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# The Favored Circle

The Social Foundations of Architectural Distinction

Garry Stevens

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**The Field's New System of Reproduction**

For almost the entirety of its history, the field of architecture has relied on the transmission of symbolic capital through chains of masters and pupils, webs of personal contacts, to reproduce itself. In the early nineteenth century the French state created a new method of reproduction with the formation of a school intended to train architects, the Ecole des Beaux-Arts. Through the next century and a half, the field's reproduction system gradually became embedded in national higher education systems. Figure 5.1 shows this expansion of credentialing in the architectural field. Although an indicator of the educational credentials of the most elite sector of the field, it mirrors the growth in credentialing of the whole.'

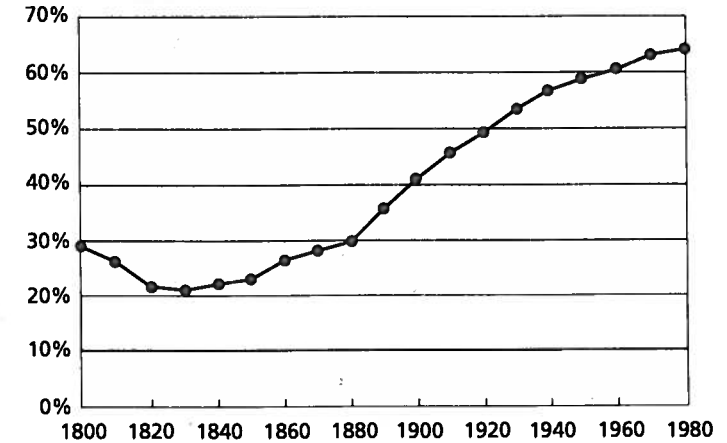


Figure 5.1 Percentage of architects listed in the MEA who attended an educational institution.

The consequences of this have been considerable.<sup>2</sup> The first we may note is the disruption it has caused in the traditional reproduction mechanism. In the last chapter I noted that the cyclic behavior in the changes in numbers of the great architects loses definition in the early twentieth century (see fig. 4.8). It is no coincidence that this occurs a few decades after the rise in credentialed architects that begins in the 1880s.

We can understand the full implications of the institutionalization of the field's system of reproduction by considering the history of architectural education, and reassessing the conventional wisdom about architectural schools and their relations with the occupation and their universities (fig. 5.2). The basic idea is that architecture reproduces itself through a formal system of education that is properly located in universities. The state credentials graduates in the field of architecture, formally certifying them as competent, relying on professional proxies to monitor the quality of educational programs. Apart from teaching, the academics also produce research or scholarship, which informs their teaching and increases the knowledge base of the profession.

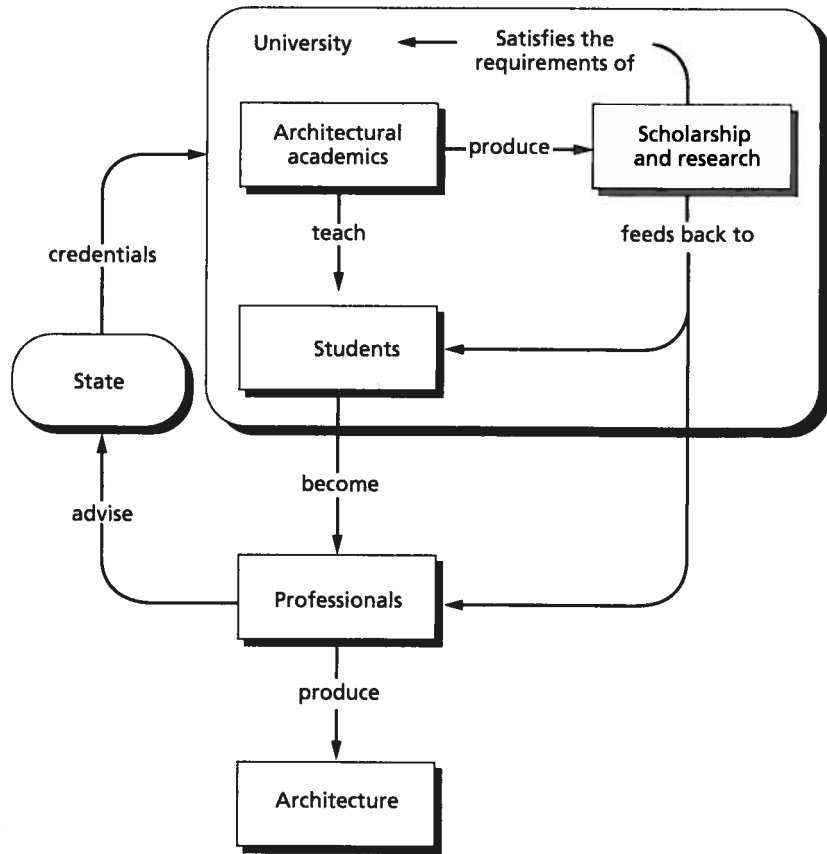


Figure 5.2 The standard model of the relationship between the universities, the schools of architecture, and the body of practitioners. Production and reproduction are united.

The Critique of Architectural Education

Straightforward though this model may be, it cannot be a correct representation of the reality, for it fails to explain why architecture schools should have such fraught relationships with both the occupation and their universities. Neither American nor British practitioners have ever been reticent about criticizing the departments, the fundamental and continuing failure of which is, from their point of view, their sheer and seemingly perverse inability to prepare students for the real world of practice.<sup>3</sup> The studio

Field	Doctoral production	Field	Doctoral production
Chemistry	480	Pharmacy	72
Zoology	217	History	63
Engineering	196	Literature	54
Music	140	Home economics	29
Economics	120	Journalism	15
Social work	117	Art	15
Languages	101	Architecture	11
All disciplines	100	Law	6
Education	79		

Table 5.1 Ratio of doctorates to lower degrees awarded in various fields, compared to the ratio for all fields (average = 100). (Source: S. E. Harris, *A Statistical Portrait of Higher Education* [New York: McGraw-Hill, 1972]. Data is for the United States, 1965–1966.)

system of education is, they say, a fantasy world in which incompetent professors who are the center of petty personality cults encourage bizarrely unrealistic expectations in students, while avoiding the teaching of anything actually to do with the hard realities of life.<sup>4</sup> Students learn nothing of the other activities of the construction industry.<sup>5</sup> They cannot draw and they know nothing of construction. The suggested remedies are usually along the lines of introducing more “pragmatic” subjects such as management and technical courses or, significantly, a partial return to apprenticeship in some form.<sup>6</sup>

There certainly is no problem in finding evidence that architecture is failing to perform like other academic disciplines, whose function is invariably taken to be knowledge production. Table 5.1 shows the production of doctorates compared to lower professional degrees in a variety of fields for the United States. A value of 100 indicates that the field awards doctoral degrees in the same ratio as the higher education system as a whole. If architecture were as research oriented as the average university discipline, it would graduate almost ten times as many doctoral students each year as it actually does. Even home economics, not usually regarded as the most intellectual of areas, produces more. Over the entire period 1920 to 1974 American schools graduated only 56 people with a Ph.D.,

a minuscule figure.<sup>7</sup> Perhaps one quarter of American academics in architecture schools hold a Ph.D., a degree which in other fields is mandatory for even the lowest ranks. Architectural academics do little research; neither they nor the profession find it relevant.<sup>8</sup> Indeed, there is often a positive hostility to the very idea of this most intellectual and academic of activities, for, of course, designing buildings—not publishing papers—increases the architectural academic's symbolic capital. As one architectural academic lamented:

Architectural research survives as an ad hoc phenomenon which is employed when needed, remaining erratic for most subject areas and, in general, unmonitored and uninstitutionalized.<sup>9</sup>

Those in the occupation of architecture certainly regard research as irrelevant or redundant, but one may have expected their academic brethren to take some interest. Not so. Very few architecture departments or schools in the English-speaking world produce scholarly works on a scale considered normal for other university-based disciplines.<sup>10</sup> Bedford and Groak determined that fewer than half of British architectural academics were involved in research, and the proportion is probably about the same for the United States.<sup>11</sup> Much more study of the built environment is done outside the schools than inside, in government research centers and private industry.<sup>12</sup> The research that is conducted in the schools is fragmented and takes place more within particular subdisciplines (environment-behavior studies as a branch of the social sciences, lighting research as a branch of physics, engineering or physiology) than within the architectural milieu—so much so that some have wondered aloud whether there is such a thing as architectural research.<sup>13</sup> This is to be expected, since the actual researchers are only sometimes architects who have decided against becoming designers. Most often they are immigrants from other disciplines, with varying degrees of interest in the core activities of architecture schools. Most architects and many architectural academics would classify all this sort of work as building (not architectural) research, and quite outside their province. They are not at all sure that people without architecture degrees should be in architecture schools at all, and regard with some dismay the open warfare that exists between the supernumerary

scientific (or scientistic) researchers and those who are getting on with the job of teaching future architects.<sup>14</sup> The only area that is unequivocally a legitimate subject for architectural celebration is history, theory, and criticism.<sup>15</sup>

Quality and quantity of research output, usually manifested as academic publication, are among the primary indicators of institutional credibility for universities and for individual academics in all disciplines, save architecture.<sup>16</sup> Juan Pablo Bonta and others have argued that the universities should come to terms with this and accept architecture's peculiar lack of product in this regard, but the universities have tended to see things the other way around.<sup>17</sup> They have difficulty comprehending what the schools mean when they say that "professional service and the application of knowledge . . . together constitute much of the scholarly output of architecture," as the Boyer Report states.<sup>18</sup> These pursuits seem appropriate for practitioners, not academics. Over the past twenty years or so the universities have pressured the schools to come to the academic party and bring in research money, articulate faculty promotion criteria in line with other disciplines, and make an effort to accommodate academic norms and values.<sup>19</sup> No wonder that pressures to conform to university ideals of academe are so stressful to architecture schools.

