Interior Design in Architectural Education

Meltem Ö. Gürel and Joy K. Potthoff

Abstract

The domain of interiors constitutes a point of tension between practicing architects and interior designers. Design of interior spaces is a significant part of architectural profession. Yet, to what extent does architectural education keep pace with changing demands in rendering topics that are identified as pertinent to the design of interiors? This study explores interior design-related coursework taught in accredited architectural programmes in the United States. Two methods of collecting data are used: self report from architectural programme chairs and content analysis of web-site posted programme catalogues describing course content. The findings show that many interior design concepts are not well addressed in the architectural curricula [1]. On average, only 0.44% of program content is dedicated to curricula focusing on knowledge and skills in shaping interiors. These findings offer a parameter to educators who are involved in assessing and reforming architectural education by expanding issues of design in general. The authors contend that the pedagogical approach in architectural programmes would benefit from the inclusion of more interior design concepts and through such education efforts the stature of interior design is likely to be improved.

JADE 25.2 (2006)
© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

Introduction

Recognition of interior design as separate from architecture is primarily a twentieth century phenomenon following the emergence of interior decoration as a 'new' profession in the latter part of the nineteenth century. This division has generated a source of tension that is rooted in conceptual differences between the pedagogies of the fields and is amplified by a conflict of interest between the two professions. Yet, in the contemporary world and economy, complex building projects require the expertise of many specialized people, who can work as a team. The concept of being part of a team, as an equal member rather than the principal and leader, does not correspond to an inherent value system (which promotes what is often referred as 'star system') in the architectural discipline [2]. Architectural education has been criticized for perpetuating this fundamental position in which such values are embedded. In the United States, many scholars, educators and students have long voiced concerns about every aspect of architectural pedagogy and challenged its fundamental precepts [3]. Architecture's relationship to interiors and to the discrete field of interior design can be evaluated on such a platform that scrutinizes the educational premises.

Professional architects and interior designers often find themselves in an acutely painful professional relationship due to increasing turf wars and monies to be earned. A 'critique' article for the journal *Contract* reported that in June 2000, the National Council of Architectural Registration Boards (NCARB) passed a resolution opposing interior design licensing laws. The resolution reads as follows:

Resolved, inasmuch as the licensing of interior designers may not protect the health, safety, and welfare of the public in the built environment, the National Council of Architectural Registration Boards (NCARB) opposes the enactment of additional interior designer licensing laws and directs the Board of Directors (1) to monitor the licensing efforts of interior designers, (2) to take appropriate actions to oppose such efforts, and (3) to continue to support Member Boards of the Council with accurate information with which the Member Boards may effectively oppose each such efforts. Educators need to assist the practitioners in promoting the profession and testifying in jurisdictional hearings as necessary [4].

Conversely, the editor in chief of *Architectural Record*, Robert Ivy stated, "…interior designers are engaged in a full-court press to achieve licensure… interior designers are seeking practice rights, as opposed to title acts… to increase their share of the market" [5]. This conflict not only represents a trajectory of debates between the fields, but also provides an excellent forum to review interior design curricula in architectural education. Are architectural students being trained in concepts and issues considered pertinent to the design and development of interior space? Do accredited architectural programs equip students with knowledge and skills to provide graduates with professional expertise? These important questions need addressing particularly in view of potential architectural education reform and the development of new objectives and goals for curricula in architecture schools.

Sources of tension: a historical and theoretical overview

The notion of interior and exterior as separate can be traced to architectural treatises of antiquity. In *The Ten Books on Architecture*, Vitruvius emphasizes the perceptual and experiential differences between the enclosed space and the exterior appearance through a discussion on the distinctions between the exterior and the interior components of structures, such as the treatments of columns and cella walls [6]. Yet, the "division of labor" between architecture and interior decoration is a phenomenon that prevailed at the end of the nineteenth century. In *The Decoration of Houses*, (1897) the novelist, Edith

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

Wharton and the architect, Ogden Codman connected this split to the perception of decoration as an insignificant part of architecture:

Architect's task seems virtually confined to the elevation and floor-plan. The designing of what are today regarded as insignificant details, such as moldings, architraves, and cornices, has become a perfunctory work, hurried over and unregarded; and when this work is done, the upholsterer is called in to decorate and furnish the rooms [7].

Wharton and Codman's analysis argued that "house decoration has ceased to be a branch of architecture," leaving a void that needed to be filled by 'decorators' trained in architectural work [8]. This view was supported through the publications of a number of tastemakers, as well as advocates of the professionalization of interior decoration, such as Elsie de Wolfe [9] and Candice Wheeler at the turn of the twentieth century [10]. Considered as an appropriate occupation for women, academic programs in interior decoration education were originally established in the home economics departments of universities in the United States. This historical tableau led to the development of the interior paradigm as a discrete discipline in the second half of the twentieth century. The Interior Design Educators Council (IDEC) was formed in 1963 to foster the educational standards, and the Foundation for Interior Design Education Research (FIDER) was established in 1970 to regulate and accredit undergraduate and graduate interior design programmes. Finally, the National Council for Interior Design Qualification (NCIDQ) was formulated to design and execute qualification examinations and certification.

