

# Diversity & Multiculturalism in the Architectural Academy: An Assessment of Barriers & Opportunities

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## INTRODUCTION

While the persistent underrepresentation of students of color in architecture is well documented, little empirical research is available from within the discipline that helps us to understand the problem's causes.<sup>1</sup> However, the body of argumentative literature that does exist calls attention to the political nature of schooling and suggests that architectural theory, curricula, and pedagogy may play a role in deterring the participation of people of color. In doing so, it also raises questions about architecture schools' ability to prepare students to work in a context of increasingly internationalized professional practice and resurgent interest in humanitarian design.

I begin the paper with an overview of data on racial and ethnic representation in architecture and a discussion of its possible implications. I then review the argumentative literature and evaluate it relative to related educational theory. This is followed by a brief evaluation of four design studios I taught between 2007 and 2011 at the University of Oregon. I conclude by suggesting concrete changes that can be made to improve multicultural teaching in the design studio, and by identifying areas in need of future research.

## A STATISTICAL OVERVIEW

Questions remain about the reliability of the little available statistical data on race and ethnicity in architecture.<sup>2</sup> It is also difficult to compare data sets to one another due in part to in the way racial and ethnic categories, as well as participation in

architecture, are defined. However, the available data (Figure 1) seem to indicate both that there are multiple factors affecting the participation of people of color in architecture and that these groups may face different deterrents.

## Pipeline Leakage

The data show a phenomenon often referred to as 'pipeline leakage',<sup>3</sup> or declining participation at multiple 'sites' along the path to professional practice. While significant additional research is needed to confirm these apparent trends and to identify causality, the data thus nevertheless suggest that there are likely multiple factors working to deter participation.

The statistics for people who identify as African American and Hispanic provide examples of this phenomenon. While African Americans make up 14.6% of the non-Hispanic U.S. population,<sup>4</sup> they represent only 8.4% of first time enrollments and 4.9% of degrees awarded in National Architecture Accrediting Board (NAAB) accredited schools and 2.1% of persons employed as architects. Similarly, while people who identify as Hispanic represent 16.3% of the population, they constitute only 13% of first time enrollments, 11% of degrees awarded, and 7.8% of people employed as architects.<sup>5</sup>

The data also show a higher percentage of students of color enrolling in architecture school for the first time than of degrees awarded, which suggests that architecture schools may be one of the sites at which barriers to the participation arise. Combined NAAB data from 2009 and 2010 (Figure 1)

	Total US Population	Non-Hispanic US Population	Persons Employed as Architects	Demographic Diversity Audit Survey Respondents	AIA Membership		Students at NAAB Accredited Schools			
					Architects	Associates	Total Enrollment	1st Time Enrollment	Degrees Awarded	Degrees Awarded ÷ 1st Time Enrollments
White/ Caucasian	72.4%	76.2%		80.0%	72.0%	56.0%	63.0%	64.0%	73.0%	82.0%
Black/African-American	12.6%	14.6%	2.1%	5.0%	1.0%	3.0%	6.3%	8.4%	4.9%	42.5%
Amer. Indian including Alaska Native	0.9%	0.9%		0.5%			0.5%	0.6%	0.5%	66.0%
Asian	4.8%	5.6%	1.9%	5.0%	5.0%	6.0%	12.4%	10.7%	9.5%	63.7%
Native Hawaiian, Other Pacific Islander	0.2%	0.2%					0.3%	0.5%	0.2%	21.6%
Some Other Race	6.2%	0.2%			1.0%	4.0%				
Two or More Races	2.9%	2.3%					1.0%	2.5%	0.6%	16.4%
Hispanic	16.3%		7.8%	5.0%	3.0%	7.0%	16.0%	13.0%	11.0%	61.8%

Figure 1. Comparative Racial & Ethnic Representation in Architecture & U.S. Population<sup>7</sup>

show that graduation rates may in fact be considerably lower for students of color than for white students. They indicate, for example, that while 82% of white students who matriculate are receiving degrees, only 42.5% of non-Hispanic African American students are doing so.<sup>6</sup> However, because the amount of available data is quite limited, it may be misleading and simply reflect annual variability in enrollments and degrees awarded. However, this does suggest the need to monitor relative graduation rates as more data becomes available. It also suggests that tracking specific cohorts through school might be needed in order to understand if and why the trend exists.

