

Global Constructions, or Why Guadalajara Wants a Home Depot While Los Angeles Wants Construction Workers

CARLOS MARTÍN
Stanford University

Introduction

The first time I heard the term “global practices” used was in a graduate course on the international construction industry, a course devoted almost entirely to analyzing economic opportunities more than anything else. Questioning how the means and methods of design services would shape the social, political, and stylistic relations between the developing and developed nations—or even between designers and users—was a distant concern. That monetary profit was a central focus in that class is not so remarkable, nor was it particularly enlightening. But, one set of course discussions struck me then and continues to be mulled over in my mind.

The professors devoted a few days to talking about how doing work in foreign countries would change the materials of construction, the types of technology to be implemented, and, in turn, the ultimate design choices. “For example,” they would say, “if you’re doing work in the Third World you wouldn’t use heavy construction equipment because you’d have hundreds of cheap construction workers. Then, your design would depend on how precise and uniform the construction would be because of that, too.” Students were shown slides of construction sites teeming with poorly-protected workers hauling bags of dirt out of trenches. We were told that bamboo was the world’s most widespread construction material, with the hope that we would all be surprised at the pervasiveness of such “primitive” methods. We even calculated how many workers it would take to equal the power of a back hoe, and compare their respective costs.

Introducing new construction technology and methods to the Third World was purportedly less viable because of those nations’ poor economic state. New designs that required new physical techniques or that were predicated on alternative technologies were similarly improbable. So, my professors and presumably most international designers and construction engineers were very conscious of the correlations between design, construction, and economic and social difference. Despite the racial, class, and nationalist overtones of these lessons, I do believe that these professors and the course did get one thing right: design necessarily implicates techniques, form, and labor. As such, certain people would surely benefit from design choices, while others would be put at a disadvantage.

What they were dead wrong about, though, was how those benefits would play out. While global development projects are traditionally studied for their symbolic and political import, their physical construction demonstrates design’s uniqueness in perpetuating and, at times, subverting formal politics. The means

and methods of building in many sites certainly point to the assumptions about labor, technology, and industrial achievement that determine the politics and form of design interventions. But, exchanges in design and construction knowledge are also inscribed in these practices in ways that subvert those same assumptions. We studied *formal* design globalization when, in fact, globalization is transpiring *informally* to a much larger extent. Increased accessibility to design tools and products across national borders and the acquiring of construction skills through immigration and labor, for example, are insuring more prevalent changes in design than formal and heavy-handed projects in both the First and Third World.

Global Constructions

In this paper, I track these contemporary formal assumptions and informal exchanges. By retelling a series of personal, professional, and historical stories set in Mexico, the US Southwest, and the Border region at large, I point out the authority held by Western architects and engineers, and that authority’s nationalization, racialization, and classing of construction labor and design skill. But, I also point to the ways in which informal practices are shifting the lines between developed and developing nations, and between design producers and users. These informal transformations, I argue, will ultimately change the terms of design globalization.

Specific choices made by designers in one location not only determine the construction methods and materials at another, but are also informed by assumptions regarding the latter’s social and industrial achievement. Many of the social inequities that have been linked with transnational design exchanges in the past reproduce broader injustices: assumptions regarding lack of technological capacity; purported labor surpluses and subsequent skill and wage disparities; and an ostensible need for guidance into modern environments. If “technological maximization... is often antithetical to the creation and maintenance of the place-form” as Kenneth Frampton suggests, then then the design and technical choices made in building here and elsewhere are inextricably linked to how we perceive and imagine these places.¹ These links are that much more critical when we think about how designers and builders in the developed world think about places, people, and skills in the developing world.

