

## **Keynote Speech by**

### **Prof. Stanford Anderson**

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USA

## **Presentation of the Honorary Guest by Dimitris Antonakakis**

*As you can see from the program, our first keynote speaker is Prof. Stanford Anderson, whom we are delighted to present and I, personally, am particularly touched by this opportunity and honor of introducing him to you.*

*Prof. Stanford Anderson has a Bachelor's degree from the University of Minnesota, a Master's from the University of California and a Ph.D. degree from Columbia University. He led a Master's Unit in the London Architectural Association and in 1963 became a Professor at M.I.T., where he has been the Head of the Department of Architecture since 1991. Prof. Anderson has published numerous articles, works and books, among which include the following: "Planning for Diversity and Choice", which has been translated in German; "On Streets", translated in Italian and Spanish; "Hermann Muthesius: Style-Architecture and Building Art"; "Peter Behrens and a New Architecture for the Twentieth Century". The AIA and the Association of Collegiate Schools of Architecture have chosen Stanford Anderson the 2004 recipient of the Topaz Medallion for Excellence in Architectural Education. In addition, he is a Guggenheim Fellow and a Fellow of the American Council of Learned Societies as well as having been awarded the highest Laureate of AIA and ACSA. I am certain that after this introduction to his rich and impressive professional background, you will be most interested in his speech, tonight, entitled, "Shaping the Curriculum for a European Higher Architectural Education: A Trans-Atlantic View".*

# Shaping the Curriculum for a European Higher Architectural Education: A Trans-Atlantic View

Professor Stanford ANDERSON

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It is a great honor to be, here, in Hania and to be invited, even if briefly, into the family of the Heads of European Schools of Architecture. Dimitris mentioned earlier that he had talked with us several times and it was approximately ten years ago while teaching architectural studios that he won the love and respect of his M.I.T. colleagues and students, immediately. This was the reason that we were very happy to invite him back several times, even if at times we were unsuccessful, I must say. Among the things I heard from Dimitris, just last evening, were some of his impressions of M.I.T., which reminded me, again, how often someone from outside sees and observes things that I having been there for some 40 years would not remark upon, and I am sure that it is important to have these kinds of insights coming from outside. So, I hope that in being invited here to come and speak to you that some of the things I have to say may be of interest.

In many ways our field of architecture is in a state of flux. Architecture and architectural education are mutually challenged. Yet, there are also enduring values in our field. Consequently, the current challenges are not only to adapt to the new, but also to discern what should be maintained from the past.

My expectation is that the current situation of architecture in Europe and in North America has more commonalities than differences. But even small differences can have large consequences, so it will be valuable for us to learn from one another.

When the organizers of these meetings contacted me, they invited my participation in the stated purpose of this event, namely:

... to speculate on the consequences for European architectural education, imposed by the possibility of the implementation of the European Higher Education Area as this is described in the Bologna and Prague Declarations. This perspective will trigger serious reforms in the school curricula and will, therefore, redefine the aims and values of architectural education in Europe.

It will not surprise you that I was unfamiliar with these Declarations, when they were provided to me for study. Perhaps it would be useful if I give a trans-Atlantic reading of those short documents. Hopefully, my thoughts will provide some provocation for you. I will speak with some conviction from my own experience, but it will obviously be for you to determine whether my thoughts are of relevance to your discussions.

In what follows, I will at several points provide excerpts from the operative documents.

## The Magna Charta of University

Bologna 18 September 1988<sup>1</sup>

### Preamble

[We find ourselves in an] increasingly international society.

Consider:

- 1) the future of mankind depends largely on cultural, scientific and technical development ... and this is built up in centres of culture, knowledge and research as represented by **true universities**;
- 2) ...[universities must] **serve society as a whole** ... [which then] **requires investment** in continuing education;
- 3) that universities must give future generations education and training that teaches them, and through them others, to respect the **great harmonies of their natural environment and of life itself**.