### Variability Between Groups

The data also show that participation rates vary considerably between racial and ethnic groups, as does that the rate of change at each point along the 'pipeline'. This may indicate that different deterrents exist, or have differential impact, for different groups. For example, in contrast with data described above for people identifying as African American and Hispanic, which indicate that these groups are already underrepresented by the time they enter architecture schools, Asians are overrepresented: 10.7% of students enrolling for the first time are Asian and they are awarded

9.5% of degrees, while they are only 5.6% of the total non-Hispanic population.<sup>8</sup> This seems to indicate that African Americans and Hispanics may face more barriers to participation prior to entering architecture school, while for Asians more deterrents may arise during or after architecture school.

In addition, while all groups are significantly underrepresented among people employed as architects, some are less well represented than others. For example, U.S. Census data for 2010 show that the proportion of Asians and Hispanics employed as architects is a bit less than half their representation in the total population. In contrast, African Americans representation in the total population is about seven times greater than it is among architects. This indicates that there may be more deterrents to African Americans' participation than that of Asians or Hispanics.<sup>9</sup>

This overview therefore suggests the need for a nuanced approach to studying barriers to participation that recognizes the diversity that exists between ethnic groups, as well as the need to take seriously the prospect that aspects of architectural schooling may play an important role in limiting diversity in architecture.<sup>10</sup>

## A REVIEW OF ARCHITECTURAL DIVERSITY LITERATURE

Most of the literature regarding diversity in architecture supports the idea that architecture schools contribute to the persistent underrepresentation of people of color in the field. It tends to focus in particular on the role of curricula, pedagogical practices, or both, and to ultimately challenge the stated or unstated foundational assumptions that shape them.

### Scope, Diversity, & Emphasis of Curricula

The most straightforward argument made about architecture schools' role is that greater curricular diversity is needed to attract more people of color. Sharon Sutton, Linda Groat, and Sherry Ahrentzen have argued, for example, that women and people of color are more likely than their white counterparts to be interested in careers that have "power," especially the power to affect social change or provide "the opportunity to solve important social problems."<sup>11</sup> They therefore advocate for an expansion of curricula that address architecture's social aspects and those that prepare students not just for traditional design practice but also for a broad range of related careers.<sup>12</sup>

Groat also makes the argument that predominant models of architects' role, which she labels the "architect-as-artist" and the "architect-as-technician," are problematic because they "depend on the patronage of well-to-do and influential clients" and thus have a limited ability to affect social change.<sup>13</sup> She sees the architect-as-artist model, for example, as one that serves to "distanc[e] the artist/architect from the sociocultural context of his or her work" because it is rooted in an ideals of individuality, originality, and the "now commonplace view of the artist as fundamentally separated from society."<sup>14</sup> Groat proposes a new conceptual model, the "architect-as-cultivator," in which the architect's work is understood as a collaborative endeavor that engages practitioners with the social aspects of the built environment, and in which buildings are seen as part of a "collective [cultural] inheritance created by past individuals and continuously reinterpreted and reconstructed by others."<sup>15</sup> This new approach allows the contributions of people of color to be acknowledged and, implicitly, for architecture to begin to serve communities in ways that can re-

verse the conditions of racial oppression, and to attract students interested in careers that do so.<sup>16</sup>

Groat's argument dovetails with Craig Wilkins's contention that the predominance of the idea that architects' credibility is tied to their artistic genius, and schools corresponding emphasis on the aesthetic, serves to distract attention from architecture's other implications and thus to resist the participation of African Americans.<sup>17</sup> He writes,

"The genius is required... to create... something that cannot – by definition – be understood by objective means... the function, economics, and politics of the object are all rendered immaterial to the aesthetic product. So why bother to investigate or even teach its economic and political implications?"<sup>18</sup>

Wilkins implies that these curricular omissions play a role in the continued devaluation of African Americans in society because they silence discourse about things like architecture's relationship to power and social inequality.