Why should the schools find themselves derided by the profession and disdained by the universities? Why do they seem to be inadequate in their two crucial functions of *reproduction* (of the profession) and *production* (of intellectual discourse)?<sup>20</sup> Many of the stresses in architectural education arise from the fact that its various elements were drawn from differently structured national fields and placed into the British and American fields out of context. Our current method of giving architects their training at an institution that also conducts systematic research and scholarship in a wide variety of intellectual areas is of quite recent date, the result of synthesizing the educational systems from several countries. From France we have the notion of organized, formal architectural education; from Germany the concept that there is and should be a linkage between teaching and research, and that this occurs in universities; and the two were uneasily synthesized in the United States, where they overlaid an apprenticeship system inherited from Britain.<sup>21</sup>

Britain: Articled Pupilage

We must start with the "natural mode" of education for the Anglo-American system of professions, which is the self-controlling mechanism of apprenticeship or, strictly, pupilage (fig. 5.3). This was a modification of the medieval apprenticeship system. But where an apprentice exchanged his labor for instruction from a master, an articled pupil paid cash to be taught. Probably something like half of all entrants to the occupation were trained through pupilage by 1800, rising very quickly in the opening decades of the nineteenth century to displace other entry points into the occupation, such as through the building trades. Pupilage usually lasted five or six years, and often included attendance at a local arts academy, and perhaps foreign travel.<sup>22</sup>

The field's reproduction function was securely vested in the body of practitioners. The United Kingdom pioneered the concept of professional association which has so structured our whole concept of profession, and these strong associations have always been the organizations primarily responsible for the reproduction of their occupations. The British system of professional education has always been dominated by practitioners, who conduct it in schools that may or may not be associated with universities. Even today such professions as law and accounting conduct most of their training outside universities. As late as 1979 it was not necessary to have a degree to be a barrister, and in the 1950s the English solicitors actually dissociated themselves from the alliance they had formed with the universities a few decades before (they returned in the 1970s).<sup>23</sup> British professions developed as associations of people doing similar work, not, as in Europe, as people with similar state-certified qualifications. The only universities in England in the early nineteenth century, Oxford and Cambridge, regarded the concept of vocational training as repugnant to the whole idea of a university, and were quite content to leave the new professions to educate their own, who were equally happy to develop practice-based training. The new universities evinced only marginally more interest. A few years after its foundation the University of London had two professors of architecture. They gave occasional lectures intended to supplement pupilage, not to offer any sort of substantive education in the discipline.

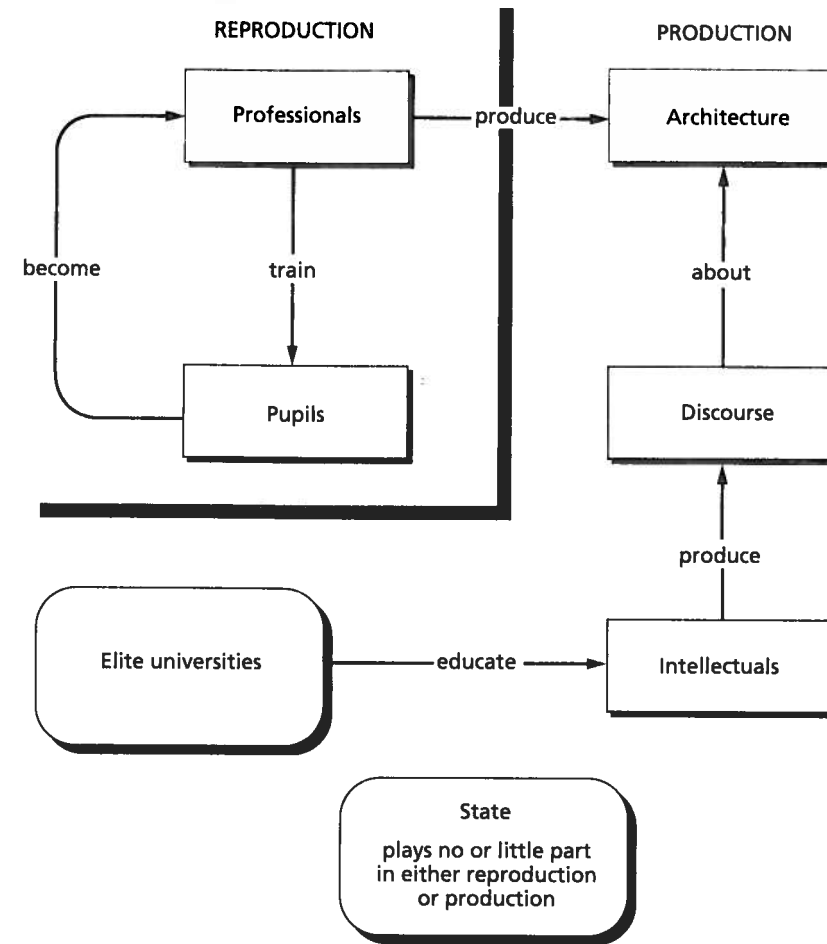


Figure 5.3 The British pupilage model. The body of practitioners handles reproduction, and other intellectuals handle production of discourse.

The system of state certification that existed from the beginning in France and Germany was entirely absent. Certification of competence was instead provided on a de facto basis by observing the competition system of design selection. Competition was a very common means in nineteenth-century Britain for selecting designs. Winning a competition after a few years in pupilage was the rite of passage that denoted that a young architect was competent to practice by him or herself.<sup>24</sup>

The first school in the United Kingdom to offer a structured program of instruction was the Architectural Association (AA), founded by disgruntled architectural assistants in 1847. It was not associated with the newly established University of London and has remained unattached to universities to this day, while maintaining a reputation for excellence and innovation (and avant-garde elitism). The AA educated only a tiny proportion of practitioners through the nineteenth century, and began to offer a full-time course (of four years' duration) only in 1889. Day classes were not offered until 1901. Within a few years the first schools to be housed by universities commenced operation at King's College within the University of London and the University of Liverpool, and more schools were created after the turn of the century.

As more schools were founded the system of articulated pupilage declined, until by the 1920s most architecture students were undergoing some sort of comprehensive formal training. However, few of these were in the higher reaches of academia. When, in the first important discussion on U.K. architectural education since the war (the 1958 Oxford Conference), there was a call to move education into the universities, about 63 percent of all architecture students were at polytechnics or art schools, 22 percent in universities proper, and the rest were working their way through offices.<sup>25</sup> Practitioners still dominated the educational system, however, through the British association of practitioners, the RIBA. Although anyone could call himself an architect prior to the 1931 Architects' Registration Act, after the RIBA instituted examinations for associate membership in the early 1880s, all schools worked toward ensuring their students would pass them. The RIBA granted partial exemption to Liverpool University a decade after its school commenced operation and slowly granted full exemption to the other new schools beginning in the 1920s. At the same time it established visiting boards to monitor the schools. With the Registration Acts the RIBA was granted de facto control over licensure of individuals and credentialing of schools, an iron grip that it holds to this day.

The advantages of apprenticeship as a means of professional reproduction are threefold. First, it allows a fine control of the supply of new practitioners. In boom times firms take on pupils and in slack times let them off. The dictates of the demand side can be responded to very quickly

and supply regulated to satisfy it. In contrast, a school-based system ignores the requirements of the market and replaces them by its own quite independent logic, deriving from the schools' desire to maintain a steady flow of graduates. Second, practitioners define what is to be learnt, and have a better appreciation of the market's need for particular skills.

Third, the full weight of an individual's social capital is best exploited by apprenticeship. The importance of social capital varies, having least effect in those areas requiring formal academic certification, and most in unbureaucratized areas of social space, where the state imposes no rules and makes no tests. Of course, the social capital that can be mobilized by an individual from the upper classes is rather more than that of someone lower down in the class system. When pupilage was at its height in the late nineteenth century, it was noted at the time that English architectural apprentices came from higher strata than in Germany, where architectural education was taught at technical universities.<sup>26</sup>

Apprenticeship allows the well-connected to put their children into the most prestigious firms from the very beginning of their careers—indeed before their careers even begin—providing that most precocious of head starts impossible for the lower-class aspirant who, incapable of *proving* any talent, since he or she has not yet had the chance to show any, cannot and will not be given the opportunity to demonstrate sufficient worth. Apprenticeship also allows the socially privileged the possibility of success through means other than technical competence or creative flair. The history of architectural practice is littered with firms that have succeeded through combining the architectural skills of one partner with the entrepreneurial and social skills of another. One designs, the other courts the wealthy to bring in commissions.