I am disconcerted by the phrase "represented by **true universities**". I know that European institutions of higher learning are as diverse as those in North America. When it comes to architectural education, it is more common in North America than in Europe that schools of architecture are found in prestigious and richly developed universities. A document invoking "true universities" suggests an invidious distinction meant to exclude some institutions of higher learning from the European Higher Education Area – or at least to suggest the recognition of hierarchical levels. What is the place of polytechnics, art academies, and those Hochschulen or institutes that originally developed more in the realm of crafts and industrial technique? We also know there are hierarchies among *these* institutions. Not every polytechnic has the renown of Delft or Zurich; not every Academy that of Vienna.

I will be interested to learn more of what may have been the intent or the result of this emphasis on "true universities". But let me make a more generous reading of the Preamble and move on to what I admire in that document. Let us assume that "true universities" is not to refer to existing hierarchies, but rather to encourage traits mentioned in that same paragraph: that culture, science and technology are all part of our social needs; that research is integral to the pursuit and transmission of culture and knowledge; that teaching at higher levels must be integrated with research.

From that positive assumption we can move on to other admirable aspects of the Preamble to this Magna Charta of University: namely, that the university must serve society as a whole, and that there must be a diffusion to the students, and beyond, of **"the great harmonies of their natural environment and of life itself."**

I find this last idealistic ambition courageous and welcome. It pleases me to think that such a statement might be made with some realistic conviction in Europe. In America, I fear it would be deleted under some hard-headed cost-benefit analysis – or by contemporary political positions that I want still less to contemplate here.

<sup>1</sup> Excerpted here from Constantin Spiridonidis and Maria Voyatzaki, eds., *Towards a Common European Higher Architectural Education Area* (Thessaloniki: EAAE, 2003), pp. 273-274.

To sum up thus far: I read that the Bologna call is for institutions of higher learning that will unite and pursue our several forms of knowledge and culture through an integration of teaching and research – this in the service of society as a whole, and in affirmation of high ideals for the quality of life and our environment.

Surely architecture has something to offer under this admirable program. Indeed, whether a school of architecture is located in a technical school, a great technical university, an academy, or a traditional university, it can be argued that architecture should be a valued agent in moving toward an institution that values knowledge *and* culture, teaching *and* research. Given the diverse natures of our home institutions, the relative strengths of our schools of architecture may be on either side of those equations.

Consider the second section of the Magna Charta:

### **Fundamental principles**

- 1) The university is an autonomous institution ...** it must be morally and intellectually **independent of all political authority and economic power.**

The moral and intellectual independence of the university is indeed a fundamental principle – a principle that needs to be safeguarded as much today as ever, perhaps more than ever. There is, however, an intrinsic problem that appears within the Magna Charta.

The need for independence from economic power is asserted as a fundamental principle. But the Preamble also asserts that universities should... "**serve society as a whole** . . . [and that this] **requires investment** in continuing education." As currently organized, our institutions need stronger finances – intensifying research activities and providing outreach programs increase these financial needs. Whether new support is sought from government or industry, we are courting the seats of economic power. There is no easy solution to this matter, but it must be faced both in specific cases and as a matter of policy.

The second fundamental principle of the Magna Charta states:

- 2) Teaching and research in universities must be inseparable [from one another]...**

While this principle is widely accepted in major universities (and leads to the term "research universities"), it needs tending both at the level of individual professors and that of the institution. I think this issue is of particular importance for schools of architecture, so I will return to it later.

The third principle is truly fundamental and needs no discussion here:

- 3) Freedom in research and training...**

Rejecting intolerance and always open to dialogue, a university is an ideal meeting-ground for teachers, . . . imparting their knowledge and well equipped to develop it by research and innovation, and for students [who are able and willing to learn]

But what then of this fourth principle?

- 4) A university is the trustee of the European humanist tradition... our constant care is to attain universal knowledge.**

Not true for every university, but I will assume this principle is intended to mean: *European* universities are the trustees of the European humanist tradition. Even growing up in the cowboy country of the western United States, I am very much aware of growing up in, and valuing, the European humanist tradition. I constructed my university education in that way.

But remember, the Magna Charta began: [We find ourselves in an] increasingly international society. . .