According to Lucinda K. Havenhand, while efforts to equate interior design to architecture through titling and licensing made headway in the professionalization of the field, they did not improve its marginal status in the architectural sphere [11]. Many architects have repeatedly expressed their doubts about the competency of interior designers and their education. Reforming interior decoration education has been central to the efforts of transforming interior decoration into interior design. The Polsky Forum that explored "critical issues related to interior design research and graduate education" signified an important benchmark in this direction [12]. Comparisons between architecture and interior design in terms of education, as well as practice have been a significant component of discourse for interior design educators and professionals [13]. Architects have been considered to be the "greatest challenge to the professionally educated interior designer," as documented over a decade ago by Carll-White and Whiteside-Dickson [14]. On the other hand, the emergence of interior design into a discrete discipline practiced by professionals, not necessarily trained as architects, has not only undermined the architect's position with total project control, but also provoked conflicts of interest between architecture and interior design [15].

The conflict between the professions has escalated because of the interest by both parties in increasing their share of the marketplace. Presently, interior design's share of the market surpasses billions of dollars worldwide. Architects are "heavily invested in interiors" according to the findings from an AIA firm survey which indicated that "84 percent of all AIA member firms offer interior design and space-planning services, up from 73 percent in 1996" [16]. A prior study by Joy Potthoff which examined architects' involvement in interiors also indicated the significance of the interiors market for architects (91% of the firms in the study offered interior design services. However, 57% of these firms reported employing no interior design personnel). The findings from this study also showed that, after architecture, interior design was the most offered service in the firms. In some of the written responses, the firm principals state that they are licensed architects fully qualified to undertake interior design work, so there is no need to hire interior design personnel

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

(educated by college degree and certified by the National Council for Interior Design Qualification [NCIDQ] examination) [17].

Architects who believe and state that they are fully qualified (by education) to practice interior design portray disciplinary norms that reprehend the education and practice of interior design as a specialized sphere. Such norms denounce any interior designer or architect's operation and process of thought that does not match with the long established values of architecture. More precisely, a discrete and different pedagogy and practice of interior design does not fit into a 'normalized' notion of architecture. As Foucault suggests, "the disciplinary institution compares, differentiates, hierarchizes, homogenizes, excludes, in short, it normalizes" [18]. The beliefs and values become formalized through a discursive process that draws the contours of disciplinary boundaries. The educational field bears a significant role in the construction and institutionalization of beliefs and values that form a concept of architecture. The norms delineate ideologies, and in the academic milieu this process tends to homogenize knowledge into a unitary body of subjectivity. Many architectural schools prescribe a meaning for architecture to draw the boundaries of the field. This fosters the formation of a stagnant body of architecture that tends to exclude *other* subjects and meanings that are considered unprivileged.

The unprivileged position of interior design has been linked to a professional identity that is rooted in the 19th century female tastemakers. Aaron Betsky and more recently, Joel Sanders have also drawn attention to the connection of the interior designer's identity with homosexuality [19]. Commenting on the subordinate status of interior design/decoration, Sanders stated,

I confront the professional rivalries and contradictions… on a daily basis. As a licensed architect based in Manhattan, apartment renovations comprise much of my practice, work that has required me to augment my architectural training with decorating skills that I never learned in school. Intending to rectify this gap, I attempted, when I became director of Graduate Program in Architecture at Parsons School of Design, to incorporate interior design classes into the curriculum. However, my efforts to merge disciplinary boundaries were frustrated by the school's institutional structure: Parsons had recently established a separate Department of Interior Design [20].

Sanders' argument in regard to the exclusion of interior design from architecture is shared by architects and educators, Kurtich and Eakin, in their book *Interior Architecture*. The authors connote, "the prevalent attitude is that architecture is the ultimate art and interior design is a secondary, less important aspect" [21]. They also affirm that there are indeed substantial differences in the way architects and interior designers understand and develop space. They underline these differences by saying that architects are trained in three-dimensional thinking with great emphasis on purity, geometry, ideology and maintenance of a concept. While interior designers (which they place in the same category as decorators to make a distinction from interior architects) in general are keen on human comfort and two-dimensional surface quality.

Such differences are open to discussion. A study undertaken by *Architectural Record* precisely enables a platform for a discussion by portraying the views of seven prominent interior designers. When describing their working relationship with architects, all the interior designers interviewed believe and agree that architects think and work quite differently than they do. They state "architects design buildings from the outside; the inside is fallout." Saladino, who employs three architects, states: "The inside is often a disaster because architects don't change scale. They are above caring about the necessities of life." Orsini proclaims: "Architects are trained to perceive their design as sculpture, …Interiors people have been trained to perceive spaces from the inside out." The concerns raised

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

by the panel not only assert that emphasis is given to different aspects of the environment, but also questions the authority of the architecture discipline [22].