Intellectual production was, in the British model, vested primarily in free-floating intellectuals. Until the middle to late nineteenth century in Europe and the Americas, intellectual life was something that happened outside the universities. The intelligentsia was to be found in the leisured aristocracy, in the bourgeoisie, and in the elite members of the professions.<sup>27</sup> Many of these were educated in the elite universities, but very few were employed by them. The continuous debate about architectural quality was conducted through the writing of articles for the

## The Importance of Social Capital

The possession of social capital is and always has been of the first importance in architecture, an unlvely fact little discussed by practitioners or educators, as in this rare admission by Brendan Gill in his article on Stanford White in the *MEA*:

*That McKim, Mead and White in its prime was the most fashionable firm in town is a fact that can be faced with equanimity. For architecture is an impure art, indissolubly linked to money and to the ways in which money chooses to express itself. Again and again we observe young architects beginning their careers with commissions given to them by wealthy members of their families or by wealthy friends; in some cases, the commissions are among the most substantial they will ever have. One thinks of that New York society figure, James Renwick, designing Grace Church at the age of twenty-six, and William Delano offered the commission for the Walters Art Gallery, in Baltimore, at a similar age, when he was but recently graduated from architecture school and had yet to design so much as a doghouse.*

B. GILL, "Stanford White," in *Macmillan Encyclopedia of Architects*, ed. A. Placzek (New York: Macmillan, 1982), 391.

For more systematic evidence one has only to turn to Williamson's substantial study of famous American architects:

*In the course of examining biographical material in the literature of architecture, I found*

*factors that surfaced with surprising regularity. Family advantage, schools, and social connections—although not unique to architecture—are also important. In fact, it would be naive to overlook the fact that, in most careers, an avid contender for fame or financial success often gains considerable advantage from a social background providing natural contact with power brokers. For architects this means contact with wealthy potential clients and with decision makers, whether they are politically or socially based. A number of famous architects did gain access to clients because of their families' social contacts and because they attended Ivy League schools where their classmates included potential future clients. Others, like Wright, who did not attend those schools, found other ways to reach clients. Wright, for example, not only benefited from his relationship with his uncle and his uncle's congregation, but actively courted his early clients by joining their organizations and activities.*

R. K. WILLIAMSON, *American Architects and the Mechanics of Fame* (Austin: University of Texas Press, 1991), 4.

cultural press, the few architectural journals, books, discussions at meetings of the AIA or RIBA, or personal communication between architects and critics.

### France: The State Certification Model

If British professional education is dominated by practitioners, in France it has always been dominated by the state (fig. 5.4).<sup>28</sup> The Napoleonic reformation of higher education established two defining characteristics of the professions: service for the state, and state-certified academic credentials from one of the elite *grandes écoles*. Private practitioners in the same occupation, and especially those who had trained at other institutions, did not have the status or privileges (and responsibilities) that we would associate with professionals. So, for example, an architect only had to be registered to work on a government building in France: anyone could design buildings for the private sector.

As it evolved through the nineteenth century the higher education system remained, and still remains, strongly vertically stratified. In France, occupations traditionally dependent on graduates from the *grandes écoles*, who are destined for government employment (such as teaching, engineering, and public administration), enjoy much higher status than all the others whose graduates are trained in universities or other institutions. Moreover, the development of new professions through the 1800s to the present did not occur from the bottom up, with people doing similar work banding together and soliciting the state for certification, but rather from the top down, with the state creating institutions to provide specialized training for new occupations. In effect, the state defines the professions in France. The French higher education system is further complicated by the variability in the connection between research and teaching in institutions of higher education. Research is conducted either in the provincial universities, which focus on applied research and research for the various non-state professions they provide vocational training for, or in separate research institutions that are associated with neither the *grandes écoles* nor the universities.<sup>29</sup>

It is no surprise, then, that France invented academicized architectural education with the Ecole des Beaux-Arts. It is here that we see for



are less influential in the international discourse of architectural theory, precisely because there is no unified apparatus that can throw its whole weight behind one theory or another.

Like the *grandes écoles* even today, the Ecole des Beaux-Arts was not an educational organization like modern universities, in which research was a primary mission, systematically carried out by most staff and upper-level students, and expected to filter down into teaching. Prior to the foundation of the University of Berlin, research in Europe had been conceived of as a strictly private undertaking, conducted only by particularly gifted individuals with the private financial means to do so. Scholarly activities right from the Middle Ages to the Enlightenment had been only loosely tied to universities, and most scholarship was conducted outside them. At the Ecole des Beaux Arts, for example, there were only five or so full-time academic staff—the professors—responsible for the strictly optional lectures given to two or three hundred students. The dominant teachers were the patrons, leaders of the twenty or thirty ateliers into which students were organized and which represented the center of their educational lives. Patrons were invariably practicing architects, not individuals dedicated to research in any sense of the word.

Germany: Research Enters the Universities

The link between research and teaching we now accept as fundamental to the mission of universities was first forged in the early 1800s in Prussia, starting with the University of Berlin, in which professors were expected to conduct scholarly research and communicate it to various audiences (fig. 5.5). Throughout the nineteenth century the spread of the German model created a new sort of occupation, that of the researcher working also as a teacher, and the community of scholars and researchers which until then had existed outside the universities moved almost wholly into them.<sup>33</sup>

This research-teaching connection differed from the one prevalent today in Anglo-American higher education in structure and in content. Structurally, the German universities were organized as colleges of professors. Research was carried out in institutes organized as the private domains of the chairs. In typical Teutonic fashion, the chair was regarded as a representative of his or her entire discipline and the workers in the

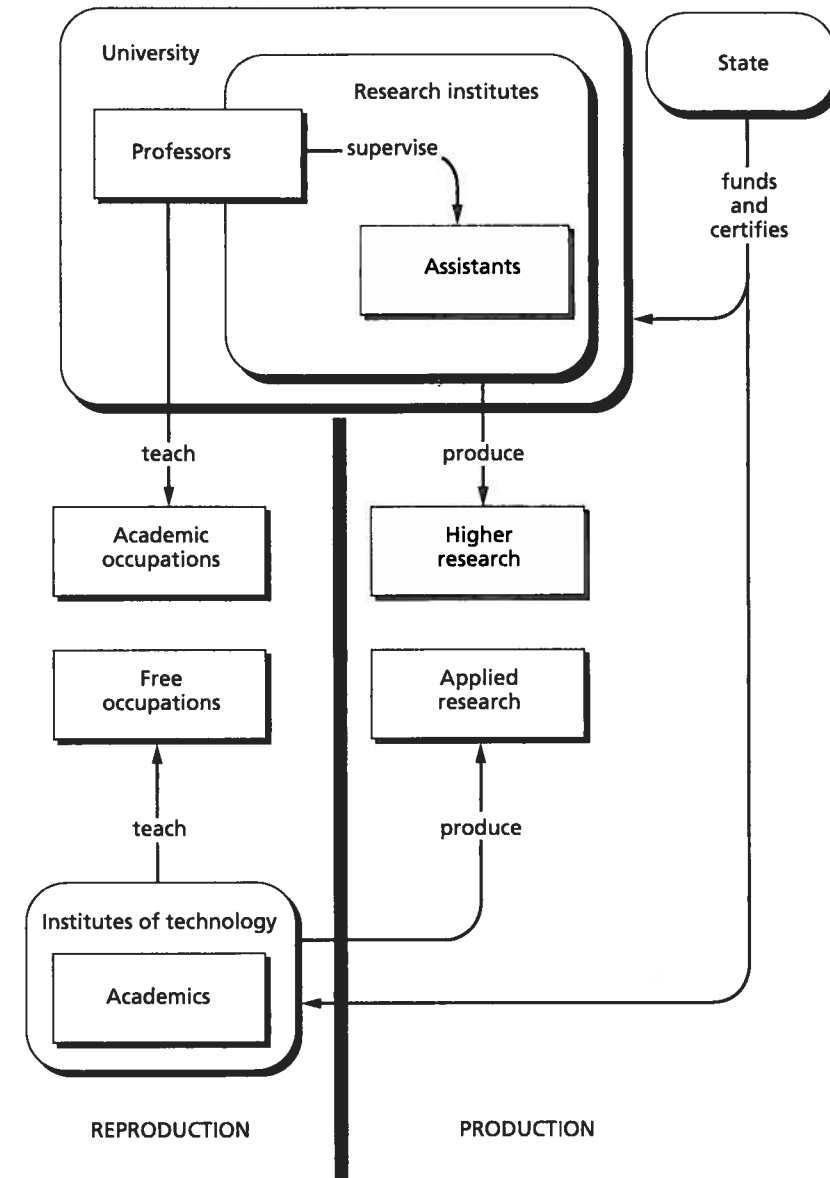


Figure 5.5 The German model of the universities.

institute were more or less assistants, helping the chair to further elaborate the world system he or she had devised.<sup>34</sup> One effect of this organization was that German professors tended to view themselves as academics first, constantly involved with the life and governance of the university, and members of their discipline second. With regard to content, the only sort of research conducted was that connected with the basic mission of the universities—to provide a general, cultivated education—or with the few occupations that required university training: medicine, law, theology, and high school teaching.

German professions arose with the development of powerful civil services in the late eighteenth century, and most in these privileged occupations were employed by the state until the 1850s. As late as 1880 only 42 percent of German architects were in private practice.<sup>35</sup> Unlike France, in which the state tightly controlled all the professions, in Germany the non-university professions (such as engineering, accounting, and dentistry) developed along lines similar to the Anglo-American ones, developing professional associations (in the 1850s, twenty years before the state professions) and later moving into polytechnics, which were transformed into technical universities and granted the right to award degrees around 1900. Architecture was one of the occupations taught in institutions—the polytechnics, or arts and crafts schools—that were not research-driven.