Both Wilkins and Sutton also contend that one of the consequences of architecture's focus on form and aesthetics is to retard the development of the objective research base they see as necessary to increase the profession's legitimacy, and thus its social power and ability to attract people of color, as well as to allow for the kind of critical self-evaluation needed to understand how architecture may be working to replicate conditions of social inequality, including those that disadvantage people of color.<sup>19</sup>

### Pedagogical Practices

Sutton also argues for a revised approach to architectural teaching. She characterizes typical pedagogical models as akin to "a Medieval guild culture where each person learns at the side of another person, thus perpetuating all [their]... intellectual limitations and cultural biases."<sup>20</sup> She argues that instruction grounded in objective research rather than the received wisdom of instructors can help to overcome these biases.<sup>21</sup>

Thomas Dutton likewise sees studios' predominant pedagogical practices as a barrier to diversity, arguing that the dominant hierarchical "master-apprentice" model of studio instruction places undue influence on the knowledge of the instructor and thus his or her "ideologies, values, and assump-

tions about social reality,"<sup>22</sup> thus reproducing the "forms and practices of power in [broader] society," including those that work to oppress people of color.<sup>23</sup>

### **Curricular Invisibility<sup>24</sup>**

Meltem Ö. Gürel, Kathryn Anthony, and Bradford Grant argue that course materials and content also reinforce ideologies that devalue people of color. Gürel and Anthony demonstrate that survey texts commonly used in architectural history courses marginalize women's contributions and almost categorically exclude those of African Americans.<sup>25</sup> They argue that the exclusionary content of these texts is of consequence because they "play a significant role in conveying the culture, norms, and values of the architectural discipline to newcomers."<sup>26</sup> Said differently, inclusion in these texts legitimizes certain works as Architecture and conversely devalues excluded works; moreover, because of these texts importance in defining for students what constitutes Architecture, they also devalue excluded groups within the broader disciplinary culture.<sup>27</sup> This argument implies as well that even apparently objective architectural research, like that represented in history texts, is not neutral.

Bradford Grant is more explicit in arguing that curricular invisibility devalues students of color. He views architectural education's Eurocentrism of as a form of "protectionism" born of "racism and ignorance" that "is powerfully prejudicial, leading to the virtual denial of African Americans', women's, and others' identities in built form."<sup>28</sup> He contends that curricula's "narrow focus" with its "determined ignorance"<sup>29</sup> of non-European "histories, formal aesthetics, and theories"<sup>30</sup> not only presents a false narrative about the nation's cultural ancestry and built history,<sup>31</sup> but also that doing so strips women and people of color of an "empowering" form of "potent cultural symbolism" that helps to "define and validate ...identity."<sup>32</sup> Grant proposes a revised approach to architecture based on the idea of "shared otherness" that allows architecture to fully express the "cultural diversity that actually exists within Western societies."<sup>33</sup>

Grant, Gürel, and Anthony thus call attention to the political nature of architectural schooling by revealing what they see as essentially racist assumptions embedded in its curricula and artifacts. Indeed,

the larger body of literature discussed here can be read as an attempt to reveal and to challenge the generally unstated assumptions that guide decisions about architectural schooling, and to suggest that these work together discourage the participation of students of color. In doing so, it frames architectural schooling and its constituent elements as political rather than neutral. Dutton makes this argument explicitly, writing that,

"there is a rough correspondence between schooling and wider societal practices, whereby the selection and organization of knowledge and the ways in which school and classroom social relations are structured to distribute such knowledge are strongly influenced by forms and practices of power in society. That is, the characteristics of contemporary society ...such as class, race and gender discrimination and other asymmetrical relations of power – are too often reproduced in schools and classrooms, including the design studio."<sup>34</sup>

### **THEORETICAL FOUNDATIONS & FURTHER IMPLICATIONS**

This architectural scholarship is grounded in the twin ideas (a) that knowledge is socially constructed and therefore contingent rather than absolute, and (b) that schools play a central role in social and cultural reproduction because they do not simply transfer neutral information to students, but also socialize them in society's norms and values.

This scholarship draws in particular on the work of educational theorists Henry Giroux and Paulo Freire. Freire argued that reformed pedagogy is necessary in order to transform the inequitable, or oppressive, conditions of society. He contended that conventional "banking" methods that treat education as a neutral process of knowledge transfer serve to "reinforce existing modes of social relations and production."<sup>35</sup> This is because the knowledge transferred to students is indeed not neutral but instead reflects particular ideologies, and because it limits discourse and thus any challenges to these ideologies. He argued that a "dialogical and problem-posing education" in which teachers and students "become jointly responsible for a process in which they all grow" was therefore needed.<sup>36</sup> In this approach,