In our belief such differences and gaps between the two approaches have the potential to provide fruitful results. This is illustrated in many successful collaborations of the interior designers and architects. Yet, the ongoing dispute between the two reciprocal fields limits this productive capacity and raises the question of how long architecture and interior design can stay in conflict and apart, especially when the welfare of users and society at large necessitate the united work of both fields. Within this framework, we aim to present a perspective on the issue in question by empirically examining the significance of interior design concepts (as established by FIDER) in architectural education. The objective is to discover the ratio of course work dedicated to the design of interior space, furniture, equipment and interior finishes/material selection, in relation to the overall architectural curricula. It is hypothesized that nominal attention is given to interior design concepts in the majority of architectural programs. The goal is to open neoteric dimensions for those educators who are in the process of, or intend in the future to reform architectural education and its relationship to the allied fields.

Method

Part I: Questionnaires

One hundred and five questionnaires were mailed to the National Architectural Accrediting Board [NAAB] accredited architectural program chairs with the request to respond to questions about 30 topic categories related to interior design [23]. Most of the categories had been previously identified and used in a study by Potthoff and Woods which utilized category topics from the FIDER accreditation materials [24]. The categories included such areas as principles and elements of design, space planning, decorative elements, human factors (ergonomics, anthropometrics), construction systems and materials, history of furniture/textiles/accessories, technical drawing, and rendering techniques (see Table 1). The respondents were asked to indicate which year of study their students addressed the given topics and at what level of expertise, competency, understanding, or awareness.

The chairs were also asked to respond to the following four additional questions: (1) whether smaller scale projects were assigned with a focus on interiors; (2) how often did they require furniture layout as part of a design project; (3) which scale was usually used to design interiors; and (4) if product knowledge about interior finishes, furnishings and appliances/equipment was taught. Frequency analysis was used to tabulate the data from the questionnaires.

Part II: Catalog analysis

Catalog analysis was undertaken for the 76 universities in the United States that provided detailed information and course descriptions on their web sites. These universities were among the NAAB accredited universities in architecture. A three-step process was used to acquire and analyze the information about the architectural programs. First, the course offerings were carefully examined to identify the topics rendered in architecture curricula. A preliminary review of the architectural programs and their course offerings determined the 'categories of curricula.' Twenty-one categories were identified, for example: architectural design; historical preservation; building science and technology; and housing. To determine the number of courses offered in each category of curricula, an analysis sheet was generated and completed for a total of 120 undergraduate and graduate programs (65 undergraduate and 55 graduate). Frequency analysis was used to tabulate the data from the analysis sheets (see Table 2).

Second, architecture colleges, schools or departments were reviewed to identify those

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

which accommodated related disciplines (Interior Design, Landscape Architecture, Building Sciences, and/or Construction Science Management) within their body and offered degrees in them. This was primarily done with an understanding that if there was an interior design program coexisting in an architectural program, this might provide an opportunity for architecture students to take interior design courses from that program. Third, to be able to further evaluate the exposure of architecture students to interior design curricula, we examined the yearly curricula of the 120 architectural programs to identify the number that included an interior design/architecture course as a curriculum requirement or as an elective that could be taken within the college, school or department.

Findings

Part I

Twenty-nine questionnaires (27%) were returned with twenty completed (19%). The nine surveys (8%) that were returned but not completed enclosed letters or notes giving the following reasons for not completing the survey: (1) The School of Architecture does not offer an interior design curriculum, so we do not qualify to participate in your survey (five responses); (2) The interior design program is in another college not in architecture. Therefore, we assume you are not interested in our answers to the survey (two responses); and (3) The interior design program is within the Department of Architecture. However, since your survey seeks to gain an understanding of how well these topics are addressed in architecture programs the survey is therefore somewhat difficult for us to complete. In theory, our architecture majors could be exposed to most of the FIDER content areas, and many are. Others would be much less exposed to the interior design content (two responses).

The findings showed that 10 of the 30 identified topics were not addressed by 20% or more of the programs (see Table I). These topics were: furniture selection and layout, interior materials and finishes, decorative elements, kitchen design, construction details for custom interiors, furniture design, history of furniture/textiles/accessories, art history, historical interiors, material/color presentation boards. Table I shows correspondingly low percentages (35% and below) for the 10 topic areas reported to be taught at the competency level in the third, fourth, and fifth year of study. With higher percentages reported (40% and below), this trend holds true for these topic areas reported to be taught at the understanding level (second and third year of study) and awareness level (first, second, and third year of study). Other topic areas also reported taught at 35% or below, and not listed in the 'not covered' category by 20% or above of the programs, were color theory, bathroom design, and human factors – ergonomics, anthropometrics (see Table I).

Responses to the four additional questions showed that 50% of the programs rarely worked on smaller scale projects with a focus on the interiors. Twenty percent reported rarely including furniture in the design, and 40% reported only using 1/8th inch scale to design interior space. Forty-seven percent, 65% and 68% respectively reported not teaching product knowledge for interior finishes, furnishings, appliances and equipment.