In this paper I would like to present a few stories—some set in Mexico and some in the US Southwest—that illustrate the discrepancy in architectural production between First World

design and building circles and Third World interventions in the built landscape. I especially look at the technological authority assumed by Western architects and engineers; the effect of that authority on the nationalizing, racializing, and classing of construction labor and design skill; and the symbolic use of design and construction as a sign of modernization. Rather than looking at specific buildings or projects as canonical examples of transnational and transcultural exchanges, though, I am more curious about broader changes in the economic and cultural transactions that are design and construction.

What is particularly interesting about these cases is that they are shaped both by formal institutional practices with regard to building and design and by informal exchanges. As such, they are all tales about social inequities and cultural transformations despite the purported geographic and political distance between the US and Mexico. Interestingly, the actors in both stories are not only related metaphorically or even politically, but by blood as well. Building practices are becoming more entangled, more insidious, and more complex. In short, people from all sides of all borders negotiate modernization and modern design through formal projects and informal practices—both of which are influenced by changing politics, technology, and design methods. Here are some stories.

Local Constructions: Mexico

A few years ago, my cousin Tarcicio was visiting my family in San Francisco from his home near Guadalajara, one of Mexico's emerging centers for post-NAFTA manufacturing and information technology work. As a practicing architect and contractor, we knew that Tarcicio would be particularly interested in looking at different buildings. Though he did marvel at downtown skyscrapers and timber construction, he reacted more to what was meant to be a quick purchase at the local Home Depot.

Tarcicio was overwhelmed not by the variety or quantity of design and construction goods on the store's shelves. While he did leave the store with stacks of catalogues, brochures, and samples, he was already well-acquainted with the proliferation of products involved in his own work, including many of the same ones he found here. Rather, he was excited by the limitless access to them. The very ability to get information and goods for his small practice easily and directly represented a departure from his usual work. Aside from his own potential benefit, Tarcicio also commented on how desperately Mexico needed such stores. They could provide small-scale architects and contractors with new building ideas and techniques, and they would provide both professionals and ordinary consumers with the chance to pick the best solution for their particular problem from a wealth of choices. He was so taken, in fact, that he approached the store manager to ask whether Home Depot had plans to globalize, especially in Mexico. So, not only did he leave the store with product propaganda, but he also left with the hope of seeing this instant and open access back home.

While a possible Home Depot in Guadalajara seemed to vali-

date the Americanization of commerce and design in developing nations to me, for my cousin it was much more positive. Home Depot was a democratizing of goods, an economic opportunity not just for individual enterprise, but for collective progress. Home Depot stored a kit of tools that would both aid his design skill and capacity, and simultaneously aid in national development. Tarcicio's visit to the Home Depot ultimately reaffirmed many conceptions I had about the high value placed on design and construction in the developing world. But, it also brought out a few new twists.

The professors in my international construction industry course had advocated tailoring design services and construction techniques to local social contexts like labor skill, material availability, and technological capacity in ways that, I felt, assumed poor achievement on all those fronts. For Tarcicio, understanding and working within that local context was central to his enthusiasm about Home Depot. The goods and services available there could be tailored for his practice and his community in ways that broader, national development efforts could never approach. So, while international development institutions have repeated the importance of making practices and technologies *appropriate* over the past few decades, Tarcicio believed that the Home Depot was, in fact, appropriate due to its institutional subversion.

While my cousin's fascination with Home Depot certainly provided me with some interesting fodder for study (along with giving my family some funny stories), it reflected a much broader change in international trade which further tied the developed United States and developing Mexico this past decade. In fact, appropriate growth in design, construction, and technology became an explicit means for social, economic, and political change in Mexican development policies. It also became a symbol for that change.

Appropriateness and its related designs and technologies took on a particularly nationalist form in Mexico from 1988 to 1994, the years of President Carlos Salinas de Gortari's administration. In addition to the North American Free Trade Agreement (NAFTA), the Harvard-trained Salinas implemented a major developmental policy for improving national economics and individual circumstance: the *Programa Nacional de Solidaridad*, more commonly known as *Solidaridad*, or Solidarity. Design and construction were specific targets for the national government, as they have been in developing nations for quite some time.² *Solidaridad*, however, suggested a change in the interactions between developed and developing people through informal design exchanges.