Well, the issue is the "European higher educational area," so perhaps "international" means "intra-European." But is that adequate? The document seems to recognize that the now quite extended European Union is heterogeneous. Even the major western European powers are not as homogeneous as they once were. Does the tolerance and openness to dialogue of our universities extend to this heterogeneous situation? In my immigrant nation this is certainly an issue – one on which we move but that is far from resolved. For my part, I would support the centrality of the European humanist tradition for European universities, but the discourse clearly has to be broadened.

And the call to "attain universal knowledge"? I won't take up this issue here. Time does not allow it. Furthermore, I myself hope that the extreme relativism of much of post-modernism is being mitigated. But these are issues not to be resolved by mere assertion, especially while calling for openness to dialogue.

The last section of the Magna Charta is headed:

#### **The means**

- 1) To **preserve freedom in research and teaching**, the instruments appropriate to realize that freedom must be made available to all members of the university community
- 2) Recruitment of teachers: **research is inseparable from teaching**
- 3) **Students' freedoms are safeguarded**
- 4) Universities – particularly in Europe – regard the **mutual exchange** of information... and frequent joint projects... as essential to the steady progress of knowledge. Therefore (as historically) encourage mobility among teachers and students.

As might be expected, "the means" impinge more directly on what we as architectural educators are urged to do. The second foundational declaration, the Prague communiqué titled "Towards a European Higher Education Area," is also concerned with the means to advance such an enterprise.<sup>2</sup>

Consequently, I would like now to look for what will touch more closely on architectural education; but first, a summary of some important aspects of the position advocated in our documents:

The two documents recurrently emphasize that **research and teaching** must be inseparable "... if [the teaching programs are] not to lag behind changing needs, the demands of society, and advances in scientific knowledge."

One might say that the vision of a "European higher educational area" is fundamentally

<sup>2</sup> From *Towards a Common*, pp. 312-316.

based on *research* and *thus implies* advanced education – education beyond transmission of the existing state of knowledge or practice.

Higher education must be equipped to develop knowledge by research and innovation. Thus, in the recruitment of teachers, **research is inseparable from teaching.**

The documents also emphasize mutual exchange of information, frequent joint projects, and, above all, **mobility** among teachers and students.

## **My experience**

I offer some reflection on these principles from long experience as a professor and as Head of the Department of Architecture at MIT. MIT is a highly international, research-driven university. It is at least plausible to think of MIT as one model for the kind of university envisioned in the Bologna charter: international in both faculty and students; strongly based in research, MIT is also devoted to teaching; leaders in science and technology, we do also have a broad embrace of culture – and *cultures*. For this meeting, the MIT Department of Architecture may serve as a test case of architectural education within a research university.

I begin within the context of the Prague Declaration.

### **Towards a European Higher Education Area**

Communiqué of the meeting of European Ministers in charge of Higher Education in Prague. 19 May 2001

The preamble here, in comparison to the Bologna Charter, speaks more fully of diversity. There is a call for a lifelong learning perspective on education. And a reaffirmation of higher education as a public good.

It is noticeable that students succeeded in inserting themselves in these discussions of the future of European higher education – and through them a stronger awareness of the social dimensions of intended reforms.<sup>3</sup>

The Prague document then repeats some earlier advocacy and goes into some more detail:

#### **Adoption of a system of easily readable and comparable degrees**

##### **Adoption of a system essentially based on two main cycles:**

Undergraduate and graduate: bachelors and masters

##### **Establishment of a system of credits**

[Again] **Promotion of mobility:** Including students, teachers, researchers and administrative staff

**Promotion of European cooperation in quality assurance:** Accreditation mechanisms but with encouragement of universities contributing to such establishments

**Promotion of European dimensions in higher education:** i.e., not regional or national – but modules of general applicability

Promotion of the attractiveness of the European Higher Education Area:  
Importance of quality and of accreditation

Thus, for the most part, the Prague document is remarkably bureaucratic, concerned with the nuts and bolts necessary for the Europeanization of higher education in EU countries.