Part II

The findings of catalog analysis indicated that there were more courses offered in other architecture related disciplines, such as urban design and planning and landscape architecture, than interior design/architecture in the 120 examined programs (Figure 1). Interior design constituted only 0.44% of the curricula, which was less than urban design and planning (5.68%), landscape architecture (1.25%) and housing (0.84%). Other interior design related coursework, such as furniture and human factors had very little overall importance in the programs (Figure 2).

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

JADE 25.2 (2006)
© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

Table 1: The Percentage (%) of Topics Covered in Years 1–6 and the Level of Coverage Competency/Understanding/Awareness for the Twenty Schools of Architecture

Topics	Competency						Understanding						Awareness						Not
Year	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	Covered
Principles & elements of design	20	50	65	65	70	30	25	40	20	5	0	0	50	5	0	0	0	0	0
3D spatial development	15	35	50	65	70	30	25	45	30	5	0	0	40	5	0	0	0	0	0
2D design fundamentals	35	40	40	45	50	30	25	40	20	10	5	0	35	5	0	0	0	0	0
Color theory	15	10	35	20	15	10	15	40	10	5	15	5	45	15	10	15	10	0	0
Space planning	5	20	35	40	40	15	0	40	35	20	10	5	30	35	5	0	0	0	5
Design analysis/synthesis/programming	0	15	30	60	40	25	5	30	45	20	10	5	25	25	5	0	0	0	0
Furniture selection & layout	0	0	5	20	15	10	5	20	40	20	10	0	10	35	10	5	10	0	25
Interior materials & finishes	0	0	10	30	30	15	0	25	40	20	15	5	20	40	20	10	10	0	20
Decorative elements (accessories, artwork)	0	0	10	5	5	0	0	20	20	10	5	0	15	15	15	10	10	0	50
Kitchen design	0	0	5	25	10	5	5	20	35	20	10	0	20	35	20	5	5	5	20
Bathroom design	0	0	15	35	15	5	5	25	45	25	20	0	20	40	15	10	10	5	10
Americans w/ Disabilities Act (ADA)	0	10	40	65	45	20	0	25	45	30	15	0	30	25	10	5	5	5	0
Human factors -- ergonomics, anthropometrics	5	5	25	30	25	10	10	40	35	25	5	5	45	20	5	0	0	0	5
Construction detail for custom interiors	0	0	15	20	25	10	0	15	30	20	5	0	25	15	10	0	0	0	25
Furniture design	0	5	25	30	10	0	0	20	15	25	15	5	25	20	10	5	0	0	25
Lighting	0	0	15	40	30	25	0	15	55	30	10	5	30	25	10	5	0	0	0
Construction systems & materials	0	20	40	60	45	30	5	45	40	20	5	0	35	20	5	0	0	0	0
Building systems (HVAC, plumbing, electrical, acoustics	0	5	35	40	35	25	5	35	45	35	15	0	25	20	5	0	0	0	0
Envir. concerns (energy, ecology, indoor air quality, sustainable materials)	0	0	35	35	40	25	10	35	40	35	15	0	20	25	15	0	0	0	0
Codes/standards/regulations	0	0	25	65	45	25	5	25	30	25	10	10	20	25	10	0	0	0	0
History of furniture/textiles/accessories	0	5	10	5	0	0	0	5	5	5	0	0	10	5	5	5	0	0	60
Art history	5	10	10	15	5	0	5	20	0	5	0	0	25	30	15	15	10	5	20
Historical interiors	0	5	15	5	0	0	5	15	20	15	0	0	5	10	5	0	0	0	50
Technical drawing (plans, sections, elevations)	0	35	65	45	45	15	30	40	15	10	0	0	35	10	0	0	0	0	0
3D drawing (perspective/paralines)	5	35	70	45	45	15	20	40	15	10	0	0	25	10	0	0	0	0	0
Lettering	5	35	40	30	25	5	15	30	10	5	0	0	35	5	0	0	0	0	15
Computer Aided Design (CAD)	5	20	50	45	50	25	10	25	40	25	5	0	20	10	0	0	0	0	0
Rendering techniques	10	20	45	50	55	25	20	25	25	20	5	0	25	10	5	0	0	0	5
Material/color boards	5	10	25	15	20	5	5	5	20	15	5	5	10	10	15	5	5	0	35
Sketching	30	40	55	50	55	30	15	35	20	20	5	0	35	20	5	0	0	0	0

Table 2: The Results of Frequency Analysis of Course Offerings in the Architecture Programs of NAAB Accredited Universities

