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Terri Meyer Boake B.E.S. B.Arch. M.Arch.
Associate Professor
School of Architecture
University of Waterloo

CONFLICT ANALYSIS:

Can a *Traditional Liberal Education* emerge from a *Professional Degree*?"

Architectural education in North America is shifting from a less general liberal arts oriented focus to a restricted one that has been technically directed to lead to employment in the architectural profession. This redirection is due largely to external pressures that have required the restructuring of the curriculum to comply with the content and technical requirements imposed by Professional Architectural Associations and Accreditation Boards. Coupled with these external pressures, internal pressures exert demands on curricula, a direct result of the increased time required to address constantly expanding technical issues. In opposition to the increase in technical content, the "professionally" focused curriculum is under severe scrutiny at many schools of Architecture, and being faulted for producing students who are ill equipped to enter a shrinking *traditional* job market.¹

Eroding the Good Intentions of Vitruvius:

Writings about the historical progression of the education of an architect have usually adopted the position that architectural education is, and should be, "liberal", in its content, its objectives and its attitude. Liberal education is defined as being directed to the general enlargement of the mind and not professional or technical. Educators have maintained that a quality general *-liberal-* education in architecture would provide students with a broad spectrum of knowledge in preparation for a career that was focused on, but not limited to, architecture. The recently published Boyer Report focuses on the dialectic needs of architectural education to be at once liberal and professional. In its critical assessment of the quality and content of current educating practices in architectural institutions, the Boyer Report asks for a review of curricular direction in both liberal and professional terms.

"The nobility of architecture has always rested on the idea that it is a social art -- whose purposes include, yet transcend, the building of buildings. Architects, in short, are engaged in designing the physical features and social spaces of our daily lives, which can shape how

¹Kapusta, Beth. Architecture's Alter Egos. The Canadian Architect. September 1993. p. 39

"Few jobs exist for qualified graduates, and the joke "What do you say to an employed architect? Big Mac, fries and a Coke," may not be that far off the mark. Many graduates find themselves as models of a Generation X-type architect: disillusioned, ambivalent, over-educated, and underemployed. According to a 1993 survey, junior employees fell in number to less than 3% of all production staff, down from 20% in the so-called boom years. Most firms ... had reduced staff size by 23% from last year..."

productive, healthy, and happy we are both individually and collectively. The profound and permanent impact of the architecture profession demands an education not only highly technical and practical, but broad and intellectually liberating as well.”²

The required knowledge base of the Architect has exponentially increased over time and has necessitated the reassessment of the goals of the traditional education of the Architect throughout the history of the profession. The education of an architect has changed greatly from the broad liberal pursuit described by the Vitruvian model.

“Let him be educated, skillful with the pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinions of jurists, and be acquainted with astronomy and the theory of heavens.”³

Until the onset of the Industrial Revolution and subsequent explosion of technical knowledge during the 19th century, architectural education had been dominated by liberal arts studies. By the beginning of the 19th century the technical knowledge base, and possible directions for study and specialization in Architecture had expanded to such a degree to warrant the virtual termination of the comprehensive mode of study of the “Academie” and replaced it, as such, with a more exclusive specialized education at the “Ecole des Beaux Arts” (history/theory) and the “Ecole Polytechnique” (praxis/technical). As Joseph Rykwert wrote

“The break occurs almost precisely at the turn of the century. And from that time on, in spite of various exceptions, the attitude propounded by Durand dominates architectural thinking to the exclusion of all others, since it proposes a wholly unhistorical, wholly a-prioristic approach to design, in which the procedure of the architect is wholly autonomous, and the past a mere repository of conventions.”⁴

Dissolving and Rebuilding Standardized Education:

During the 19th century architecture (both education and practice) divided itself into two opposing camps. Those in support of the liberal arts perpetuated a humanist style of architecture and education that relied on historical precedent and avoided new industrialized technology (even newly developed materials). Those inspired by new technology and advances in engineering developed a style of

² Boyer, Ernest L and Lee D. Mitgang. Building Community: A New Future for Architecture Education and Practice. The Carnegie Foundation for the Advancement of Teaching. 1996. p. 3-4.