Begun in December of 1988, *Solidaridad* was described as a way to combine foreign (particularly, American) knowledge with Mexican know-how and human capital for local development projects. As such, the program would create a new and appropriate exchange of design and construction services and technologies. Contrary to traditional governmental interventions, *Solidaridad* required the formation of local committees to assess the social and economic needs of their respective regions.

They would suggest possible development projects, and then serve as labor on those projects. Four “basic principles” would guide these projects: respect for community decisions; collective participation; mutual responsibility between the government and communities; and the honest management of tasks.³

Within a few years, over 100,000 *Solidaridad* committees were established in urban, rural, and indigenous communities throughout the country. Each was organized in such a way that its community’s members would be enlisted to work cooperatively on construction projects.⁴ In so doing, the national government believed it could “avoid the dependence and paternalism” of the past by both increasing employment and incorporating local citizens into the design choices and technological decisions that would affect their surroundings.⁵ As such, *Solidaridad* would create a uniquely Mexican design and technology development program, one that formally provide for informal exchanges.

For new design and construction to be “more in line with our resources,” the government and *Solidaridad* committees would transform “all technical decisions into sociopolitical ones.”⁶ The building and construction industry was viewed as the most viable sector for this negotiation because of its history as a strong employer, its reliance on manual work, and its explicitly social importance. Analysts pointed out past evils in governmental projects to demonstrate the need for *Solidaridad* designs. Among the most infamous examples of badly-conceived architecture included the specification of aluminum roofs for housing in the Mexican tropics (which, of course, rusted immediately) and of cement block buildings in the middle of interior forests (where timber construction would have been less costly and material intensive).

Architects and engineers were called on to research materials like adobe brick and passive heating and cooling systems as part of the environmentally, socially, and economically “appropriate” goals of the project. More directly, Mexican architects and engineers were called upon to accommodate their traditional practices and tools to make them more national: “Engineers must participate in this... national process of design and construction.” The new professional skill was even given the label “rural engineering and design.”⁷ *Solidaridad*, however, failed in part because of this. While architects and engineers were asked to change their practices, they were not asked to change their social positions. Designers and engineers maintained the same authority over their design and construction knowledge rather than sharing them with the committees. In fact, each committee’s projects were headed by an engineer who was to lead the committees and workers, and to “explain to them how they were to organize as well mention some of the project’s characteristics.”⁸ Their authority was unquestioned. Traditional social hierarchy was combined with the full-scale importation of design work and technology provided under NAFTA’s plans.

Throughout all of this, NAFTA further undermined attempts at local self-reliance in design. Even before the United States officially approved the trade agreement, US designers and con-

tractors were heading south in record numbers.⁹ Besides being awarded major infrastructure and housing projects, US designers and contractors were also assured that their Mexican counterparts would not make many inroads outside.¹⁰ By the 1993 devaluation of the peso and the political scandals following President Salinas’ departure from office, *Solidaridad* was dead, NAFTA was alive and kicking, and the lay communities of Mexico were left with little of the design education and technological skills to which they were meant to have access.¹¹

Unfortunately, such failed developments to institutionalize informal exchanges in knowledge and design are far too common in the history of developing nations. Despite its significant attempts to reconsider design and construction for popular ends, *Solidaridad* proved ineffective because of the same formal political and knowledge structures that it sought to dismantle. Only certain people on both sides of the border had the skills and insight that could have transformed the Mexican social and built landscape. They also retained the power for applying them.

Local Construction: United States

During the early years of NAFTA, Mexican architects and contractors actively sought joint ventures with US firms for projects in the United States at the same time that US firms were building all over Mexico. But, a more interesting and, in fact, more profound exchange was occurring across the border: immigration. A significant fraction of Mexican rural folk—including a substantial percentage of the townspeople from my and my cousin’s hometown—were and are continuously crossing the historically porous line.