Categories of Curricula	Total number of undergraduate & graduate courses offered per category of curricula in the 76 identified programs			
	Undergraduate	Graduate	Total	Average %
1. Arch. Design	619	299	918	16.82
2. Arch Design seminar	67	43	110	2.02
3. Graphic representation	204	39	243	4.45
4. Bldg. science & tech.	649	371	1020	18.69
5. Profession	144	151	295	5.4
6. Computer tech/CAD	159	116	275	5.04
7. Programming	31	28	59	1.08
8. Photo/film/multimedia	44	21	65	1.19
9. Arch. history & theory	661	353	1014	18.58
10. Historic preservation	72	65	137	2.51
11. Human factors	12	4	16	0.29
12. Arch. & society	82	69	151	2.77
13. Arch. research	99	145	244	4.47
14. Internship, travel	57	27	84	1.54
15. Other	158	144	302	5.53
16. Urban & E.D.	145	165	310	5.68
17. Landscape arch.	51	17	68	1.25
18. Housing	15	31	46	0.84
19. Interior design	19	5	24	0.44
20. Furniture design	5	8	13	0.24
21. Art	38	26	64	1.17
Total number of courses in all categories	3331	2127	5458	

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

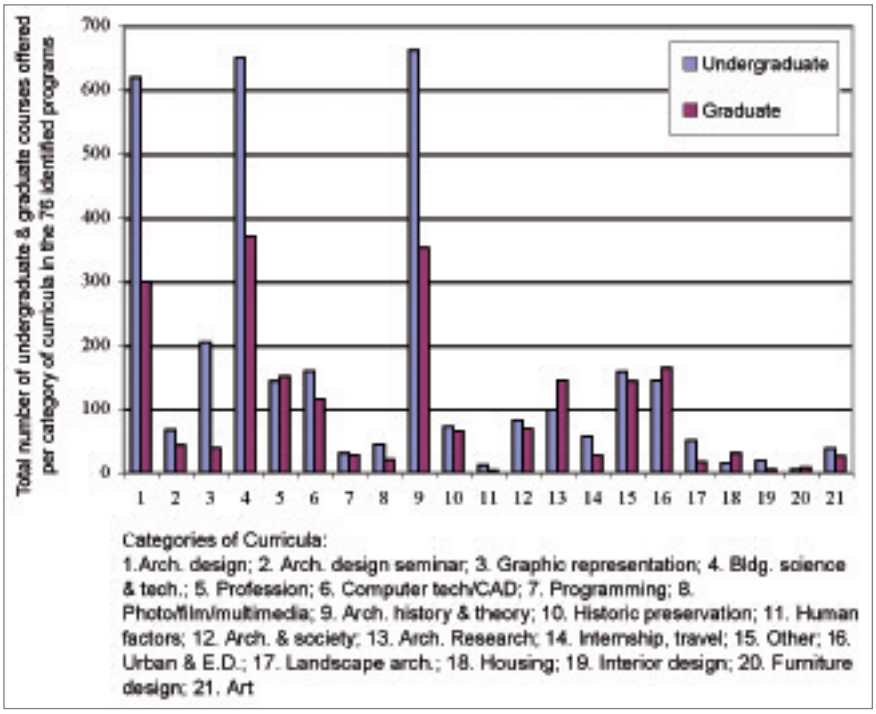

Figure 1
The Results of Frequency Analysis of Course Offerings in NAAB accredited architecture programs

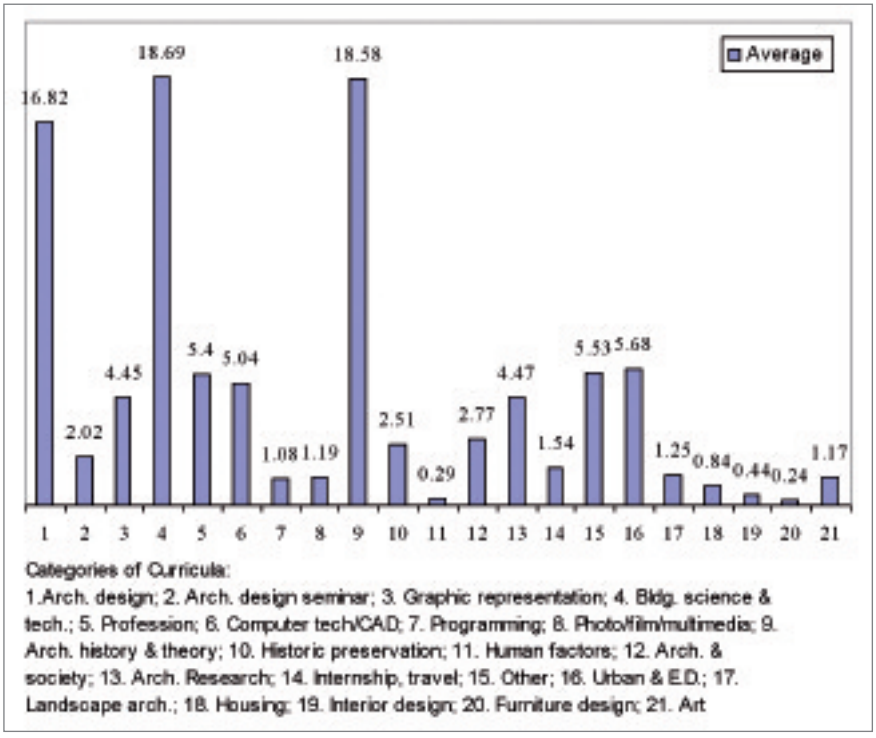

Figure 2
Averages of the Courses (undergraduate & graduate) offered per category of curricula in the 76 identified programs

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

The second part of the catalog analysis revealed that 26% of the examined architecture schools offered programs and degrees in interior design. This was also less than degrees offered in urban design and planning (61%) and landscape architecture (36%). Finally, the study showed that 14 schools out of the 76 included at least one course with interior design/architecture content in their curriculum. These were mostly studio courses (58%). However, only 4–5 programs included an interior design/architecture course as a curriculum requirement.

