obran sobre el hombre." Arai, *La nueva arquitectura y la técnica* 12-13. se están constituyendo unos a otros, de modo que varias técnicas distintas constituyen una más amplia, la que a su vez puede pasar a ser una de las que constituyen una más amplia todavía..." Arai, *La nueva arquitectura y la técnica*, 8.

minute and disciplined analysis that has in any epoch ever been able to be performed on man and his problems. Because of that, the new architecture will always be an *integral* architecture.³³

The critical political concept of integralism in the new architecture - which harkened as much to contemporary sociological theories of integration as it did to a Fordist vertical integration industry and Taylorist conceptualizations of scientific management - referred to a far reaching organizational system that sought to resolve material reality and human necessity:

In short, the dialectical connections of techniques, from the perspective of the new architecture, are called order. Because of that, order is the thread or perimetral ribbon that delimits the technical reach of architecture and, at the same time, is the concept that integrates it in relation to each of its individual parts. The concrete application of order to a particular case is called composition.³⁴

Because this new integral architecture's ultimate area of jurisdiction was 'human life' - a term more reflective of biopolitical interrelations and processes - and this term was understood by Arai as the product of composition, he made a particularly poignant statement regarding the bounds of architectural expertise. While architects could still be technical 'specialists' by focusing on any of a number of lesser techniques within the architectural discipline, this particularism ultimately distract-

33. "A la técnica humana de la nueva arquitectura le interesa el hombre completo, pues a éste le toca desarrollar dentro de aquella toda su vida psíquica y física, toda su vida moral y biológica. Es decir: a la nueva arquitectura, más que a ninguna de otro tiempo, le interesa el hombre como tal, puesto que la técnica conceptual y experimental de nuestros días permite hacer los más minuciosas y disciplinados análisis que en época alguna se hayan podido hacer del hombre y sus problemas. Por eso, la nueva arquitectura siempre resulta ser una arquitectura integral." Arai, *La nueva arquitectura y la técnica*, 17.

34. "En suma: la conexión dialéctica de las técnicas, desde el punto de vista de la nueva arquitectura, se llama orden. Por eso el orden es el hilo o cinta perimetral que delimita el alcance técnico de la arquitectura y, al propio tiempo, es un concepto que integra su sér propio con relación a cada una de sus partes. La aplicación concreta del orden a un caso particular se llama composición." Arai, *La nueva arquitectura y la técnica*, 14.

ed them from a higher calling of which they were capable: "to perform the position as *governor* of the complete architectural order".³⁵

What were the boundaries of the 'complete architectural order?' Arai's reference to the technical architect's gubernatorial function in matters of order had strong implications for how architects of his generation conceptualized the scope of their expertise, and in consequence the professional claims that they would make over the next two decades. Arai acknowledged the existence of discrete categories of disciplines and their respective limits within the practice of architecture while at the same time placing value on the totalizing capabilities of an abstracted system of knowledge that was based on architecture's interrelations with other external disciplines and their respective 'techniques'. The value of this flexible and integrating system of knowledge could, in theory, allow a technical architect to transcend the traditionally narrow limits of the architectural profession. Arai's claim for architecture's specialized expertise in the abstract technique of "composition" carried with it governmental implications that, furthermore invoked practices not only from the division of labor inherent to the collective nature of technical architectural design and construction and its hierarchical and managerial operations, but from the more general techniques of government bureaucratic organization.

Given their artistic skill to compose (a word that implies a degree of direction, and therefore leadership) and arrange the lives of men - the principal objects of a "complete" or "integral" architectural order - it is evident that Arai was suggesting that architects could directly manage a body of specialists directed towards a humanistic social project. But given the ambiguity of his concept of a "complete architectural order," we can perhaps deduce this phrase's implications of the ordering of an even greater social body. In that light, this document, taken together with O'Gorman's language suggestive of a political constituency, can be viewed as a younger

35. "...no quiere decir...que el arquitecto no pueda convertirse en un momento dado en especialista de una técnica particular que necesita dominar por alguna circunstancia y de ese modo contribuir a su perfeccionamiento; pero en tal momento habrá dejado, naturalmente, de desempeñar el cargo de gobernador del orden arquitectónico completo." Arai, *La nueva arquitectura y la técnica*, 15.

generation of architects' specific call for members of the functionalist faction of the architectural profession to enter *politics* (which I define in this instance as the pursuit of a portion of power and leadership of a political organization).³⁶ The claim that a technical architect had a duty to govern by means of their 'integrated' understanding of human matters (especially within a national context) and their capability to compose an order out of disparate parts set the groundwork for a shift in the definition of the political actor in Mexico's mid-century. The increasingly bureaucratic-authoritarian state and the single party - reorganized by Cardenas as the *Partido de la Revolución Mexicana* (PRM) in 1938, one year after the publication of Arai's text - required political figures that could compose, order and consolidate in order to preserve the very fragile political equilibrium of the era.³⁷ The new implications of the '*técnico*,' which suggested the responsibility to organize smaller (the vast planning bureaucracies) and compose the lives of larger collectivities (the masses), critically shifted the conceptualization of the 'technical' architect and his role, not only in construction but in planning as well. From the late 1930s until the 1950s-60s, the architect - acting as a *técnico* - shifted from being an advocative and diplomatic 'architect-planner' and 'technical director' to a new hyphenated professional position that came to define certain Mexican architects of this young generation, who claimed titles like 'architect-administrator,' or even 'architect-politician.'

36. "The first category is generated by the concentration of administrative and managerial functions under corporate capitalism....Here, the claim of specialized or 'professional' expertise for technobureaucratic functions which are unspecific and polyvalent does not aim at asserting independent professional status; rather, it borrows from the general ideology of professionalism to justify technobureaucratic power." Larson, 179; Smith, 153. My definition of politics is borrowed from Max Weber, "Politics as a Vocation" in *Weber's Rationalism and Modern Society: New Translations on Politics, Bureaucracy, and Social Stratification*, edited by Tony Waters and Dagmar Waters (New York: Palgrave Macmillan: 2015), 135-136.

37. On the rhetorical and structural tactics of maintaining political order during this period, see: Aaron W. Navarro, *Political Intelligence and the Creation of Modern Mexico, 1938-1954*, (University Park, PA: Pennsylvania State University Press, 2010). On the particularities of the political order and coalitions of Cardenismo, see Alan Knight, "Cardenismo: Juggernaut or Jalopy?" in *Journal of Latin American Studies*, 26, No. 1 (February 1994): 73-107.

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