"the students – no longer docile listeners – are now critical co-investigators with the teacher. The teacher presents the material to students for their consideration, and re-considers her earlier considerations as the students express their own. The role of the problem-posing educator is to create, together with

the students, the conditions under which knowledge at the level of the *doxa* is superseded by true knowledge, at the level of the *logos*.<sup>37</sup>

Henry Giroux further develops Freire's ideas. He agrees with Freire that schools play a role in reproducing the conditions of broader society, including those of racial oppression, but that "teachers and students ...often reject the basic messages and practices of schools," and thus the dominant ideologies<sup>38</sup> they represent.<sup>39</sup> Therefore, while these ideologies become "inscribed in: (1) the form and content of classroom material; (2) the organization of the school; (3) the daily classroom social relationships; (4) the principles that structure the selection and organization of the curriculum; (5) the attitudes of the school staff; and (6) the discourse and practices of even those who appear to have penetrated its logic," their replication is incomplete.<sup>40</sup>

Angela Valenzuela's study of Mexican origin<sup>41</sup> students in a Houston high school provides a useful concrete example of how difficult it can be to identify these 'inscribed ideologies' – especially when they are not evidently racist – and thus to understand how they may be working to devalue or disadvantage students of color. Valenzuela's study found that the mostly white middle-class teachers' assumptions about what constituted success – that is, the ideological assumptions about 'what constitutes the good life' that informed the content of their courses and their interactions with students – were at odds with those of their less-affluent Mexican origin students and that this adversely affected both the students' success in school and their willingness to participate in schooling.<sup>42</sup>

The teachers saw success as getting into college and out of the *barrio*. For the students, who valued their home-place and the social and cultural associations it held, this kind of success meant turning their backs on their culture and community.<sup>43</sup> As one student put it, "getting with the program" is undesirable because those who do, "get rich, move out of the *barrio*, and never return to give back to their *gente* [people].<sup>44</sup> Or, as another student commented, "If only us *raza* [Mexican American people] could find a way to have all three, money... clean money, education, and the 'hood."<sup>45</sup>

The students therefore rejected schooling in a variety of ways, including dropping out or skipping classes. Valenzuela contends that in this way and others,

"[s]chooling is a *subtractive* process" for these students that is "organized formally and informally in ways that fracture students' identities" and "divests [them] ...of important social and cultural resources, leaving them progressively prone to academic failure."<sup>46</sup>

Giroux outlines a pedagogical approach based on Freire's idea of "praxis" – a cyclical process of "critical reasoning and critical intervention in the world" – intended to help bring the sorts of hidden ideologies Valenzuela describes to light.<sup>47</sup> This includes four "dialectics": (a) *totality*, which is "based on the insight that for any fact, issue, or phenomena to become meaningful it must ultimately be examined within the context of the social totality that gives it meaning; (b) *mediation*, which suggests that the "true nature" of phenomena are mediated by different layers of meaning shaped by ideology, but that these "legitimated" or "commonsense" meanings can be unmasked; (c) *appropriation*, which frames "critical thought and dialogue" as essential "forms of classroom action" that help us "to focus more critically on questions concerning the nature of the hidden curriculum, the patterns of social control underlying student-teacher relationships, and the focus of ideology embedded in the use of specific types of knowledge and modes of classroom evaluation"; and *transcendence*, or "refusal to accept the world as it is."<sup>48</sup>

Architecture scholars' arguments for a shift in emphasis away from aesthetics and toward other aspects of architecture, as well as those for the development of a broad objective knowledge base for architecture, can be seen as related to Giroux's notion of *totality* in that they endeavor to set formal and aesthetic decisions in their social context. Critiques of hierarchical models of studio instruction can be understood as related to his notions of *mediation*, *appropriation*, and *transcendence* in that they seek to remove one level of ideological mediation between students and phenomena through more dialogical processes of classroom instruction. Critiques of the invisibility of people of color in texts and curricula can be seen in terms of "appropriation" in the sense that they seek to reveal how these work to frame what is seen to matter as architectural knowledge.

These authors' practical recommendations for reform can thus be seen as efforts to deploy Giroux's dialectics. These include adopting models of design

teaching and evaluation that promote “greater discussion and debate about design,” including panel discussions and colloquia, exhibits, debates, workshops and small group discussions, and emphasis on “critical questioning” and team work, as well as offering courses that focus on “broader issues that affect the profession at large,” and integrating teaching about the work and issues of people of color throughout the curricula.<sup>49</sup>

### LESSONS FROM MULTICULTURAL DESIGN TEACHING

Between 2007 and 2011, I taught four design studios at the University of Oregon intended to raise cultural issues in design and also to test assumptions about some of the ‘received wisdom’ common in architectural discourse. While there is not room here to provide a thorough evaluation of these studios, I would like to highlight aspects of my experience that are not evident in the literature discussed above.