Discussion and conclusion

The findings of the study indicated that interior design concepts (for example, furniture selection and layout, interior materials and finishes, decorative elements, color theory, furniture design, interior product design, fabric selection) were not being well addressed in architectural programs. On average only 0.44% of program content was dedicated to such content. Furthermore, the results of the study also revealed that human factors – a very important concept of (interior) space generation – were minimally studied [25]. This supports the hypothesis that a serious lack of attention is given to the development of interior space in architectural pedagogy. Moreover, the propensity of architectural programs to neglect interior design as an area of study promotes the concept that interiors are of little importance and readily relegated as an after thought in the total design of buildings. Such perception impedes architectonic development of space and conceives interior design solely as decoration.

As history and today's marketplace indicate, practices emerge as a result of need, demand, and societal change. Malnar and Vodvarka, in their book *The Interior Dimension*, trace the specialization of an architect in interiors to the Rococo period and connect this development to the social, economical, and financial situation of pre-revolutionary France. At this time, interior design appears to be not only an acceptable subject, but also an important occupation for architects as stated in *Livre d' architecture* by Gabriel-Germain Boffrand [26]. According to Boffrand, interior design and decoration of apartments constituted a major portion of architecture commissions in Paris. Decorative interiors were a significant component of architectural practice and theory with the Art Nouveau and the Arts and Crafts Movements, and in the works of architects, such as Victor Horta and Charles Rennie Mackintosh. This trend was changed with the onset of the Modern Movement that reacted against the bourgeois interiors of the late nineteenth and early twentieth centuries, as well as against a certain kind of decorator – one who did not embrace a 'modernist style,' rather designed ornate or historically informed 'period' interiors. Supported by a social agenda, modernist interiors were predominantly conceived as pure and abstract spaces equipped with functional furniture. 'Traditional' interiors elaborated in historical styles were perceived as the *other* of Modern Movement's austere aesthetics.

The modern movement favored a dogmatic approach to architecture. Criticizing the modernist ideology, Anthony Ward wrote: it represented " the arrogance… of a cultural elite that is determined to advance their own social and economic interests by suppressing architecture as a social process, that is, meeting patron/client needs, in favor of the normative architecture as art object" [27]. The social motives of the early modernists were undermined by perception of spaces as if they were static images. As stated by Theodor Adorno, lacking purpose, the film set like interiors were a result of unmediated subjective expressionism. However, the function of the subject in architecture is determined by "concrete social norms," rather than "some generalized person of unchanging physical nature" [28].

The realization of a paradox between ideological design and spatial practice promoted the inauguration of the Environmental Design Research Association (EDRA) in 1968 as a vocal advocate of social architecture [29]. According to Thomas Dutton, in its postmodern condition,

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

architecture neutralized and deployed a number of styles and aesthetic preferences for visual competition. Meanwhile, the social trajectory of architecture was weakened by a void of "progressive thinking about social accountability, and about theorizing a critical architecture" [30]. As stated by Dana Cuff, the gap between the profession and the public at large might be the most prevalent problem of architecture and its education [31].

In this context, many educators have criticized different aspects of architectural education. In her book *Design Juries on Trial*, Kathryn Anthony critically examined the studio environment, raising awareness in regard to the studio culture and the evaluation system [32]. Geoffrey Broadbent argued that architectural education has not changed much since the work of Vitruvius in the first century A.D. [33] Recognizing the stagnant stance of architectural pedagogy, Neil Leach directed attention to the lack of architecture's ability for self-criticism by stating that: "for too long it has been engaged in an hermetic discourse of self-legitimation." He proposed that: "architecture must break with tradition… and broaden its horizons beyond its traditionally perceived limits" by shifting away from the "purely abstract intellectual project" [34]. In the August 2002 issue of *Architectural Record* the question was raised: "whether the familiar method used to teach architects is still appropriate today?" [35] Thomas Fisher suggested that while the profession has been transforming into a more "diverse and more fragmented" entity, "the changing realities of architectural practice" did not match with the traditional modes of education in terms of context, content and process [36]. A survey carried out by Lee D. Mitgang in *Architectural Record* [37] conformed to his earlier view discussed in Ernest Boyer and Mitgang's book, *Building Community: A New Future for Architectural Education and Practice*, that schools were too remote from the state of the practice [38]. This proposition maintains its cogency as a core concern in architectural education.

What an architect should study and how an architect should be educated will be at the forefront of any proposition that set new objectives in architecture education. Whether designed by architects, interior architects, interior designers or decorators, the interior dimension is an integral component of architecture. In that respect, how architecture embraces interior design should be given thorough review and consideration in the future development of architectural curricula.