³ Vitruvius. The Ten Books on Architecture. Morris Hicky Morgan. trans. New York: Dover Publications Inc. 1960. Chapter I. Section 3.

⁴ Middleton, Robin editor. The Beaux Arts and Nineteenth Century Architecture. Cambridge: The MIT Press, 1982. p. 16

architecture and education that relied on the invention and exploration of new materials, methods and engineering practices. The former focused on ideology and the latter on practicality. These two parallel approaches to architectural education co-existed, evolved and resulted in a highly eclectic range of architectural thought and buildings throughout the 19th and early 20th centuries -- from Neo-Classicism to Neo-Gothic, Structural Rationalism to Arts and Crafts, Art Nouveau to Early Modern. This effected a further division of schools of thought in respect to education practices and concerns. The net result was that by the beginning of the 20th century the architectural curriculum offered by institutions became increasingly less standardized and more reflective of eclectic architectural interests.

During the 20th century professional architectural associations were created to support and protect the unified interests of practicing architects. It became necessary to regulate the profession to ensure quality in practice. In the United States and Canada, separate professional associations, registration boards, exams, procedures and standards were developed for each State and Province -- to the point of prohibiting practice across jurisdictional boundaries. Lack of standardization in practice paralleled the lack of standardization in education. Under the conditions of the North American Free Trade Agreement, this condition could not continue to be perpetuated. A National procedure for professional regulation was adopted. This required that a national standard be developed for architectural education.

The modern intervention of the National Council of Architectural Registration Boards, as a (legal) mediator between the Profession and the University has encountered resistance from the Schools who have been opposed to unifying and standardizing a "correct" approach to education. NCARB has struggled with creating a uniform definition of "claims and intentions", that in effect, requires the merger of disparate approaches to education. It has done so by setting specific curriculum requirements. In 1981 NCARB listed 142 required topics for licensing. Although this still represented a broad liberal base of issues (including accounting, economic, legal, technical, environmental and social issues⁵) the requirements were difficult for many schools to achieve. Subsequent negotiations between the Schools and the Profession have whittled the list to less than 40 requirements, the intention of which continues to be to maintain a curriculum that simultaneously satisfies both liberal and technical requirements. The Boyer Report⁶ outlines the quandary of architectural institutions today that in response to NCARB requirements are attempting to simultaneously develop increased professionalism while maintaining liberalization in their curriculum.

⁵ Esherick, Joseph. The Professions of Architecture. JAE. Fall 1984. p. 26

⁶ Boyer, Ernest L and Lee D. Mitgang. Building Community: A New Future for Architecture Education and Practice. The Carnegie Foundation for the Advancement of Teaching. 1996.

"Professionalism": Detailing the Evolution from Liberal to Directed:

The shift in attitude towards the educational requirements of an architect are twofold. Firstly, the role of the architect throughout history,⁷ from the master designer / artist has been transformed to that of the *professional practitioner* who must operate in a society that expects responsible action in light of technologically advanced building practices. Secondly, a preoccupation with the ramifications of legal liability demands skilled technical and administrative capabilities. These conditions have reallocated the devotion of curricular time to the technological and professional practice aspects affecting architectural design. In addition to a large range of specific technical and professional core courses, these concerns are also evidenced in the proliferation of "technically integrated" Design Studios. This acknowledgment of "professionalism" in architecture has resulted in the eventual devolution of the liberally inclusive education to a more directed and prescriptive course of study.⁸

A Symposium on "The Liberal Education of Architects" in November 1990 at the University of Kansas addressed the issue at some length.⁹ The majority cited the liberal aspects of the architectural education as the most positive and desirable, yet acknowledged that the maintenance and encouragement of the liberal education was problematic within the current system. Most contributors felt that the superior version of liberal education was to be found outside Schools of Architecture, in undergraduate degrees acquired prior to entering the "professional" architectural program. Not only was the technological and practice oriented course material cited as eroding the liberal intent and content, but it was even felt that the current methods for teaching the design studio netted a non liberal experience as the focus of studio projects is strongly oriented towards achievement, technological innovation and problem solving which are non liberal ideals. The modern focus of the design studio contrasts, for example, with the 19th century Beaux Arts program where the projects were set by the professor of architectural theory as a means to engage students in the study of theory, and where "(T)echnological innovations were taken up on occasion, though many inventions were ignored".¹⁰