While many who settle on this side of the border find work in agriculture and other fields traditionally taken by immigrants in the US Southwest, many who have arrived in the past two decades find jobs in construction. A trip to any construction site in the greater Los Angeles area—and in the entire US Southwest for that matter—bears witness to these changing labor demographics. Though exact numbers are not known, it has been estimated that the majority of construction workers in Southern California—especially in open-shop residential construction—are Latino immigrants. The construction industry is one of the ten largest employers of Latinos in the state of California, and this labor change happened over the span of only one decade.¹²

Drywall construction is a particularly interesting case. Nine out of ten drywallers in Southern California today are Latino, and many of them are undocumented.¹³ Only two decades ago, the majority of construction workers in the area were White and union-affiliated. As the design and building sector dried up in the mid-70s, drywall contractors began hiring undocumented laborers to replace union trades. In 1982, after a heated strike, the contractors broke the union and Latino immigrants soon filled the labor supply.¹⁴

The work became piecemeal, routine, and thoroughly non-union throughout the 1980s as the design and construction industry tried to come to terms with a depressed housing mar-

ket.¹⁵ The workers' plight was further exacerbated by low wages, no health care, and fear due to their precarious immigration status. The work itself was increasingly consigned and referred to as "Mexican" work or, as one observer noted, was not even acknowledged at all.¹⁶ The previous drywallers settled into commercial construction, taking the union with them. The traditional building trades were so averse to the new workers that they refrained from any attempts at organizing the new work.

Despite such lack of support and even resistance, the drywallers chose to organize themselves—an act that would be regularly compared to the early union organizing of the largely-immigrant United Farm Workers in the 1960s. With the assistance of local Latino aid agencies, Catholic clergy, and the "workers' family and geographical ties to Mexico," drywallers walked off construction sites throughout the Southland in June of 1992. The strike broke many contractors, who were already feeling the crunch of the California building recession. With freeway blockades, caravans, and public demonstrations in open defiance of building, police, and immigration authorities, the drywallers made themselves and their work known. Five months later, 39 builders signed an organizing agreement with the approximately 4,000 drywallers.¹⁷

The success of the strike was seen as a wake-up call for the building trade unions, and the design and construction industry as a whole. After establishing explicit characteristics for construction work (including so-called low skill tasks and meager salaries) that could only be filled by an implicit labor group (that is, geographically-close undocumented immigrants), builders were faced with the very real possibility of addressing a classed and racialized labor union. The strikes and the ensuing conflict were especially fueled by the scare of California's most recent anti-immigrant episode. Immigration officials launched major raids and deportations against Southern California drywallers just two years after those same workers gained union recognition.¹⁸ Union leaders publicly denounced these attacks, claiming that the INS was targeting drywallers solely because of their recent and successful organizing campaign.¹⁹ The next year, further, California's Governor Pete Wilson selected the head of the world's largest land developer (the Irvine Land Company) to serve as the chief fund-raiser for his presidential bid.²⁰

One month after Wilson's announcement, carpenters and framers throughout the Los Angeles area began picketing residential building sites.²¹ Confrontations between the workers, contractors, and land developers became commonplace. Even more telling is that these confrontations usually took place on the quintessentially Californian design development: the Angelino suburban residential tract. With the economic boom of the past half-decade, however, labor disputes have been ignored as architects and builders have found themselves inundated with new work.

Immigrant construction labor, however, has most surely not ended. Just last spring, Latino workers struck a Kaufman and Broad job site in Las Vegas, Nevada.²² Two related articles came out in the *Engineering News-Record* this past summer, as well.