#### The United States: An Uneasy Synthesis

The United States provides a third model besides the practitioner dominated system of professional education of Britain and the state dominated system of France. We must note, first, a significant difference between otherwise similar systems of professions in the two major English-speaking nations. The major differences between the British and American systems of the professions are the much weaker historical continuity and associationalism of the latter. In Britain the archetypal professions of law and medicine have maintained an extraordinary continuity with their medieval forebears, and their powers and privileges are much as they were five hundred years ago. After the American Revolution, the American professions were deprived of state support: throughout the middle of the nineteenth century there was no licensing system for either medicine or

law, and no architect needed to be licensed until Illinois introduced legislation in 1897. Their modern successors were essentially reconstructed in the decades around the turn of the century.<sup>36</sup> Partly because of this discontinuity, partly because of the difficulties of communication and geography, and partly because of the federal-state split of government jurisdiction, American professionals have had substantial difficulties building the sort of powerful associations characteristic among the British. Even the American Medical Association and the American Bar Association, while powerful in American eyes, are weak compared to their British counterparts.<sup>37</sup> In the case of architecture the difference is best seen in the proportion of registered architects who are members of their national professional body: about 66 percent belong to the RIBA and 53 percent to the AIA.

The weakness of professional associations has been critical in shaping professional education in the United States. Prior to the Civil War, American universities were in general modeled on the Oxbridge model, providing a cultivated education and some training for the clergy or teaching. Professional education started in the state land-grant universities of the postwar period, driven not by the demands of practitioners but by the universities themselves. The history of American professional education is one of these universities seizing market opportunities to provide the standardized education each atomized profession was unable to provide itself.<sup>38</sup> Thus, the first architecture schools of the postbellum period were housed in new universities (MIT, Cornell, Illinois), some forty years before their British counterparts. As Gutman noted, the expansion of architects in the United States has been due entirely to the considerable increase in the number of universities offering architectural programs (fig. 5.6) and, as with other professions, practitioners have been able to influence education only indirectly, usually in cooperation with elite schools and through accreditation.<sup>39</sup> The AIA has never exerted the control of professional education that the RIBA does: the National Architectural Accrediting Board, loosely associated with the AIA, only began its work after World War II, while the RIBA was exerting direct de facto control over university schools from their foundation. The most significant effort that the profession made to regulate education was that conducted by the Beaux Arts Institute of Design, which for two or three decades after 1910 successfully dominated education by promulgating and assessing standard design programs

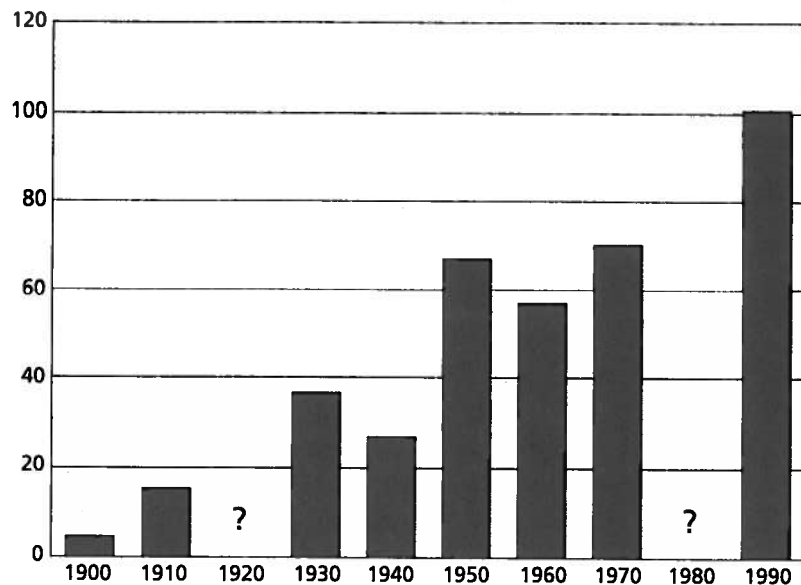


Figure 5.6 Number of U.S. architecture students per million population.

for use in the schools.<sup>40</sup> Even this foundered with the decline of Beaux-Arts classicism and was completely destroyed by the immigration of European modernists into the schools in the years before the war.

American professional education can therefore be characterized as university dominated, as opposed to the British practice dominated or European state dominated systems. When the American universities embraced professional education they were rather different institutions than those we have in the late twentieth century, being either of the Oxbridge type or vocationally oriented. The notion that research was a fundamental mission of a university did not appear until the importation of the German model in the latter part of the nineteenth century, with the creation of Johns Hopkins (1876), Clark (1887), and the University of Chicago (1892).<sup>41</sup> Several important changes were made to this model as it crossed the Atlantic. First, the German chair-institute structure was dropped in favor of a departmental structure. They replaced the German autocratic polymath closely directing the researches of a group of assistants with a more egalitarian

system in which the departmental chair handled administration and finance for a group of academics who more or less set their own intellectual agenda. Second, where the Germans had left applied research to industry or the lower-status polytechnics, the Americans brought it right into the universities.<sup>42</sup> Third, the academics at these universities tended to regard their discipline or profession as their primary milieu, not the university, the reverse of the German case. As Abbott points out, the American professions have maintained a deep ambivalence about university education, for "they were in the university but not of it."<sup>43</sup>

### How the Schools Socialize

The mechanisms for the transmission of symbolic capital from generation to generation are today vested in the architecture schools located in universities. Much has been written about the obvious forms of this capital, the knowledge and skills, but little on the crucially important embodied capitals that are also transmitted through a much less obvious form of inculcation. The importance of the process of inculcation in the educational process depends on the relative worth of intellectual or institutionalized capital vis-à-vis embodied capital. It is of least importance in those fields within which the procedures and processes of production and acquisition of knowledge are objectified in instruments, methods and techniques, and of most importance in those areas where excellence is held to be almost entirely owing to the natural gifts of individuals, their raw talent.

It is clear that in architecture the procedures and processes of design are not at all objectified (as the dismal failure of the Design Methods movement attests)<sup>44</sup> and that architecture, unlike medicine or engineering or even law, requires one not only to know something as to be something; we colloquially call this quality of being "genius." Architectural education is intended to inculcate a certain form of habitus and provide a form of generalized embodied cultural capital, a "cultivated" disposition. Of course young architecture graduates must know how to draw, of course they must understand building codes, the rudiments of structural analysis, the principles of construction; but right from the moment they sit down

at the drawing board of their first office to the day they retire the smoothness or difficulty of their career will be mediated by their habitus acting through their cultural capital. Habitus multiplies educational capital. Those with the right habitus and capital, those with the feel of the game, will find doors open more readily, their peers and superiors come to respect them more easily, clients look more favorably.

In earlier times educators not only readily acknowledged but positively gloried in the fact that architectural education was a cultivated education, intended to instill the appropriate habitus. Writing to parents who sent their sons to board in Paris to attend his revitalized Academy of Architecture in the late 1700s, Jacques-François Blondel reassured them that he would provide for

fencing, music and dancing; exercises to which particular attention is paid, since they should form part of the education of all well-born persons who devote themselves to architecture, and who are destined to live in the best society.<sup>45</sup>

Or, as the AIA Committee on Education so clearly put it in 1906, "An architect is a man of culture, learning and refinement," and the purpose of architectural education "the breeding of gentlemen of refinement."<sup>46</sup> The American Academy in Rome strove to select fellows "among those only who will be recognized as gentlemen by instinct and breeding."<sup>47</sup> It is no longer politic to say such things; but they remain as appropriate a description now as then, as John Morris Dixon observed in the only published statements I have been able to find brave enough to discuss the class origins of architects.<sup>48</sup>

Objectified cultural capital in the form of educational diplomas is only marginally useful in producing cultivated individuals, who are attempting in reality to acquire an embodied form of capital. Architecture schools devalue intellectual capital compared to embodied cultural capital, for intellectual capital is simply not essential to achieve success. In their more sardonic moments some architects see this:

Intelligence, in any absolute sense, is not a major factor in the production of distinguished architecture. Arrogance coupled with a sense of competition and a pleasure in the fashionable and exotic, are much more important.<sup>49</sup>

### Favoring the Favored

By disguising what is actually a social process of selection that favors the privileged with one that appears to be a purely meritocratic academic one favoring nothing but native talent, the architectural education system works to preserve the existing social structure. Its success is often obscured by the fact that some individuals from the lower strata of society do make it through architecture school. Almost anyone could quote examples. Indeed, there are just enough such exceptions to make us believe that the system really is fair. Their prime function is precisely that of making the educational system appear meritocratic when it is not.

The architectural education system achieves its results in several ways:

- The disadvantaged eliminate themselves from architectural education.
- Architecture schools consecrate privilege by ignoring it.
- Schools accept the ideology of giftedness.
- Schools underestimate their inculcation function.
- The studio system favors the cultivated habitus.
- The schools favor those who favor them.

### The Self-Elimination of the Disadvantaged

People try to achieve what they think is possible. Students from disadvantaged backgrounds—those with low economic and cultural capital—self-select themselves out of the system by simply saying to themselves that they have no chance of success. One may see the effect operating within the university system, as students distribute themselves among the various fields on the basis of their current economic and cultural capital, according to their perceptions of how successful they will be in increasing those capitals.