In the first studio, I asked students to evaluate the appropriateness of common green building strategies in housing for migrant farmworkers in Washington state. In the second, students designed housing for the primarily Latino/a and Mexican immigrant residents of a very low income *colonia* in New Mexico. Two other studios asked students to consider what constituted contextually appropriate architecture in central Saigon (Ho Chi Minh City), Vietnam, which is being transformed by rapid urbanization, increased political openness, and an influx of global capital.

Not wanting to engage in ‘parachute projects’ that would benefit myself and the students but do little for the communities in question, and not having the social networks in place that would have helped me to identify real clients, the studios’ were based on real issues and places but hypothetical projects. We therefore worked largely from readings, internet-based research, image collection and analysis, and other similar sources rather than directly with the ‘client’ groups in question.

A challenge associated with this approach was to find ways to humanize the projects’ ‘client’ groups for us all in order to try to avoid a stereotyped view of these groups. In part for this reason, I began to front-load my studios with in-depth research into historical, social, environmental, economic, formal,

aesthetic, technical, and other aspects of the design project. These assignments helped to provide us with broad background in the issues and possibilities and to reveal the diversity within groups labeled as ‘Vietnamese’ or ‘Latino/a’. In the case of the Saigon studios, where two participants were natives of the city, the challenge was to avoid the expectation that these students be seen to speak for all Vietnamese, and thus once again an to avoid an essentialized view of all Vietnamese.

The research assignments also resulted from my evolving pedagogical approach; I began with a sense of obligation to have knowledge and transfer it to the students, and ended seeing it as my role instead to raise relevant questions and learn along with my students – an approach perhaps in line with what Paulo Freire argued was necessary for ‘true’ or ‘liberative’ education.<sup>50</sup> I’ve found that these assignments worked well to ground students’ designs in meaningful rather than arbitrary decisions, be they technical, aesthetic, or otherwise.

Perhaps the most challenging aspect of my experience has been to try to unearth my own biases. For instance, I realized at a certain point that I’d entered the farmworker housing studio with a sort of paternalistic mentality that failed to see the workers’ agency, social organization, and personhood. I suspect this attitude of being tied up in part in the internalized stereotypes of Mexicans that affect, to use Giroux’s words, “even those who appear to have penetrated [their] logic.”<sup>51</sup> As William Anthony Nericcio deftly demonstrates in his cuttingly insightful book *Tex[t]-Mex: Seductive Hallucinations of the “Mexican” in America*, the “Mexican” is commonly “seen” in the United States in terms of simultaneous, contradictory, and largely negative stereotypes that affect even Mexican Americans themselves, not to mention people who see themselves as positive promoters of things Mexican.<sup>52</sup> I do not intend this as a *mea culpa*, but rather as an observation that even inclusive curricula and discursive pedagogy cannot avoid being affected by the complex dynamics of race and ethnicity in broader society.

Despite these challenges, it is absolutely clear to me that my experience teaching these studios has broadened my cultural understanding and sensitivity to issues of race and ethnicity. While I do not have empirical evidence of what these studios meant for students of color, my experience tells me that

multicultural teaching and design studios are quite compatible, even complimentary. Thus, it is my view that multicultural teaching can be effectively integrated into architectural curricula even without dethroning the primacy of the design studio or eroding studios' ability to help students develop the skills necessary for traditional professional practice.

### SOME CONCLUSIONS

While the theoretical research to date and my own experience suggest that schools play a role in the persistent underrepresentation of people of color, it remains unclear how these students experience architectural education, why or why not they choose to pursue architecture as a career, and how big a role schools play. In addition, seen in a global context, this literature raises troubling questions about the ideologies and values architecture schools transmit to students about people of non-Western origins, and thus about their ability to graduate culturally fluent students capable of engaging in international and humanitarian work in ways that do not devalue those they are intended to serve. Thus, while the literature to date provides a useful revised theoretical foundation for multicultural architectural education, it leaves many of questions unresolved, including those identified in the data section above and those I will finish with here:

- What impact does curricular exclusion of the "histories, formal aesthetics, and theories"<sup>53</sup> of people of color have on students of color?
- To what extent does the absence or tenuousness of social ties between mostly white faculty and communities of color work to perpetuate the underrepresentation of people of color in architecture?
- How do barriers to participation vary between and within different racial and ethnic groups, and to what extent do architecture schools play a role?
- Are students of color in fact more likely to favor careers with a social mission?