Architectural education provides numerous topics ranging from structures to history. The study of all interior design concepts in a four or even five-year undergraduate programme is a large task, if not impossible (no university interior design program is less than four years of study). Yet, interior design curricula could be offered as a graduate study option in architecture for students who wish to adequately prepare themselves for a successful career in creating interior environments. It is our belief that better understanding of the interior paradigm would lead to a recognition of its significant position in the architectural practices.

Institutionalization and normalization of architectural education, with a yearning to attain a unified meaning of architecture, sustain interior design's marginalized position in architectural practices. Perception of interior design in its *otherness* or *difference* to architecture hardens the disciplinary boundaries between the two fields [39]. However, suppressing the validity of interior design in pedagogy does not correspond to the changing realities of architectural practice. We should not dismiss the need to provide topics pertinent to interior space design at a detailed level by embracing an argument that justifies the lack of interior design through suggesting that architecture graduates are equipped with the skills to develop interior design competence later in their professional career. Successful collaborative projects illustrate, if designers can operate beyond the turf wars, the gap or the difference between interior design and architecture offers a productive potential for the built environment. Much

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

professional behavior is rooted in education and the precepts studied. The practice of architecture can benefit from architectural education that embraces *difference* rather than *exclusion*.

This study focused on interior design curricula in architectural programs and aimed to reveal the status of interior design concepts within architectural pedagogy. The authors question the normative architectural stance in regard to interior design curricula and hope that the study's findings will give a perspective for those educators who are endeavoring to reform architectural curricula in general. It is suggested that the pedagogical approach of architectural schools fully encompass concepts of interior design, which will strengthen the work of both fields and positively benefit patrons/clients and society. The authors hope that the study's findings will help to pave the way for further inquiries and initiate more focused research in the educational field of interior design to review its standards, shortcomings and strategies.

Notes and References

1. To identify 'interior design concepts,' we primarily rely on the Foundation for Interior Design Education Research [FIDER] accreditation criteria. FIDER is responsible for reviewing and accrediting undergraduate and graduate interior design/architecture programs.

2. For a discussion on 'star system' see, Anthony, K. H. (2001) *Designing for Diversity: Gender Race and Ethnicity in the Architectural Profession*. Urbana and Chicago, IL: University of Illinois Press. Also see, Scott Brown, D. (1989) Room at the Top? Sexism and the Star System in Architecture, in Berkeley, E. P., McQuaid M. [Eds] *Architecture: A Place for Women*. Washington, D.C.: Smithsonian Institution Press, pp. 237–246.

3. For example, see, Brady, D. A. (1996) 'The education of an architect: continuity and change,' *Journal of Architectural Education*, Vol.50, No.1, pp.32–49. Crysler, G. C. (1995) 'Critical pedagogy and architectural education,' *Journal of Architectural Education*, Vol.48, No.4, pp. 208–217.Groat, L. N. & Ahrentzen, S. B. (1997) 'Voices for change in architectural education: seven facets of transformation from the perspectives of faculty women,' *Journal of Architectural Education*, Vol. 50, No.4, pp. 271–285.

4. Hughes, N. (2003) 'Defending interior design,' *Contract: Commercial Interior Design and Architecture*, January, p. 102.

5. Ivy, R. (2000) 'The keys to the kingdom,' *Architectural Record*, Vol. 188, No.9, p. 17.

6. Vitruvius, M. P. (1999) *Ten Books on Architecture*. Trans. Rowland, I. D. , comment. Howe, T. N. Cambridge: Cambridge University Press.

7. Wharton, E. & Codman, O. (1897) *The Decoration of Houses*. London: B.J.Batsford, pp. xix–xx.

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

8. *Ibid*.

9. See, De Wolfe, E. (1913) *The House in Good Taste*. New York: The Century Co.

10. Kirkham, P. & Sparke, P. (2000) A Woman's Place: Women Interior Designers, in Kirkham, P. [Ed.] *Women Designers in the USA 1900–2000*. New Heaven: Yale University Press, pp. 305–316.

11. Drawing on feminist theory, Havenhand suggests that interior design's "strategy of legitimization" has prevented it from developing a distinct identity. See, Havenhand, L. K. (2004) 'A view from the margin: interior design,' *Design Issues*, Vol. 20, No.4, pp. 32–42.

12. Whiteside-Dickson, A. & Carll-White, A. (1994) 'The Polsky Forum: the creation of a vision for the interior design profession in the year 2010,' *Journal of Interior Design Education and Research*, Vol. 20, No.2, pp. 3–11.

13. For example, see, Harwood, B. (1991) 'Comparing the standards in interior design and architecture to assess similarities and differences,' *Journal of Interior Design Education and Research*, Vol. 17, No. 1, pp. 5–18.

14. Carll-White, A. & Whiteside-Dickson, A. (1992) 'Who is keeping the fire? An analysis of who is being published in a major interior design periodical,' *Journal of Interior Design Education and Research*, Vol. 18, No.1,2, pp. 92.