The first reported the hearings of a panel of architects and contractors on "future trends" in building, the most notable of which was the "shortage of skilled, motivated, and loyal employees at levels throughout the construction industry [that was] threatening its survival."²³ The second article—titled "Let in More Mexicans Legally"—called on all design and building-affiliated professionals to push for expanded visa programs for Mexican nationals during "peak times of construction activity" since, in the past, "many illegals who sneaked by [immigration officials] ended up on construction sites."²⁴

That the premier journal for project announcements and construction information would print such articles speaks volumes about how design and building professionals see themselves in relation to the skills, capacities, and personal characteristics of their workforce. That the same journal, further, would name *nations* in a manner that opposed recent popular sentiments reveals much more about how race, class, and national status both determine conceptions of design and building practices and perpetuate these across political and cultural boundaries.

In fact, the drywallers' skills and knowledge—or more accurately, the assumptions made regarding their skills and knowledge—were predicated on these social and political categories. Such decisions and professional border-drawing parallel the relations that Mexico's *Solidaridad* and NAFTA established between US design and construction firms and their Mexican counterparts, and between Mexican designers and engineers and the general populace. What is more, this tension between informal exchanges in design from laborers and regular folk and formal claims over design knowledge and policy by professional and governmental bodies will most likely continue throughout future globalization projects.

Constructing the Globe

In many ways, the local stories I describe here are not new. Institutional attempts to transform building practices have a long history in both developed and developing nations. Informal exchanges have an even longer one. Linking certain kinds of work (particularly design and construction occupations) to specific class, race, and gender groups is also an unfortunate truism. The most critical difference in these stories, though, is the fact that neither could be told without incorporating the loose affiliations between people on both sides of geographic and cultural border. Global practices in design and construction can no longer be simply described in terms of Western design and technology exports to the developing world, nor in terms of tailoring that technology appropriately to the local developing context. The increasing complexity of global economies and cultural exchanges prohibits such simple readings of contemporary architectural design and construction.

As with most challenges, however, the problem is the solution. *Solidaridad* and other modernization projects in the developing world persist in remaking the class hierarchies that translate into castes of knowledge, skill, and authority. In *Solidaridad*,

authority still rested with Mexican engineers and architects and ultimately, with the federal government and foreign (that is, US) design and technology exporters. The Mexican people might have been the formal beneficiaries of these works, but did not retain informal authority over them. Similarly, the exploitation of undocumented immigrant exploitation and the disavowal of their informal skill and contributions remakes skill and information borders along similar motives. In both cases, conceptions of the design and technological *other* serve as the means for reproducing authority and defining formal control—be it the authority of the developed world over the developing, of the building professional over the laborer, or of the building industry over common folk.

Formally constructing the designed *other*, the construction *other*, and the technological *other* prohibits the incorporation of the more liberatory informal knowledge exchanges. Providing design and technology services or even employment is insufficient for remedying global inequities. Rather, programs that question *who* retains knowledge and skill in design and technology more effectively subvert traditional boundaries between the developed and developing world, between the design and building professional and workers, and between the producers and recipients of building exchanges.

As economics and politics obscure geographic borders, culture and technology are blurring traditional lines between design and construction. We are already witnessing these transformations with our own design and construction practices both here and abroad, though we often choose to overlook them. The daily and ubiquitous transacting of design skills and construction products serve more to break down geopolitical and professional borders. The catalogues that Tarcicio took back to Guadalajara and the methods learned by Los Angeles' drywallers will negotiate global design and construction practices in more equitable and less heavy-handed ways. In short, we already practice global practices right here.

Ultimately, my cousin was right in many ways about the Home Depot. Now, I am not saying that Home Depot *should* open up in Guadalajara. But I no longer think that it is an altogether bad idea. As scholars of design and building, we should devise ways to support such informal yet strategic interactions. When we speak of globalization, we usually speak about knowing that what is *here* is linked to what is *there* in subtle ways; the study of specific and bounded design projects usually masks that subtlety. We talk about Western designers and multinational contractors working in the Third World, rather than the immigrant adding a room to her home. So, when we speak of global design practices, we must understand that global links are based on assumptions of and authority over design and technological knowledge—that is, we know that what is *there* was designed and constructed by what is *here*, and vice-versa.