Table 5.2 shows the proportion of entrants to the various Faculties (Schools or Colleges) at my own institution, the University of Sydney, who have attended a private high school. The nature of Australian society is such that attendance at such a school is an indicator of cultural capital. It becomes clear that those areas that reproduce the cultural producers

Field	Deviation (percent)
Music	+42
Law	+35
Visual arts	+30
Architecture	+21
Arts	+18
Economics	+17
Veterinary science	+11
Medicine	+7
Social work	+1
All	0
Science	-2
Engineering	-15
Education	-22
Pharmacy	-32
Dentistry	-43
Nursing	-43

**Table 5.2** Proportion of entrants to the University of Sydney who attended a private high school (expressed as a deviation from the mean for the whole university, by Faculty). (Source: author's analysis of university statistics, 1991-1992.)

(music, visual arts, architecture, other arts) attract those who already have sufficient cultural capital to obtain a good rate of return, while fields for which the possession of cultural capital is less relevant (nursing, dentistry, engineering) attract those without. Data in any form for the United States are very rare: we only have one study thirty years old, which ranked disciplines by the proportion of the senior year from the highest socioeconomic class. Law, medicine, and the humanities attracted the most privileged students (about 70 percent of that year's entrants were upper-class), while the physical sciences, education, and engineering attracted the least (about 45 percent). Unfortunately, the data do not list architecture separately, although the ranking is surprisingly close to my own university, an ocean and thirty years away.<sup>50</sup>

Father's occupation	All University of London students	Bartlett applicants	Bartlett entrants
Management and professional	64	68	78
Clerical	9	29	20
Skilled manual	21	3	2
Unskilled	6	0	0

**Table 5.3** Social class of students at the Bartlett School of Architecture, University of London (percentage of students from each social class). (Source: M. L. J. Abercrombie, S. Hunt, and P. Stringer, *Selection and Academic Performance of Students in a University School of Architecture* [London: Society for Research into Higher Education, 1969].)

Differences between classes manifest themselves most, not in differential rates of *passing* university courses, but of *entering* them. For a specific example we can cite the social origins of students at the University of London entering its Bartlett School of Architecture (table 5.3). We note, as before, the overselection of students from the upper classes into the university as a whole (column 2). Next, the self-selection of students who applied to Bartlett (column 3). Those with the least cultural capital eliminated themselves by not even applying. Finally, the bias of the selection committee in the interview process removed those with middling amounts of capital who had not the grace to remove themselves (column 4). The interview process, indeed, is the most effective mechanism for assessing cultural capital, and the only means for evaluating embodied capital. It is especially common in the more elite institutions, and in those disciplines in which such capital is most important for success.

Consecrating Privilege by Ignoring It

The higher education system as a whole has the essential function of conserving and preserving the culture of society, of passing it down from generation to generation. It is clear that it does not transmit the totality of society's culture. It transmits only those portions that those running the system consider worthy of transmission, the culture of the dominant, euphemized as "liberal education." There are continual debates, of varying vehemence, about just what should be transmitted, but these are internal struggles between intellectuals and academics, none of whom doubt that

there are some things (English, architecture) that should be taught in higher education and others (automobile repair, hairdressing) that should not. No one thinks that everything is worthy of a degree.

By teaching and transmitting just one culture, that of the dominant classes, and by defining excellence and achievement in terms of that culture, the educational system of necessity favors those who have already been inculcated from birth, those for whom the dominant culture is as natural, familiar, and easy as walking. By assuming students are broadly homogeneous—for no one believes they are exactly alike—institutions of higher learning privilege the privileged, simply by ignoring their privilege. By referring generically to “students” it is possible to forget that the experience of university life affects different students differently. Entering university is markedly different for the student for whom university has always been expected as a natural career path, who has many family members with degrees, who has lived with stories of parents’ college days, than for the student who has heard of college life third-hand, who hardly knows what to expect. What a gulf must have existed at the *Ecole des Beaux-Arts* between those from architectural families and the rest when “an architect’s son [in choosing an atelier] would listen to his father’s advice following the latter’s personal inclination, inquiries or past loyalties.”<sup>51</sup> And how must lower-income students in one contemporary U.S. architecture school have felt when another student, being praised for her design in a jury session, was told that she “had demonstrated an understanding of Roman urban planning, and clearly had spent time in Europe . . .”?<sup>52</sup>

Students can have the same practices without experiencing them as the same. To say that two students have part-time jobs as sales clerks in a store disguises the distinctions between the privileged student working for extra pocket money in the most up-market department store in town and the lower-class one at a supermarket checkout who must work to live.<sup>53</sup> To say that the architect’s daughter and the construction worker’s son are both keen photographers conceals the fact that with this same practice the former prepares herself for her chosen profession by carefully photographing interesting buildings, while the latter memorializes a personal history—birthdays, weddings, graduations, the important moments in the life of family and friends.

It is in this light that one can interpret an incident at my own school at Sydney some years ago. A new faculty member, an eminent and successful architect on the national scene, wanted to start the academic year with a celebration that would be both entertaining and instructive. The event was a daylong series of talks and exercises for the entire student body, physically and metaphorically centered around his firm’s eighteen-foot skiff, which he had assembled in the architecture school’s courtyard. His intention was to use the skiff as an example of excellence in design, of the highest craftsmanship, of subtlety and beauty of form, yet perfectly functional, as this sort of yacht is widely used for amateur racing.

The differential symbolic effect this had on the students was unintended. Sailing on the harbor is one of the favorite pursuits of Sydney’s elites, among whom must be counted the better-off of the city’s architects. Many architecture firms have their own boats, the favorite of which is the eighteen-foot skiff. For many years there has been an annual architectural racing competition, and participation in that event is a sign that one’s firm has made it. Almost all the students from privileged backgrounds would have had sailing experience, and many of their families would have owned such a skiff. To them, sailing was a perfectly everyday pastime, and the professor’s use of the boat as an exemplar of design was an implicit affirmation of the quality of that recreation, a comforting confirmation of the match between their cultural capital and that required for the profession. To students from lower-middle-class backgrounds the skiff was a novelty that made them uneasy. In a manner more potent and effective than mere words could have done, the cultural capital of architecture was identified with unknown experiences, and their own lack of familiarity and ease with yachting labeled them prepared, less familiar with that culture, and less acceptable as would-be entrants to the profession.

Those from the most privileged backgrounds must have been pleased to receive the syllabus quoted below, for a course in the Faculty of Architecture at the University of Sydney, which elevated their own calling and reaffirmed their superiority to others:

With a dozen students to present class papers over a period of eight weeks, and given the necessity to allow time for producing the written version before I leave Sydney about September 24 (I am

booked to teach permaculture in Nepal), we shall have to start the student-presented seminars very soon.

...

I work on the assumption that Architecture students do not do things just for the marks either; that may be possible for students of Accountancy or Dentistry or even Engineering, but not for Architecture.<sup>54</sup>

#### Accepting the Ideology of Giftedness

Success, of course, depends on having some sort of talent and skill in the occupation of choice. In different degrees in different fields, success also depends on the ease with which one can acquire the culture offered by the educational system. Those with a habitus that predisposes them to play the game they have chosen to enter, and to love to play that game, will do better than those without. Students from cultured families, especially from families with heavy investments in artistic or architectural cultural capital, come to school with a habitus ready-made for reception of the peculiar education that is architecture. Such students appear to be naturally gifted, but this natural gift is—as well as being a talent—also the feel for the game that their habitus provides them, a “naturally natural naturality” that impresses all who see it as a natural ease, grace, style, and confidence. Those who say they are “born to be architects” truly are, but not in the way that the speakers intend.

The notion that one is born with natural talents completely independent of the privilege of being privileged by one’s social class, is the ideology of giftedness, and in no field is this belief more strongly held than in art and architecture. No individuals confident of their own giftedness can accept the unpalatable idea that their giftedness owes as much to the unchosen determination of their own social milieu as to their own undetermined choosing, as Bourdieu puts it. If this ideology were true, then one would expect to find some sort of commonality to the psychologies of creative artists or architects and, conversely, no commonality to their social origins. Precisely the opposite is the case. The lack of a common psychology in architecture students has quite defeated the many attempts of researchers to devise selection procedures superior to the hodgepodge now operating in the world’s schools, as I pointed out in chapter 1. If the analysis presented here is correct, then researchers should really be looking for students from families with high cultural capital. Per-

haps such a criterion, which, it is believed, could not possibly lie behind the creative success of the young architect-to-be, would be as repugnant to the schools as its discovery was disheartening to two psychologists in their study of young artists:

The data make clear that, to achieve success as an artist, it helps to come from a well-to-do, educated, higher status family. (This is a disillusioning thought. One would like to believe that, at least in art, money and status play no part in determining success.)<sup>55</sup>

Researchers have been reluctant to acknowledge the implications of their own findings, politely declining to look behind the individual to the symbolic wealth sustaining him or her. The psychologist Donald Mac-

## Natural Grace

Baldassare Castiglione understood the importance of natural grace, of the “air of good breeding,” when, writing five hundred years ago, he said that a courtier must be

*endowed by nature not only with talent and with beauty of countenance and person, but with that certain grace which we call an “air,” which shall make him at first sight pleasing and lovable to all who see him; and let this be an adornment informing and attending all his actions, giving the promise outwardly that such a one is worthy of the company and the favor of every great lord. . . . The Courtier must accompany his actions, his gestures, his habits, in short his every movement, with grace. And it strikes me that you require this in everything as that seasoning without which all the other properties and good qualities*

*would be of little worth. And I truly believe that everyone would easily let himself be persuaded of this, because, by the very meaning of the word, it can be said that he who has grace finds grace. But since you have said that this is often a gift of nature and the heavens, and that, even if it is not quite perfect, it can be much increased by care and industry, those men who are born fortunate and as rich in such treasure as some we know have little need, it seems to me, of any teacher in this, because such benign favor from heaven lifts them, almost in spite of themselves, higher than they themselves had desired, and makes them not only pleasing but admirable to everyone.*

B. CASTIGLIONE, *The Book of the Courtier*, trans. C. S. Singleton (New York: Anchor, 1959 [1528]), 30, 41.

Kinnon, mentioned in chapter 1, found that almost without exception, all his most creative architects came from families with high cultural capital, but was not interested in pursuing this most obvious of indicators.