Most general or liberal arts programs at universities maintain a high degree of freedom in the setting of their courses and content, as do liberal arts students in exercising their choice whether or not to focus on a specific area of study. This freedom can be largely credited to the ability of these faculties to operate independently of related external professional societies. Architectural programs have increasingly less curricular freedom due to their peculiar relationship to Professional Associations

⁷Sinness Journal. Houston Business. Focus: Engineering/Architecture/Construction. March 23, 1992. "The architect's role, as perceived by clients and the public, has continued to fluctuate. The 1980's archetype of the star performer who makes bold statements and creates facades has begun to subside in favor of the truer picture of a hardworking, qualified professional."

⁸Lee, Peter. Some Thoughts on the Education of the Future Practitioner. JAE. Jubilee 1987. p.42
"While most architecture programs do not preclude general studies, they typically parallel rather than precede professional subjects and are consequently studied on a time available basis. It is a common phenomenon that course work is accorded student attention proportional to its perceived career purpose."

⁹The Liberal Education of Architects. A Symposium Sponsored by the Graham Foundation for Advanced Studies in the Fine Arts. November 1990. The University of Kansas.

¹⁰Middleton, Robin. ed. Annie Jacques. The Programs of the Architectural Section of the Ecole des Beaux-Arts, 1819-1914. p. 59

external to the University. This is evidenced in the extremely high proportion of “core” to “elective” courses that constitute most professional architectural degree programs. Because of their simultaneous connection to the profession and desire to maintain some liberality in their programs, most architectural departments sit awkwardly within the structure of the University.

“Architecture lives both in the world of art and in the world of technological performance. And from this face comes not only its bimodality but also its anomalous and marginal character and its uneasy status in universities. Architecture is a stranger in the modern university, a throwback representing an epistemology of practice no longer dormant. Architecture experiences real tension because of the place it occupies. On the one hand, there is a strong pull to join with the rest of the university in adopting the model of technical rationality; on the other hand, there is the self-protecting mystique of design.”¹¹

External Pressures Shaping Architectural Education:

The changing role of the architect in society to that of a “*professional practitioner*” in a position of great legal liability has intensified external pressures on the University as an Educational Institution responsible for graduating students whose goal is membership in the Profession of Architecture.¹² There are four key sources of external pressure which are directing the professional restructuring of architectural education; firstly, public perception of the professional architect in society; secondly, legal liability in the practice of architecture; thirdly, the escalating role and scope of technology (including computer aided design); and, fourthly, the role of bureaucracy in the Certification of Education and the process of licensing for a professional architect.

Public Perception of the Architect:

“Can society afford educated, as opposed to trained architects? Or, to invert the question, can society afford trained, as opposed to educated architects? Licensing of the profession is based on the perception that society is dependent on the architect too for its health, safety and welfare. It is not surprising therefore that there is a strong body of opinion which, implicitly if not explicitly, is in favor of the training of architects.”¹³

The public and the client of the 1990's increasingly perceive the architect as a responsible professional, who in their role as the primary consultant of a design and construction team, must act in an

¹¹ Schon, Donald A. The Architectural Studio as an Exemplar of Education for Reflection-in-Action. JAE. Fall 1984. p. 2

¹²Groat, Linda. Defining Liberal Education in the Context of Architectural Education. The Liberal Education of Architects. The University of Kansas. November 1990. p.68

“Too often ... professional education is driven by the concept of “professional competence” which is equated with the ability to perform specified tasks. As a consequence, many professional programs are founded on the belief that their mission is primarily to train students for such tasks.”

innovative but skilled and business-like manner. Whether the contemporary architect is responsible for handling vast sums of money on mega projects, or carefully designing a modest addition to a house, the client expects that not only will the architect design an aesthetically pleasing building, but that all economic and technical requirements will be met. Where architects work on government funded projects, the public expects an ever more responsible handling of their tax dollars.