NOTES

1. Kenneth Frampton, "Introduction" in Frampton [ed.]; *Technology, Place, & Architecture: The Jerusalem Seminar in Architecture* (New

- York: Rizzoli, 1998): p. 14.
2. For historical readings of the Mexican design and construction industry, see Dimitrios A. Germidis *The Construction Industry in Mexico* (Paris: Organization for Economic Cooperation and Development, 1972) and *Labour Conditions and Industrial Relations in the Building Industry in Mexico* (Paris: Organization for Economic Cooperation and Development, 1974).
3. Raúl Salinas de Gortari, *Tecnología, Empleo, y Construcción en el Desarrollo de México, Segunda Edición* (Mexico City: Editorial Diana, 1993): p. 126. Note that this book's author is ex-President Carlos Salinas de Gortari's brother and is currently serving a prison sentence in Mexico for embezzling and murder. I rely on this text both because of its relation to design and construction services and, particularly, because of this telling connection. All translations were performed by the paper's author.
4. *Ibid.*: p. 34.
5. *Ibid.*: p. 36.
6. *Ibid.*: p. 38.
7. *Ibid.*: pp. 118 and 144. Design (*diseño*) and engineering (*ingeniería*) are terms with almost identical meaning in Spanish, and the architectural and civil engineering professions are closely allied in Mexico.
8. *Ibid.*: pp. 141-3.
9. See, for example, Gary Tulacz and Debra Rubin, "Mexico blooms as NAFTA looms" (November 1, 1993) or "Booming Mexican market may flourish with free trade" (September 27, 1999) *Engineering News-Record*. In the former, one contractor is quoted as saying "Mexico is going to happen with or without NAFTA."
10. Richard Korman and Steven Setzer, "Engineers seeking licenses," (November 1, 1993).
11. See Tim Grogan and Tom Ichniowski, "Mexico: Still Recovering from Crisis," (December 22, 1997) or Michael A. Moore, "Mexican firms are coping" (March 6, 1995) in *Engineering News-Record*.
12. Michael Flagg, "Southland is Hooked in Cheap Immigrant Labor....," *Los Angeles Times* (September 7, 1992).
13. Leonel Sanchez, "Drywallers' strike: confrontations multiply; 500 workers, mostly Latino," *San Diego Union-Tribune* (August 23, 1992).
14. Harry Bernstein, "The Drywallers—An Ironic Tale," *Los Angeles Times* (September 29, 1992).
15. Rick Burnham, "Union wants role in house building industry" *The Riverside Press-Enterprise* (May 7, 1995).
16. Mike Clements, "Drywallers' Strike Nails Down a Principle... Workers, Especially Immigrants, Need a 'Public Dace' to Win Justice..." *Los Angeles Times* (November 16, 1992).
17. Michael Flagg, "A 'Landmark' Victory for Drywall Union; Labor: Mexican Immigrants Outlast Builders..." *Los Angeles Times* (November 11, 1992).
18. Sandy Stokes, "Over 400 Drywallers Deported," *The Riverside Press-Enterprise* (March 15, 1994).
19. Sandy Stokes, "INS Trying to Punish Drywallers," *The Riverside Press-Enterprise* (March 22, 1994).
20. David Bacon, "Shutting Down Homebuilding in LA Basin: Immigrants Lead New Surge of Labor Activism," *Pacific News Service* (May 9, 1995).
21. *Pacific News Service* (May 9, 1995).
22. Nancy Cleeland, "Las Vegas Labor Protests Brought to LA Builder" *Los Angeles Times* (April 2, 1999).
23. —, "Work Force," *Engineering News-Record* (May 24, 1999): p. 44.
24. Alan Goozner, "Let in More Mexicans Legally" *Engineering News-Record* (August 16, 1999): p. 99.