### ENDNOTES

1 While there are several empirical studies of diversity in architecture, most have either extended conclusions about gender to include people of color, or

have had insufficient data about people of color to draw firm conclusions. See, for example, Kathryn Anthony, *Design Juries on Trial: The Renaissance of the Design Studio* (New York: Van Nostrand Reinhold, 1991), 35 Fig 3-6, 158-161, 163-168, 236; See also Linda N. Groat and Sherry Ahrentzen, "Reconceptualizing Architectural Education for a More Diverse Future: Perceptions and Visions of Architecture Students," *Journal of Architectural Education* 49, no. 3 (February 1996):168; Paul Mark Frederickson's "Gender and Racial Bias in Design Juries," *Journal of Architectural Education* 47, no. 1 (September 1993) provides empirical evidence of racial discrimination in architecture school settings. However, even this data emerged from a study that focused primarily on gender. Given evidence from other fields that the dynamics of gender and race operate in overlapping but differential ways, it seems clear that more research is needed that focuses specifically on students of color. The most concrete evidence regarding race and ethnicity in architectural education to date may be the 2005 study commissioned by the AIA (see following footnote).

2 For a discussion of available sources, see Holland & Knight LLP, Corporate Diversity Counseling Group, for the American Institute of Architects, *Demographic Diversity Audit Final Report* (October 18, 2005): 8-19.

3 This term comes from literature on the so-called STEM fields – science, technology, engineering, and mathematics – where the same phenomenon has been observed. See for example Catherine Hill, Christianne Corbett, & Andresse St. Rose, "Why So Few: Women in Science, Technology, Engineering, and Mathematics," Washington, D.C.: American Association of University Women (2010).

4 The 2010 U.S. Census treats race and Hispanic origin as "two separate and distinct concepts." "Hispanic origin" which like the term Latino refers to "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race," "can be viewed as the heritage, nationality group, lineage, or country of birth of the person or person's parents or ancestors before their arrival in the United States," and is distinct from racial self-identification. One can thus identify as, for example, both white and Hispanic. (See U.S. Department of Commerce, Economics, and Statistics Administration, U.S. Census Department, *Overview of Race and Hispanic Origin: 2010*. U.S. Census Briefs, March 2011, p. 2). NAAB data does not make this distinction and treats Hispanic as a racial category. For the purposes of this study, I have therefore divided the raw numbers of students from the NAAB data into Hispanic and Non-Hispanic categories, eliminated non-resident aliens and persons of unknown race/ethnicity, and recalculated the percentages in order to attempt to achieve a more accurate comparison of the NAAB data to U.S. Census data for the total Hispanic and Non-Hispanic population. I also aggregated the NAAB data for 2009 and 2010 in an attempt to achieve a broader data set. (National Architecture Accrediting Board, Inc., *2009 Report on Accreditation in Architecture Education* (February 2010), 12-13, 15; National Architecture Accrediting Board, Inc., *2010 Report on Accreditation in Architecture Education* (March 2011), 14,19, 22-23.)

5 U.S. Department of Commerce, Economics, and Statistics Administration, U.S. Census Department, *Overview of Race and Hispanic Origin: 2010*. U.S. Census Briefs (March 2011): Tables 1 & 2, p. 4, 6; NAAB, *2009 Report on Accreditation* (February 2010), 12-13, 15; NAAB, *2010 Report on Accreditation* (March 2011), 14, 19, 22-23; U.S. Department of Labor, Bureau of Labor Statistics, *Labor Force Characteristics by Race and Ethnicity 2010*, Report 1032 (August 2011): p. 17, Table 6: Employed people by detailed occupation, race, and Hispanic or Latino ethnicity, 2010 annual averages; See also note 3 above regarding NAAB data.

6 Aggregated data from NAAB, *2009 Report on Accreditation*, (February 2010): 13, 15; and NAAB, *2010 Report on Accreditation*, (March 2011): 19, 22. See also note 3 above regarding NAAB data.