With some exceptions, students of architecture (and their parents) come from the public realm, and carry with them these general perceptions regarding the profession. Most potential or incoming students show a genuine interest in becoming a practicing professional at the end of their architectural education. The commitment required to complete the term of study represents a substantial amount of time as well as money for students and their parents. As a result, the decision to become an "A"rchitect is taken quite seriously by most applicants.

Students intending to eventually practice architecture would choose from the majority of Architectural degrees offered in North America that are deemed "*Professional*" in status. Such degrees are considered as both a mandatory and minimum requirement prior to engaging in both national and regional licensing processes. It is the perception of most students entering a School of Architecture offering a *Professional Degree* that this degree should be comprehensive, a complete preparation for handling both the 'design' and 'technical' roles of the architect, and satisfy the requirements of the licensing boards. Students will often select a school that has been accredited by either the NAAB or CACB expecting an all-inclusive architectural education. (Both U.S. and Canadian Boards follow virtually identical criteria.) Although not all of the students entering programs in Architecture will ultimately become practicing professionals, most would prefer and expect that their education will serve as a preparation for that role.¹⁴

"As symbols of professional authority began to represent a proven command of certain areas of knowledge, the public's dependence on authority increased, thus heightening the value of the holders of these areas of knowledge. Rituals were adopted to serve as objective proof of professional authority, including for example taking standardized examinations, awarding honors and prizes, using jargon and technical devices, and displaying credentials."¹⁵

¹³Meunier, John. Paradigms for Practice: A Task for Architecture Schools. JAE. Jubilee 1987. p.47

¹⁴Wolf, Harry. Observations on Education. JAE. Jubilee 1987. p92

"The fact that education has become a business is one of the problems. Institutions everywhere find themselves in competition for the tuition dollar. With fixed capital costs and smaller and smaller student population, universities "market" themselves."

¹⁵ Sutton, Sharon E. University of Michigan. M. Arch.: Will It Help -- Whom Will It Hurt? ACSA News. Volume 26. No.9. May 1997. p. 5.

The Boyer Report, expands the desired public image of the Architect to one of leadership and Community Service. Goal Seven of the Report suggests that students and faculty engage in active community service as the means of recognizing the professional and ethical importance of civic engagement.¹⁶

Legal Liability:

Legal liability has placed enormous pressure on the function of the architect, a pressure that has been acknowledged through curricular changes and additions in Schools of Architecture. The legal framework of the 1990's is far more severe than that experienced by the master builders and liberally educated architects of the past. When an Architect places his/her seal on a set of contract documents, he/she undertakes liability for the performance of that building which can extend well beyond the life of the Architect. The Architect as Prime Consultant is additionally responsible for overseeing the proper performance of all other disciplines involved with the project -- structural, mechanical, electrical engineers, life safety, as well as tertiary consultants. The architect is legally and ethically responsible for a comprehensive array of technical requirements (in which they may have only been indirectly educated) which have imposed a redirection of focus in practice. The problem of legal liability reflects not only in the nature of topics that Schools recognize must be incorporated into the curriculum, but as well, in the expectations of students. Their assumption is that the education provided should be a *complete* preparation in light of the future requirements of the Profession. Any deficiencies in the technical content could be highly problematic in this instance, given this assumption.

The notion of legal liability has not only affected the curriculum, its detailed content and offerings which include courses on Professional Practice¹⁷, Acts, Codes, Specifications and Management¹⁷, but the way in which Architecture is administrated and taught.¹⁸ Precedent setting legal cases where students have sued over inadequate education and improper grading practices have resulted in a more formal educational atmosphere. Single professor subjective grading is considered to be politically dangerous.¹⁹ Preference is given to teaching situations that are carefully monitored and documented, and where grading is done by teams on a consensus basis as a preventative measure against student appeals and potential lawsuits. Teaching becomes more directed and carefully controlled in these conditions, and less liberal in the breadth of its approach and content. The traditional Beaux-Arts or Wrightian role of the omnipotent master and suppliant apprentice is less viable.