#### Schools Ignore Their Inculcation Function

Educators talk about how students are socialized into "architectural culture," usually in disparaging tones, as though it were some incidental side effect, or is easily rectified by simply not teaching students certain things. The process of inculcation, I have argued, is no mere epiphenomenon, but an integral part of architectural education. This process operates at a much deeper level than is implied in the notion of a hidden curriculum. One cannot manifest cultivation by knowing, but by being. All the subtle signs of cultivation—accent, manners, deportment, bearing, dress, attitudes, tastes, dispositions—cannot be obtained second-hand. They must be slowly absorbed from those who are already cultivated. The importance of cultivation lies precisely in the fact that it cannot be picked up easily. If it were readily obtained, by simply reading a few books or attending a few lectures, it would not have the value it does. Its acquisition is essentially a matter of directly experiencing it, of soaking up all the many small things it comprises. Nor can its content be enumerated. No book can tell you that cultivation consists of *x*, *y*, or *z*. This sort of cultural capital exists in the tacit qualities of individuals.<sup>56</sup> As Alberti said:

There is no one even slightly imbued with letters who does not in his leisure conceive the hope that he will soon become a great orator, even if he has only seen the face of eloquence at a distance. But, when he realizes that mastery of this art involves more difficulty than he drowsily thought, he strives toward this goal by reading every available book, as if we could acquire our style from books alone, rather than by our own intense efforts.<sup>57</sup>

A more recent statement in almost exactly the same terms can be found in this one by Paul Cret, who wrote in 1934 of his school at the University of Pennsylvania:

All education in Fine Arts . . . has for its main object the development of the artist's personality. A consequence is that such a result can be accomplished only through personal effort and not through a perusal of textbooks.<sup>58</sup>

This is the crux of the matter: the cultivated habitus cannot be acquired through labored study. That is the way of the pedant, the plodder. One must have not only the right culture, but the right relationship to that culture, and that relationship depends on how the culture was acquired.<sup>59</sup> The dominant definition of the right way to acquire culture is by direct experience, upon actually being there. Does not every architecture student aspire one day to make the Grand Tour, the leisured journey, the pilgrimage, to actually see and experience the sacred sites of architecture? As the architectural historian Spiro Kostoff wrote on the virtues of architectural education:

There is no substitute for the experience of travel that opens the eye and builds up a storehouse of impressions. . . . And beyond that comes life and learning. We understand the needs of others to the extent that we have insisted on a full life for ourselves; we can provide for the settings of social institutions to the extent that we have been broadly educated, broadly read, given the wherewithal to reflect on the course of human affairs and to scan the reaches of human achievement.<sup>60</sup>

As a means of producing a specific, cultivated habitus, architectural culture can only be inculcated in a certain way. Bourdieu distinguishes between a *scholastic* and a *charismatic* mode of inculcation.<sup>61</sup> The scholastic mode is what we normally recognize as pedagogy, the formal and explicit teaching of formal and explicit knowledge and skills. The charismatic mode is the informal and implicit method of inculcation which is, Bourdieu argues, the only possible means of transferring embodied cultural capital. The former is intended to produce knowing, the latter being. Hence the strong identification between work and person, so common in architectural design, which this anecdote illustrates:

One day a professor approached for a mid-project desk crit and pointed to the model I had constructed. . . . "Is this you?" he asked. Hoping to build a casual rapport with this rather stern young teacher, I responded jokingly, pointing to myself, "No, no this is me," then to the model, "This is my model." "No!" he replied firmly, putting his hand on my model, "This is you and this is shit!" It was an incredible high when the unity between self and work brought us praise, but quite devastating when our efforts were insulted.<sup>62</sup>



Lecture courses play only a small part in this process, and then only some courses. Subject areas in architecture are strongly stratified, with design by far the most honored. If we were to construct a hierarchy of curricular prestige it would correspond more or less to the degree to which the course can utilize the student's cultural capital. Design, history, and theory would be at the top, and environmental science, structures, and building services at the bottom. When students protest that courses are not relevant, quite often they are simply protesting courses whose examination prevents them from displaying their cultivation. The hierarchy of curricular prestige corresponds more or less to the social hierarchy of students, those with most cultural capital doing best in the most prestigious subjects, and hence attempts to overturn the former meet with resistance from the student body.

The loudest objections to non-design-oriented courses will come from the most cultivated within the student body. They believe most strongly in the ideology of giftedness, and most strongly in their own gift, judging themselves indulgently at every point. So they will dismiss a low mark in a design project by blaming the marker's inability to perceive their gift and its manifestation in their design. Such a rationalization is possible in design studio, an area renowned for contentious assessment, but impossible in the cut-and-dried world of structures or mathematics. The privileged therefore treat with contempt those areas they consider mundane, those in which flair is irrelevant.

The design studio is the site par excellence for the operation of a charismatic mode of inculcation. It is no happy accident that the studio system has been at the very heart of architectural education throughout its entire history. The studio system is essential for socializing students with a cultivated habitus. As the architectural academic Kathryn Anthony points out, the studio provides a very peculiar form of education.<sup>63</sup> In conventional university education, students sit in anonymous lectures for a few hours a week, work alone, and benefit from little collaboration with other students or academics, who must be actively sought for assistance. Examinations take the form of written documents, and are conducted in private. Design students are surrounded by their peers for many hours a week, often relying on them for assistance. The studio-master will actively seek

them out to provide criticism, and examination is public and by oral presentation.

The student cannot present nor the teacher assess embodied capital by the usual university means of lecture and written examination. Taste and cultivation cannot possibly be determined by multiple-choice questions. Only face-to-face contact and immediate, personal experience can do that; allowing the examiner to distinguish by all the subtle signs of body language, dress, demeanor, poise, and linguistic fluency the suitability of the examined. The point is worth reiterating: *if taste and cultivation were capable of objectification they would not have the value they do.* Difficulty in acquisition and assessment *in person of the person* are essential and defining characteristics. No doubt this explains the riots that broke out in the old Ecole des Beaux-Arts when the government tried to make the Ecole's own lecture courses compulsory. The government backed down soon enough, and the architecture students happily resumed their old practices of ignoring lectures for the ateliers.<sup>64</sup>

By saturating students with the objects of architectural culture; by presenting them with role models, living examples of embodied cultural capital (hence the insistence on the importance of having practicing architects as teachers); by displaying in all the slight ways of manner, dress, and taste that one is becoming what one wishes to be, students absorb cultural capital in the only possible way, by presenting to the studio-master's gaze their whole social being. Witness the studied manner of the studio-master, played out by the avant-garde architect Bernard Tschumi, who presented himself to at least one audience as the very embodiment of embodied capital:

Bernard Tschumi, too, had the air of a man who'd backed the only horse in the race. He boasted a more Parisian demeanour than anyone else at the symposium. Derrida included, lecturing in the sort of scarf that forty years ago existentialists thought in, and employing the low murmur of interiority, broken by sudden impositions of assertion, that is post-structuralism's ideal mode. If I heard right, we were witnessing a "terminal crisis of the referrant." There were no boundaries; "we inhabit a fractured space made of accidents." Anything less accidental than Bernard Tschumi, the fall of his suit, the toss of his scarf, the stylised drone of his

delivery set to a slide of our starry, unpurposed universe which we viewed in a darkened auditorium, I found it difficult to imagine.<sup>65</sup>

The ever-present dangers of contamination are minimized by socially isolating students from peers in other disciplines and even from family:

The prolonged, intense interaction across an academic term can result in a familial atmosphere—with the best and worse aspects of family life manifested on a day-to-day basis. The intense contact with studio-mates often makes it difficult for design students to maintain their friendships with those in other years. As many students have admitted, the more years they spend in design, the fewer nondesign students they have as friends. Cloistered into the captivity of the studio, the studio commands an increasingly greater role as the center of students' social lives, and consequently the world outside the studio becomes less important.<sup>66</sup>

This form of internment produces a socially and mentally homogeneous set of individuals whose homogeneity reinforces the socialization process and the closure of social capital, limiting the chances of misalliances and laying the foundations for future patterns of cooperation in later career.<sup>67</sup> Insisting that all their faculty have a professional degree in architecture, the schools also intellectually isolate their students. Within the schools this isolation is exacerbated by denigrating lecture courses, and failing to set reading, except for those purely architectural influences the studio-master wishes students to absorb. As Anthony reports one student saying:

Architecture school was like boot camp: twelve hours a day seven days a week in basic design. . . . In retrospect it was the beginning of a major shift in my education—a totally anti-intellectual period in my life. I can honestly say I hardly read a book in my three years of architecture school. . . . Every minute, I was being made to feel like a first-grader. . . . My first design instructor was a bit like a drill sergeant. You're more or less being broken.<sup>68</sup>

The Studio System Favors the Cultivated Habitus

One can succeed more easily if one is already halfway successful. The design studio, by relying so much on the presentation of the self to those who will assess the self, favors those who come to architecture already

knowing some of the strategies of the game of culture. The natural grace, the feel of the game, which those from cultured—and especially architectural—families possess, makes them far better prepared to cope with the peculiarities of the language of design. Consider these examples:

The language of the professor has an inherent logistical [sic] problem: it is vague. The ambiguity of the professor's language renders the student unable to discern good from bad, to get a sense of value of their own or someone else's work.<sup>69</sup>

There is little effective communication of ideas in juries. Tangential remarks are difficult to apply. The level of abstraction, vague language and allusions, elliptical discourse, and often denigrating commentary are barriers to drawing anything useful from the juror's response.<sup>70</sup>

It is obvious that talent in design is necessary for success in design. It is less obvious that talent in talking about design is also required. The studio system requires students to spend a great deal of time talking about their design, talking to other students, talking to professors at desk crits, and, of course, talking at jury presentations. Students from cultured families have already acquired the basic dispositions required to further their symbolic mastery of architectural language. They already know how to talk and manipulate culture, and most important, they already have a visceral feel for the nature of the game they are playing. This may also explain the never-ending calls for "integration," by which is generally meant moving everything into the studio, transforming performance in the most objectified areas of architecture (construction, structures, etc., where possession of symbolic capital counts least), into assessments of social being. In effect, this denies those with the wrong sort of cultural capital even the least chance of asserting their competence in some area of architecture.<sup>71</sup>

The Schools Favor Those Who Favor Them

All processes of enculturation must accomplish two things: first, successfully enculturate; second, remove those who will not be enculturated. The objective is to produce individuals who want to play the game of choice (whether it be architecture or law or engineering or whatever), to take pleasure in the game, to believe in the innate rightness of the game, and

to believe that hardships endured now are but necessary steps on the path to election hereafter.<sup>72</sup> The enculturation process is most clearly seen operating in the change of dress and manner students undergo throughout their time in school. This is no mere transition from adolescence to adulthood. As I have observed it in my own school over many years, students become more alike in dress, taste, and deportment: they become more homogeneous.

Within the educational system students are kept in a more or less tame state, varying from place to place, time to time, and discipline to discipline. In disciplines in which authority is lodged outside the individual (such as the physical sciences or engineering), where criteria of excellence have been incorporated into objects, techniques, or instruments that can, it is thought, speak for themselves, the enculturation process need no more than point to these externalities for legitimation to quiet the fractious. In those areas, such as architecture, where excellence is embodied in individuals, the system adopts other means to convince all of the worth of the game, and to make students love to play the game.

The means used in architectural education to enforce this state of docile acceptance is by keeping students in a permanent state of insecure expectation. In the old *Ecole des Beaux-Arts* a particularly effective means of doing so was to allow students an indefinite period to complete their studies. Whatever other virtues it may have had, this held out to all the possibility that success could come next year if not this, if only a little more work were done, if only the game were played a little better.

Financial, legal, and institutional pressures have removed this mechanism from most places, although it is still in use at non-university elite schools. Today there are three ways to ensure docility. The first is by the control of students' time.<sup>73</sup> Design studio may represent some 70 percent of their credit-hours, but it consumes 90 percent of their time. The number of nights without sleep becomes a currency of great symbolic worth, a currency of devotion, whereby they demonstrate to the studio-master that they are coming to love the game. The second is with the use of vague, allusive, and elusive language in the design studio, which requires students to struggle to wring meaning, to worry about whether they have understood, frantically to hope they will please:

Anyways, we would be working in the studio, designing swimming pools (which our professor called "negative volumetric spaces"). This professor would walk around the studio as we worked, pausing before each student's drawings to say "the . . . space . . . it lacks . . . the purpose of essence . . . in its own idea of . . . limitation . . . but within the constructs of the idea of . . . space within . . . time . . . it reflects . . . conscience . . ." and he would look off into space for a while in silence and then just wander off. Behind him came the assistant professor who would whisper to us "You should make that line heavier, clean up those eraser marks, and redraw that curve there." It was a curious mix of the ephemeral with the practical.<sup>74</sup>

Throughout the year, we had each been responsible for presenting a historical outline and drawings of landmark buildings by a handful of "master architects" . . . I generally liked the house I worked on . . . but I could not isolate what made it good, or in advance of its time. To me, many of the other examples were as confusing. When the teachers gave clear identification of what they valued about these masterworks, we took what they said as gospel and stored it in our nervous minds.<sup>75</sup>

The third way to instill a sense of obedient acceptance is to encourage intense competition between individuals. The notion of competition—between individuals, between schools, between firms—is one of the enduring values of architecture. At the *Ecole*, competition was lauded as a virtue in itself, and progress was made by success in competition. Kathryn Anthony has documented in detail the necessary rigors that competition imposes on students: sleepless nights, stress, and anxiety.<sup>76</sup> Competition creates a whole symbolic market whereby students can show their dedication to the game. By atomizing the student body the studio system obliges students to play a serious game seriously, to realize that they play the game against others, and to devote their energies to the playing rather than to questioning the rules. The disciplines, ordeals, and vexations of studio competition—most especially in those competitions where there can only be one winner, as in the world of practice—demand from students a specific acquiescence and in particular a special form of acceptance.<sup>77</sup> By constantly competing for approbation and for approval, students can display to their teachers their desire for and acceptance of the game of architecture.

### Longevity of the Studio System

The singular opportunities that the studio system provides the architecture student for acquiring and displaying a habitus must explain its longevity in architectural education. It is much the same as it was almost two hundred years ago when the Ecole des Beaux-Arts was founded. Prior to the foundation of the state French engineering school, the Ecole Polytechnique, both architecture and engineering had been taught by practitioners to small groups of students. If some theoretical instruction was needed, it was provided by a professor or a senior student on an ad hoc basis. The primary teaching site was the atelier, while formal lecturing remained separate from and marginal to the main process.

In the early years of the nineteenth century the founders of the Ecole Polytechnique devised a new method of pedagogy. The Polytechnique introduced the idea of having academics teach general theoretical subjects such as mathematics and mechanics for several years before introducing students to specialist knowledge in one or another branch of engineering. The school also introduced the now standard pedagogical technique of the lecture to a large number of students. Interspersed with the lectures were laboratories taken by subgroups of the whole working under a tutor.<sup>78</sup>

These techniques have become standard in the world's universities for many disciplines. One of the interesting aspects of architectural education is that it retains at its heart the rather older methods that the Polytechnique abandoned, but which were preserved by the Ecole des Beaux-Arts and passed down to modern American schools. One still hears the terminology of Paris from two hundred years ago—*esquisse*, *charrette*, *jury*. The other anglophone nations have been less beguiled, but even so they maintain the studio system as the unquestioned heart of architectural education.

### Architecture as a Discipline

Let us now consider the field's production function, that is, the way it generates intellectual discourse. This is the responsibility of the *discipline* of architecture, the object of university administrations' despair and other academics' contempt. No great labor is required to unearth an article in

the academic press that excoriates architecture for its failings as a discipline. Amos Rapoport's invited piece for the jubilee issue of one of the profession's most prestigious journals, the *Journal of Architectural Education*, can be taken as typical.<sup>79</sup> He bases his attack on the grounds that architecture has failed in its mission, which is the creation of environments for users: "The only justification for architecture as a profession is in providing better environments for people." To succeed in this, he argues, requires the development of a discipline-based profession. He remarks that the search for well-founded reliable knowledge "is precisely what a discipline is all about," and that architecture has made no attempt to develop such knowledge. Describing his own area of environment-behavior studies he amplifies his concept of what a discipline is:

It tries to build explanatory theory without which normative statements are impossible. It is committed to rationality and reason, to explicit goals based on knowledge, goals which can be tested and refuted if wrong; in this way it is committed to the creation of a self-correcting discipline on which the professional/practice side must be firmly based.<sup>80</sup>

That this task is not as simple as Rapoport would have us believe may be gleaned from the fact that even to the individuals whom one would most readily identify as being its members—academics—it is not entirely clear if there actually exists a discipline of architecture, or just what architecture is. Rapoport complains that architecture's problem is precisely that there is no discipline worth the name, but that if there were one, its function would be to help architects do their job of creating decent environments for the users of buildings. As well as specifying its proper content he determines the discipline's form: it should resemble one of the social sciences. Others feel that there is no single discipline called "architecture" but a collection of intersecting research communities whose work feeds back mainly to their parent disciplines.<sup>81</sup> Some have wondered aloud whether there is anything to architectural research that is not building research, noting that the latter is not of much interest to architects.<sup>82</sup>

Other authors have made a case for the affirmative, that there is a discipline of architecture. One academic felt he had to spend several paragraphs convincing the reader of its existence and proceeded to define its concerns as the theories of what architects do and how they explained

what they did.<sup>83</sup> Royston Landau, a historian and critic, also decided that the articulation and study of theories of architectural action was the proper focus of the discipline, defining it as essentially a historical and philosophical enterprise à la Foucault.<sup>84</sup> Linda Groat's conclusion, arrived at by quite a different route, is strikingly similar in arguing for studying architecture as a cultural process.<sup>85</sup> Both Landau and Groat argue that the heart of the matter is architectural culture, understood as consisting of architects and their audiences, a collection of individuals and discourses about them.

#### The Discipline in the Field

It is important to acknowledge that the field of architecture is much larger than the discipline of the same name.<sup>86</sup> Nor is the discipline wholly contained within the field. Members of the discipline are also members of the field of education, which commits them to teach, and to produce scholarship or research, not to just produce buildings. That is, disciplinarians must generate some sort of intellectual product. Many members of the *field* of literature write, producing novels, stories, poems, and plays. Members of the *discipline* of literary studies need not have written a work of fiction in their lives, but they must have produced some critical work about literature. Just so in architecture, as many architectural critics have never designed a building themselves.