15. See, Sapers, C. & Sonet, J. (1988) 'Practice: should interior designers be licensed?' *Architectural Record*, Vol. 176, No.7, pp. 37–47.

16. Ivy, R. *Op. cit*, p. 17.

17. Potthoff, J. (1996) 'Interior design in architectural firms,' *Journal of Family and Consumer Science*, Vol. 88, No. 1, pp. 55–59.

18. Foucault, M. (1984) The Means of Correct Training, in Rabinow, P. [Ed.] *The Foucault Reader.* New York: Pantheon, pp. 182–3.

19. Betsky, A. (1997) *Queer Space Architecture and Same Sex Desire*. New York: William Morrow.

20. Sanders, J. (2002) 'Curtain wars,' *Harvard Design Magazine*, Vol.16, Winter/Spring, p. 20.

21. Kurtich, J. & Eakin, G. (1993) *Interior Architecture*. New York: Van Nostrand Reinhold, pp. 461.

22. Moonan, W. (1998) 'Listening to interior designers: what do they think of architects?' *Architectural Record*, Vol. 186, No. 4, pp. 66–69, 176–177.

23. For National Architectural Accrediting Board accredited programs in architecture see, Inchttp://www.naab.org/usr_doc/accredited_progs19.pdf.

24. Potthoff , J. Woods, B. (1997) 'Relationship between introductory interior design curricula and content of introductory interior design textbooks,' *Journal of Family and Consumer Sciences*, Vol. 89, No. 3, pp. 42–47.

25. Anthropometrics: the study of the size and proportions of the human body and used to determine optimum space needs, ergonomics: the study of people's interaction with furniture and equipment, and proxemics: the study of the use of space by people in a particular culture. See, Sloan, P. *et al* [Eds] (1999) *Beginnings of Interior Environments*. (8th ed.) New Jersey: Prentice Hall.

26. Malnar, J.M. & Vodvarka, F. (1992) *The Interior Dimension: A Theoretical Approach to Interior Space*. New York: Van Nostrand Reinhold. Also See, Boffrand, G. (1969) *Livre d'architecture, Paris 1745. La figure equestre de Louis XIV, Paris 1743*. Farnsborough, England: Gregg International Publishers.

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd

27. Ward, A. (1996) The Suppression of the Social in Design: Architecture as War, in Dutton, T.A., Mann, L. H. [Eds] *Reconstructing Architecture: Critical Discourses and Social Practices*. Minneapolis: University of Minnesota Press, p. 35.

28. Adorno, T. (1979) 'Functionalism today,' *Oppositions*, Vol. 17, p. 38.

29. Ward, A., *Op. cit*, pp. 27–70.

30. Dutton, T. (1996) Cultural Studies and Critical Pedagogy: Cultural Pedagogy and Architecture, in Dutton, T.A., Mann, L. H. [Eds] *Reconstructing Architecture: Critical Discourses and Social Practices*. Minneapolis: University of Minnesota Press, p. 158.

31. Cuff, D. (1996) 'Celebrate the gap between education and practice,' *Architecture*, Vol. 85, No. 8, pp. 94–95.

32. Anthony, K. H. (1991) *Design Juries on Trial*. New York: Van Nostrand Reinhold.

33. Broadbent, G. (1995) Architectural Education, in Pearce, M., Toy, M. [Eds] *Educating Architects*. UK: Academy Editions, pp. 10–23.

34. Leach, N. (1995) Fractures and Breaks, in Pearce, M., Toy, M. [Eds] *Educating Architects*. UK: Academy Editions, pp. 26–29.

35. Dean, A. O. (2002) '*B. Arch.? M. Arch.?* What's in a name?' *Architectural Record*, Vol. 190, No.8, pp. 84–92.

36. Fisher, T. (1994) 'Can this profession be saved?' *Progressive Architecture*, Vol. 75, No.2, pp. 44–49.

37. Mitgang, L. D. (1999) 'Back to school,'' *Architectural Record*, Vol. 187, No.9, pp. 112–120.

38. Boyer, E. L. & Mitgang, L. D. (1996) *Building Community: A New Future for Architecture Education and Practice*. Princeton: The Carnegie Foundation for the Advancement of Teaching.

39. The use of the terms *otherness* and *difference* here is influenced by Foucault and Derrida's use of the terms, respectively, as well as by feminist theorists. Yet, as Mary Mcleod analyzes, the *other* in Foucault's discourse or the *difference* in Derrida's appears to exclude ordinary people and everyday life. According to Mcleod these concepts in architecture are popularized by male architects who maintain secure positions, rather than marginalized status. See, Mcleod, M. (1996) 'Other' Spaces and 'Others,' in Agrest, D., Conway, P., Weisman, L. K. [Eds] *The Sex of Architecture*. New York: Harry N. Abrams, pp. 15–28.

© 2006 The Authors. Journal compilation © 2006 NSEAD/Blackwell Publishing Ltd