¹⁶ Boyer, Ernest L and Lee D. Mitgang. Building Community: A New Future for Architecture Education and Practice. The Carnegie Foundation for the Advancement of Teaching. 1996. p. 134

¹⁷Gutman, Robert. Education and the World of Practice. JAE. Jubilee 1987. p. 24

"One of the central issues in architectural education now is the relationship between the subjects taught in the schools and the skills required for professional practice."

¹⁸Wolf, Harry. Observations on Education. JAE. Jubilee 1987. p. 92 "...and an insistence upon keeping that consumer happy. It is a strange situation to find that the notion of being demanding strikes terror in the heart of administrators, and the failing of students is all but unheard of."

¹⁹Currently at the School of Architecture at the University of Waterloo all Design Studios are taught by a minimum of two, preference for three or four faculty who grade all student work as a team. This is in light of a recently adopted Student Appeals Policy which allows for the request of a remarking/rereading if the student disagrees with the grade given. Previous policies required extenuating circumstances on the part of students to legitimize an appeal.

The Increased Role of Technology:

The need to learn about the ever increasing new technologies of architecture -- such as increased performance criteria, numerous new materials and products, industrialized building techniques, constantly changing laws and codes, and, fast paced construction -- has necessitated positive response from educational facilities. Compare the range of materials available for building during the 17th century, when dominant issues addressed in the Academie related largely to history and the perfection of proportions, to the vast array of materials and systems represented in the volumes of Sweet's Catalogue... Many Professional Programs in Architecture have acknowledged these topics through the addition of new or expanded technical courses to provide a venue for addressing these issues. New computer related technologies to assist in the design and construction of buildings has resulted in the creation of complete networks of courses, often including the creation of several mandatory junior level courses, to familiarize students with hardware and software systems. These are often followed by required and elective senior level courses that respond to the availability of new and improved CAD, 3-D modeling, WWW and virtual reality software.²⁰ Computer based studios, devoid of tracing paper, design markers and soft pencils are increasingly common, altering the relationship between faculty and students, and the focus of the studio projects. Computer driven technical drawing precision quickly pushes aside broad based sketch ideas. Institutions now offer Professional Architectural Degrees that may have a Computer Minor attached. The profession, which has undergone a tremendous change since the onset of computer-aided design, is increasingly looking for graduates and student employees with advanced computing skills. Employment has seen an increased marketability for students and graduates who are chiefly proficient in computer skills. This fact is not missed by students in their demand for computing related courses.

Given the limited number of course hours, the increase in technical course requirements has had to "steal time" from elective and liberal components of the curriculum. This has posed a difficulty in maintaining a balanced offering of courses, and an even more serious problem at Schools offering compressed professional degrees where time issues are considerably more critical. The academic focus of the technical and professional courses is often in conflict with the ideals of liberal education, and students find difficulty in comprehensively addressing the conceptual aims of a curriculum where its internal streams of study are seemingly at odds.

Accreditation:

The Professional Architectural Associations during the 1980's and 1990's have increased their interest in the programmatic requirements of the Schools. This intervention in the education process was the result of the profession's need to respond to public perceptions and opinions about architecture. Architectural Associations have been able to influence and control the content and direction of architectural education through the Certification Process and the role it plays in the granting of licensing

and professional registration. The power wielded by the Certification Board can be very heavy. Close scrutiny of the institution, its facilities, teaching staff, space, teaching ratios, principles and curricular content can result in highly specific recommendations that must be met if accreditation is the objective. Schools with funding deficiencies often have difficulty in meeting staffing and space requirements.