7 Total U.S. Population and Non-Hispanic Population: U.S. Census Department, *Overview of Race and Hispanic Origin: 2010* (March 2011), Tables 1 & 2, p. 4, 6; Persons Employed As Architects: Bureau of Labor Statistics, *Labor Force Characteristics* (August 2011): p. 17, Table 6; Demographic Diversity Audit: Holland & Knight LLP, *Demographic Diversity Audit Final Report* (October 18, 2005): 18; AIA Membership: American Institute of Architects, AIA Diversity and Inclusion Web Page, "Snapshot of AIA Members (as of November 1, 2010)," <http://www.aia.org/about/initiatives/AIAS076703> (Accessed 11 June 2011); NAAB School Data: Aggregated data from NAAB, *2009 Report on Accreditation*, 13, 15; and NAAB, *2010 Report on Accreditation*, 19, 22. See also note 3 above regarding NAAB data.

8 Aggregated data from NAAB, *2009 Report on Accreditation*, 13, 15; and NAAB, *2010 Report on Accreditation*, 19, 22. See also note 3 above regarding NAAB data.; U.S. Census Department, *Overview of Race and Hispanic Origin*, March 2011, Table 2, p. 6.

9 U.S. Census Department, *Overview of Race and Hispanic Origin*, March 2011, Table 2, p. 6; Bureau of Labor Statistics, *Labor Force Characteristics*, August 2011: p. 17, Table 6.

10 As indicated by the U.S. Census definition of the term Hispanic, these data tend to obscure the diversity within broader racial and ethnic categories, thus potentially masking the existence of different barriers facing different groups within them. The 'Hispanic' umbrella term, for example, includes everyone from English-language dominant Hispanics whose ancestors settled in the Southwest before it was part of the United States ("we didn't cross the border, the border crossed us") to first generation Latin American immigrants of indigenous ancestry and primary language. Because each of these groups has distinct histories and sets of language, economic, and other resources, it seems likely that they are affected by different deterrents to participation in architecture. For a good overview of diversity among Hispanics, see Juan Gonzales, *Harvest of Empire: A History of Latinos in America* (New York: Penguin Press, 2000). For a brief and useful discussion of the terms Hispanic and Latino, see Earl Shorris, *Latinos: A Biography of the People* (New York: Avon Press, 1992), xv-xvii.

11 Linda N. Groat and Sherry Ahrentzen, "Reconceptualizing Architectural Education for a More Diverse Future: Perceptions and Visions of Architecture

Students, *Journal of Architectural Education* 49, no. 3 (February 1996): 176-177.

12 Groat & Ahrentzen, 1996: 176-177; Sharon E. Sutton, "Practice, Architects, and Power, *Progressive Architecture* 73, no. 5 (May 1992): 67-68.

13 Linda Groat, "Architecture's Resistance to Diversity: A Matter of Theory as Much as Practice," *Journal of Architectural Education* 47, no. 1 (September 1993): 5.

14 Groat, 1993: 4, 6.

15 Groat, 1993: p. 7, citing Lawrence Cahoon.

16 Groat, 1993: 7.

17 Craig L. Wilkins, *The Aesthetics of Equity*, Minneapolis, University of Minnesota Press, 2006: 42.

18 Wilkins, 2006: 42.

19 Wilkins, 2006: 39; Sutton, "Practice, Architects, and Power", 1992: 65-67.

20 Sutton, 1992: 67.

21 Sutton, 1992: 67.

22 Thomas Dutton, "Design and Studio Pedagogy," *Journal of Architectural Education* 41, no. 1 (Autumn 1987): 17, citing Lindsay Fitzclarence and Henry Giroux.

23 Dutton, 1987: 16-19.

24 There is some empirical evidence that students of color are frustrated by the lack of diversity in architectural teaching. In Holland & Knight's 2005 study for the AIA, "Some minority focus group and interview participants complained of discriminatory experiences in architecture school, but more often minorities complained that the architecture curriculum lacks adequate diversity. Minorities pointed to the conspicuous absence of any instruction on the architecture of diverse cultures or places, beyond Europe, and the lack of exposure to the work of diverse architects, both nationally and internationally, as part of the design curriculum. This subtle indicator signified for many minority participants a greater sense of exclusion of diverse persons and perspectives from architectural practice." Holland & Knight, *Demographic Diversity Audit Final Report* (October 18, 2005): 59.