Further, the discipline is not at all the same as the profession, and membership of the two only partly overlaps. The profession is full of people producing architecture, while the discipline is mainly filled with people who talk about architecture. The discipline is a second-order activity, a pursuit wholly dependent on the existence of architectural producers. *The central function of the discipline of architecture is to provide the intellectual instruments by which "architecture" is valorized. Discourse about these instruments constitutes the primary symbolic capital of the discipline.*

The nature of the particular intellectual instruments so devised—that is, the *content* of the discipline—is not of interest here. We can simply note in passing that all the instruments are arbitrary in that they could be other than they are, provided they served to convince others that certain parts of the built environment are good and great, and others are not. So,

for example, in the Middle Ages one simply appealed to Platonic number theory to justify built form. Vitruvius was enlisted in the Renaissance and a more refined numerological mysticism introduced. Thence to the end of the nineteenth century architects fell back on an explicit declaration that some people—that is, they—had innately better taste than others, and that was that. Eighty years ago one talked about function. The content of the justification is irrelevant, as long as one can persuade the rest of the field that it is the right justification.

#### Structure of the Discipline

Architecture differs in several fundamental ways from disciplines such as the sciences. For those that have become most entrenched in universities, such as physics or sociology, the schools provide three important structures: an intellectual market of symbolic capital; a system of production of "knowledge" or "scholarship"; and a system to reproduce members of the discipline. The unification of these structures is most complete in the fully institutionalized disciplines, and least so in those at the other end of the continuum. So, for example, many physicists are employed in universities or associated research centers, and the discipline is firmly centered on these academic units. Academic departments reproduce physicists, employ physicists, and produce physics. Academic scientists produce their science in their capacity as academics. A scientist who stops producing science and starts talking about science is held to have moved into another area (such as history and philosophy of science). There is a very clear disjunction between doing science and producing discourse about it.

None of these things is true of architecture. Academic departments of architecture produce only a fraction of the total discourse of architecture, unlike their colleagues in the sciences. Similarly, chemistry departments, for example, are dedicated to producing members of the *discipline* of chemistry, whereas architecture departments are not committed to producing members of the discipline. Instead, they produce members of the *occupation*, architects. Further, while science departments produce science, architecture departments rarely produce architecture, but instead talk about architecture. When architectural academics design buildings,

they do so in their capacity as members of a design firm quite distinct from their university department.

Architecture is clearly not nearly as academicized as physics or chemistry or the other natural sciences. At most two percent of American architects are employed as full-time academics, and the figure is probably rather closer to one percent.<sup>87</sup> Between ten and fifteen percent of American scientists are so employed.<sup>88</sup> Whether one takes the proportional difference as five or fifteen times, it is clear that a significantly higher proportion of scientists is embedded in academe compared to architects. Not at all surprising, but it does drive home the point that this necessarily gives the discipline of architecture a different character than that of any of the sciences. Academics exercise far less power in the field compared to those in other disciplines.

Universities employ only a proportion of those who would consider themselves members of the discipline. A large number of disciplinarians work as media critics, in galleries, museums, in the private sector, historical conservation, and in various cultural organizations that contribute to the work of the area. We may take the membership of the Society of Architectural Historians as an indicator: about a third are academics, a little less than a third are practicing architects, and most of the rest are working in historic preservation.<sup>89</sup>

A small fraction of practitioners would also consider themselves intellectual producers, but even if this amounted to only one percent of the professionals it would constitute a body of similar size to the academics. University-employed academics carry little clout in the discipline. As a result, the universities are not consecrating institutions in the way that they are for other disciplines. In other fields an authoritative opinion is sought from an eminent academic, whereas in architecture the equivalent authority is granted to, say, the critics of the *New York Times* or *Architectural Review*.

The importance of this lies in the fact that as a consequence the discipline of architecture is rather less affected by influences from other scholastically dominated disciplines and their academics. The scholastic virtues that the corporate university attempts to enforce on all its members are brought to bear on only a fraction of the members of the architectural discipline. Perhaps architectural publishing provides the best examples.

In the sciences, most journals are edited by academics and produced by academic presses. Papers are usually unsolicited, and blind-refereed by anonymous reviewers. The aim, whether it succeeds or not, is to remove personal bias from the process. The assumption, whether it is valid or not, is that a scientist's peers have the right to pass judgment on their fellows' work, and to determine what is publishable.

Architectural journals are usually produced by practitioners, local professional associations, arts institutions, or private publishers. The late *Progressive Architecture*, *Architecture*, and *AIA Journal* in the United States, *Architects' Journal* and *Architectural Review* in the United Kingdom, and *Domus* and *Architecture and Urbanism* elsewhere, for example, have nothing whatever to do with universities. Editors compete to obtain the rights to the most fashionable projects and architects. They practice what is euphemistically called "access journalism," which simply means that a bankable architect allows his or her work to be published if nothing particularly critical is said of it. In the worst cases, the architects insist on bowdlerizing articles prior to publication. Some of the most widely read journals and presses are little more than vanity publishing houses, relying on their favorite architects to pay for photographs and to buy a couple hundred books or magazines for use in self-advertising.<sup>90</sup>

Intellectual influences tend to penetrate architecture less through specific academic channels than through the wider communication system of the field of culture—media such as the *New York Review of Books*, the *Times Literary Supplement*, Channel 4, PBS, and so on. Conventional academic communication is minimal compared to other disciplines, a fact to which the paucity of architectural academic journals attests.<sup>91</sup> Two points should be made here. First, the great intellectual tides of the time bear on architecture more than specific ideas originating in other disciplines, and, second, they do so not so much through their influences on academics as on the other members of the field. Deconstruction offers an instructive example. It has been noted that this particular literary theory has penetrated various other disciplines, moving from academic departments of English to others. In architecture the movement was not from academic to academic, but from the architecture profession to the schools. Deconstruction underpinned the work of certain avant-garde architects, the writings of some critics, and some exhibitions at important galleries

before it became a major topic of discussion in academe.<sup>92</sup> In the English-speaking world, certainly, the universities have never been the major sites of intellectual production in architecture.

The capital par excellence in the *field* has always been that associated with the design of buildings or, more properly, with images of buildings, since it need hardly be said that some of the most important architecture has never been built: the drawings of Frank Lloyd Wright, Le Corbusier, most of the deconstructionists, and Boullée come to mind. Images are often more important than any personal experience. For example, as Juan Pablo Bonta has demonstrated, one of the most influential buildings of the first half of the century, Mies van der Rohe's Barcelona Pavilion, existed only for a few months. It only achieved its status years after its destruction, through the promulgation of photographs.<sup>93</sup>

Architectural discourse circulates as a secondary capital within the *discipline*. Deconstruction could be seen as an attempt by disciplinarians to revalue their capital to a status comparable to that of architecture per se. In this it is a weapon in the perpetual conflict between academic and architect, the former relegated to the role of mere exegete to the titanic demiurges of the profession. Within the sciences, academics hold a substantial portion of the symbolic capital of the field and therefore rank highly in its stratification systems. Elite scientists are embedded in academe and control its system of reproduction, around which research is organized. This is not so in architecture. Academics are secondary figures in the production system but dominate the reproduction side. Elite architects have little direct influence on the reproduction system, and even this is exercised only in sporadic and brief royal progresses through the design studios of the more elite schools, or the occasional hortatory harangue published in the popular architectural journals.

#### Architecture and Related Disciplines

To say that architecture produces instruments of valorization is to say that it produces the instruments of taste, the discourse that labels some buildings and architects great, and others not. This is not to say that this discourse is devoid of "knowledge," but to emphasize the fact—invariably ignored by architectural academics—that it does more than this. It is no

wonder then that areas one might normally consider of interest to architects, such as acoustics, or psychology, or sociology, carry so little weight in the discipline, for they are relevant to its central function only when the intellectual fashions of the time require their service in the formulation of the instruments of valorization. Architectural acousticians, for example, are really acousticians who happen to be working in architecture schools. They are predestined always and forever to be members of the discipline of acoustics, not of architecture, until such time as the turn of the intellectual wheel of fate might necessitate the enlistment of their discourse, as it did for a short while the discourse of psychologists in the 1970s. The fundamental failings discerned by psychologists and environmental scientists (such as Rapoport, quoted earlier) and all the others from disciplines "allied" to architecture (namely, the utter failure of architects to listen to them, the dismal and seemingly perverse inability to integrate the fruits of their scholarly labors into the architectural process) can be seen to be no fault of the architects, but the failure of others to perceive that their work has no bearing at all on the valorization of architecture.

Prime examples of this effect were provided by my own department at the University of Sydney. When we began offering courses in neural network analysis, accounting, photorealism, and loudspeaker design, is it any wonder that the designers and historians in our sister department of architecture asked what was going on? My department's new chair, educated in engineering and computer science, felt so little empathy with the architectural habitus that he inveigled the university into changing his title from Professor of Architectural Science to Professor of Design Science. No trace of my department could be found in that most comprehensive of architectural indexes, the *Avery Periodicals Index*. One had only to look at the departmental names (Architectural and Design Science; Architecture, Planning and Allied Arts) to realize that only the university's bureaucratic craving for neat organizational charts kept all of us under the one roof.