The review process can put incredible pressure on the Schools to modify their curriculum in order to meet the very specific requirements of the Certification Board.²¹ It is the perception of the Schools that the focus of the Conditions and Procedures Document favors the technical and professional practice requirements of education over the liberal arts component. The liberal requirements are stated to only constitute a minimum of 20% of the total hours required for the completion of the program, and their content and quality are more subjective and less directed than the corresponding technical component.²²

The specific requirements of the Conditions and Procedures Document which describe the criteria constituting the descriptive body of knowledge necessary for the practice of architecture outlines four major areas of study: Fundamental Knowledge (social, environmental, aesthetic and technical), Design, Communication and Practice (project, process, economics, business practice and management, and, laws and regulations). The criteria are stated in terms of the level of accomplishment that students should achieve prior to graduation; these being, "Awareness of the topic", "Understanding of the topic", and, "Ability to apply skills and knowledge to specific problems". Interpretation of the intentions of the document and its ramifications with respect to the intensity of exposure to the subject matter required, in terms of course time, leads to an appreciation of the inflated amount of time that is required to be devoted to the teaching of technology and practice, both as independent courses and as topics which require integration into the teaching of Design Studios. This is not to say that in light of the current situation in architectural practice that this is not wise or warranted, only that it necessarily reflects in the inevitable decrease in attention that can be paid to liberal studies. The liberal requirements are stated to constitute only a minimum of 20% of the content of the curriculum as recommended by the NAAB.

Although the resultant accredited curriculum is not completely devoid of liberal content, the primary focus has largely shifted to more specific issues of problem solving, design and technology. Should such a direction continue to evolve, it will likely erode program variety. In recognition of this situation and in an effort to maintain diversity, the Boyer Report suggests that the current requirements be altered to create a state of "standards without standardization". Such requirements would be less prescriptive and stress modes of thought rather than blocks of knowledge.²³

Preparing Graduates for Varied Employment Opportunities:

²⁰Gross, Mark. *Roles for Computing in Schools of Architecture and Planning*. JAE. September 1994. p. 56

²¹The list of criteria for Canadian Accreditation was modeled on NCARB as to legitimize Canadian Professional status in light of the future benefits under the North American Free Trade Agreement.

²²Canadian Architectural Certification Board. *Conditions and Procedures*. April 1992. p. 9

²³Boyer, Ernest L and Lee D. Mitgang. *Building Community: A New Future for Architecture Education and Practice*. The Carnegie Foundation for the Advancement of Teaching. 1996. p. 63

External pressures and ultimately, the specific interventions of the Architectural Certification Boards, have been successful in conservatively tailoring the "professional" degree to meet the needs of the registration and licensing process, and to serve as a high quality preparation for the practice of architecture. During the height of the building boom of the 1980's, when the Architectural Certification Boards began to seriously address the issues associated with directed education, technology, practice and the design curriculum, the majority of graduates with Professional Architectural Degrees went on to become licensed practicing professionals. To this end the directed education was both effective and appropriate. Graduates were adequately prepared to tackle increasingly more difficult and complex registration exams and all aspects of traditional architectural practice.

The current fluctuating economic situation may beg a different response. Although the "professional" degree still serves as an excellent preparation for those competing in the reduced architectural market, "professional" architectural degrees are becoming so specifically preparatory for employment as traditional practicing architects (with high level computer skills), that both students and graduates are finding themselves ill prepared to create or find alternative work in the context of recurring economic recessions.²⁴ Additionally, professional of education is often criticized as providing "training" versus "knowledge".

Current employment entertains a combined venue of traditional architectural offices, government agencies, alternative design fields and entrepreneurial self employment. Students and recent graduates are trying to find or create alternative avenues that serve to support a *broader definition of architecture*. Such alternative work may largely be found in design related fields that are more "liberal" and less "professional practice" oriented in their interpretation.

"Many graduates find career paths that are downright lateral, more in the tradition of the list of once-aspiring architects who went on to do other things for which they were more notorious -- Jimmy Stewart, Alfred Butts, (the recently deceased author of Scrabble) -- or of the legendary architecture students who went on to become rock stars -- David Byrne, Roger Waters, John Denver. ...Closer to home, people are curating exhibitions, opening their own restaurants, creating sculpture and art, starting magazines ..." ²⁵

A recent study conducted by the Ontario Association of Architects (this province, during the mid 1990's, being particularly oversupplied with architects and students and undersupplied with work) found

²⁴Fisher, Thomas. Can This Profession Be Saved? Progressive Architecture. February 1994. p.47

"Schools of architecture have always stood a little apart from the everyday demands of the profession and of the marketplace, and it is right that that should be so. But how far can that divergence go before the link between the school and the profession becomes dangerously tenuous, and the implicit guarantee that the school prepares the student for the world of work verges on dishonesty?" Historian Andrew Saint from a paper delivered at the Harvard Graduate School of Design, October 23, 1993.