25 Meltem Ö. Gürel and Kathryn Anthony, "The Canon and the Void: Gender, Race, and Architectural History Texts, *Journal of Architectural Education* 59, no. 3 (February 2006) : 66, 69.

26 Gürel & Anthony, 2006: 66.

27 Gürel & Anthony, 2006: 66, 69.

28 Brad Grant, "Cultural Invisibility: The African American Experience in Architectural Education," in *Voices in Architectural Education: Cultural Politics and Pedagogy*, ed. Thomas A. Dutton (New York: Bergin & Garvey, 1991): 151.

29 Grant, 1991: 151.

30 Grant, 1991: 150.

31 Grant, 1991: 150.

32 Grant, 1991: 150-151.

33 Grant, 1991: 150, 153.

34 Dutton, 1987: 16.

35 Paulo Freire, *Pedagogy of the Oppressed*, (New York: The Continuum International Publishing Group, Inc., 1970/1993): 109, 72; Henry A. Giroux, *Ideology, Culture, and the Process of Schooling* (Philadelphia, Temple University Press, 1981), 130.

36 Freire, 1970/1993: 45-46, 80.

37 Freire, 1970/1993: 81.

38 Giroux defines ideology thusly: "I... reject

outright the orthodox Marxist notion of ideology as a set of illusions or lies. The concept recaptures its critical spirit if it is viewed as a form of social reconstruction. This means that ideology is a set of beliefs, values, and social practices that contain oppositional assumptions about varying elements of social reality, i.e., society, economics, authority, human nature, politics, etc. Moreover, ideology is now seen as a critical view of the world that is value-laden, a view which points to the contradictions and tensions in a society from the perspective of its own world view: i.e., liberalism, communism, socialism, anarchism, and others" (Giroux, *Ideology, Culture, and the Process of Schooling*, 1981: 148, following A. Gouldner, *The Dialectics of Ideology and Technology* (New York, Seabury Press, 1976).

39 Giroux, 1981: 97-98.

40 Giroux, 1981: 97-102.

41 That is, both immigrant youth of Mexican origin and U.S. born Mexican-American youth.

42 Angela Valenzuela, *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*. (Albany, State University of New York Press, 1999): 4-5. See also Giroux, 1981: 97-102.

43 Valenzuela, 1999: 94-95.

44 Valenzuela, 1991: 94.

45 Valenzuela, 1991: 95.

46 Valenzuela, 1991: 4-5.

47 Giroux, *Ideology, Culture, and the Process of Schooling*, 1981: 18.

48 Giroux, 1981: 119-121.

49 See for example Anthony, *Design Juries on Trial* (1991): 158-161, 163-168); Grant, "Cultural Invisibility" (1991); and Dutton, "Design and Studio Pedagogy" (1987):19-25

50 Regina Davis provides a useful example of how the absence of published source information on the contributions of people to the built environment can effect pedagogy. In teaching a multicultural writing course in UC Berkeley's architecture school, Davis and her co-instructor Ken Simmons found that they needed to create new knowledge as a result, which required both students and teachers to adopt unconventional roles; students had to develop their own interpretive frameworks or theories rather than relying on other scholars, and instructors had to become "helpful guides to students' own learning initiatives rather than lecturers on our own narrow, specialized interests" and to "allow students to develop their own sense of value and learning initiatives." Davis's experience and my own therefore seem to confirm prior arguments about how pedagogy and texts can either restrict the architectural discourse or open it up to a culturally inclusive set of voices. See Regina Davis, "Writing Multiculturalism into Architecture Curricula" *Journal of Architectural Education* 47, no. 1 (September 1993), 33, 36.

51 Giroux, *Ideology, Culture, and the Process of Schooling*, 1981: 97-102.

52 William Anthony Nericcio. *Tex[t]-Mex: Seductive Hallucinations of the "Mexican" in America*. (Austin: University of Texas Press, 2007). See for example Nericcio's discussion of Orson Welles and his film *Touch of Evil* (Chapter 1) and Rita Hayworth - a.k.a Margarita Carmen Cansino (Chapter 2). Nericcio's book is potentially particularly relevant to questions of race in architectural discourse given his focus on film, and thus

the visual and aesthetic in the public realm.

53 Grant, "Cultural Invisibility," 1991: 150.