²⁵ Kapusta, Beth. Architecture's Alter Egos. The Canadian Architect. September 1993. p. 41

(It is interesting to note that Beth graduated with a professional B.Arch. during the 1980's and is employed full time as the Assistant Editor of The Canadian Architect...)

that in 1995 13% of its members were employed in jobs they considered to be outside of the traditional realm of architecture. Such jobs included management, teaching, related design, artistic, construction, trades, and sales. An additional 25% felt that they would not be engaged in a traditional practice in 5 years time. They cited low pay, insufficient work and retirement as their reasons. This same study polled members for their thoughts on important changes that should be made to the schools. The foremost responses were to provide better *training* in business administration, more practical experience by encouraging coop education programs, *training* for the “real world”, stronger technical education, more construction related courses and a reduction in enrollment. This type of feedback from practicing architects highlights the conflict present in the profession. These recommendations are in direct opposition to older models of architectural curricula (which the Boyer Report would suggest we revive) that tended to prepare architects for more diverse areas of study (and employment) via liberal education and lateral thinking.

“What does not destroy me makes me stronger” Friedrich Nietzsche

The move to standardize curricular content has resulted in a shift towards professionalism and away from liberalism. It would seem that the current state of Architectural Education describes an education that due to the external pressures which shape the requirements for educating a *professional*, has indeed taken a less liberal and more conservative direction as the means to instruct graduates for a very specific traditional+computer related job market. It remains to be seen whether or not this direction in architectural education is ultimately successful in preparing graduates for the current, and constantly changing, state of architecture and the need to address an increasing number of more liberal alternatives in the broadening definition of the "practice of architecture". In light of the immediate situation in education and the profession, it would appear that directed professional education may not be satisfactory. Feelings are increasing that the return to, or additional provision of, an alternative, more liberal architectural education is required to respond to the dwindling field of traditional architectural employment.

While the magnitude of the problem is already great, it is being exacerbated by the current move to standardize degree nomenclature. The move to eliminate the Bachelor of Architecture degree as the end professional degree, and replace it with a Professional Master of Architecture will begin to erode other aspects of liberal based variety in architectural programs. Three year professional programs must address a comprehensive range of issues, more technical than liberal, in a compressed time frame. Non-professional Masters in Architecture programs that traditionally followed the professional Bachelor of Architecture will dwindle in number as the quantity of professional Masters of Architecture programs increases. In the future, purely academic or research based -- non-“professional” -- interest in the field may only be served by the doctorate degree -- a degree beyond the grasp of many.

Can we learn from our mistakes and circumstances, both current and previous, and use this information to ultimately achieve a superior form of architectural education? However overly idealistic, the best course is likely to create a diversity of choice within the singular education of the Architect rather

than to create two distinct streams of study, Liberal versus Professional, which mandate a career choice from the outset. The Boyer Report has given architectural schooling a thorough review and has set out a comprehensive array of goals to assist in the development of this type of inclusive education. These goals may or may not result in serious changes in our approach to education. At present The Boyer Report has netted much discussion but less apparent action.

“An important focus for us to remember is that the knowledge, values, and faculties of critical thinking associated with a liberal education are both a basis for and a constant companion of architectural education and practice. ... Programs need to foster attitudes that arise from a curiosity for what is and a hope for what could be, coupled with developing creative talent to chart courses through these interactive complexities.”²⁶

Most institutions are no longer able to provide an independently functioning *liberal* education that satisfies *all* of the requirements of the *profession* and its various agencies and licensing boards. Given the state of flux apparent in architectural education in the 1990's, the existence of a truly liberal posture in architectural education must be seriously questioned.

²⁶ Miller, William C. University of Utah. Forests and Orchards: Thoughts on the Standardization of Degree Nomenclature. ACSA News. Volume 26. No.9. May 1997. p.4.