I see positives in the Prague Declaration:

- Increased recognition of diversity and participation of students
- Higher education as a public good, and now extended in lifelong learning

But also some questions:

- 1) As already mentioned, the question of how and when teaching and research are united.
- 2) With such emphasis on research, why only two cycles (bachelors, masters)? With the Berlin Communiqué,<sup>4</sup> this lack was corrected by addressing the role of doctoral degrees.
- 3) However, once the doctoral degree is introduced to the discussion, this has its own problematic within architectural education.
- 4) Finally, is mobility an unalloyed good?

In raising these questions, I do still want to endorse the ambitions of the Bologna charter. I agree that architectural education today must be conducted in settings that unite teaching and research. However, in the realities of architectural education, I think it is an error to think that the unity of teaching and research is always the ideal. This may be even more evident if European schools move to the two cycles of bachelors and masters education.

Those two cycles are the norm in North American higher education. In various schools and often in the same university, the initiation of an architectural education may be undertaken at either the undergraduate or graduate level. In either case, almost all students arrive with enthusiasm but very little knowledge about architecture. They are beginners. They are in need of intensive teaching. Many of them will have the capacities, both native and learned, to become effective researchers, but they do not yet have a grasp of the discipline within which to conduct that research. Viewed from the side of those who teach beginning students, this is an area of teaching that severely limits opportunities for research. I don't think architecture is best taught and developed under the implication that *all* teachers must be *equally* committed to teaching *and* research. Finally, I don't think that every architect need be a researcher; indeed, some of our best

<sup>4</sup> "Realising the European Higher Education Area," Communiqué of the Conference of Ministers responsible for Higher Education in Berlin on 19 September 2003, reprinted in Constantin Spiridonidis and Maria Voyatzaki, eds., *Shaping the European Higher Architectural Education Area* (Thessaloniki: EAAE, 2003), pp. 252-258.

architects would be inhibited in their own production if they themselves were to conduct research.

While agreeing on the ideal of the unity of teaching and research in higher education, I suggest we need a more articulated model of how to organize architectural education. I would like to introduce a position I advanced years ago under the heading of the "Profession and Discipline of Architecture."<sup>5</sup>

In recognizing both the profession and the discipline of architecture, I do not intend an invidious distinction. I want simply to acknowledge different responsibilities and practices in these two modes of attention to architecture. Especially in the present context, I look to these distinctions in the context of architectural education.

### **Discipline and Profession in Architectural Education I**

In Europe still more than in North America, to be recognized as a school of architecture is to be engaged in professional education. Recognition as a *professional* school implies an important responsibility to society – preparing people to enter the practice of architecture. Most, if not all of our schools of architecture conceive of professional education as the centerpiece of the school. Increasingly, however, schools of architecture incorporate other degree programs: advanced research degrees, including doctoral degrees. What new relations are then established between architecture and education, and among degree programs?

To clarify my distinction between the profession and the discipline of architecture, I offer the following virtual diagram. Imagine the profession of architecture diagrammed as a box that extends horizontally. This box is intersected, vertically, by another box for the discipline of architecture. Thus the two realms of activity intersect; the profession and the discipline are partially but not wholly coincident.

### **Profession of Architecture**

The profession is dominantly engaged with the current condition of practice, seeking to fulfill commissions to the highest standards. The concerns of the profession are mainly synchronic and synthetic. Within the profession, memory and tradition survive *operationally* (currently, for example, in the contesting attitudes about modern architecture). Other aspects of our tradition survive in the *discipline*, but are not operative in the *profession* (the guild systems of medieval builders, for example, and even their architectural forms and technologies).<sup>6</sup> The *profession* is inherently projective – it brings something into being. Yet the profession cannot be so exploratory that its projections are outside the resources

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<sup>5</sup> Stanford Anderson, "The Profession and Discipline of Architecture: Practice and Education," Andrzej Piotrowski and Julia Williams Robinson, eds., *The Discipline of Architecture* (Minneapolis: University of Minnesota Press, 2001), pp. 292-305.

and time-scale of client needs. Then too, there are *non-architectural* matters that are necessary, and thus deserving of attention within the profession (examples are public relations and office management). Viewed from the profession, we see an appropriate inclusion of concerns that are not intrinsically those of architecture. On the other hand, certain forms of *architectural* knowledge are strategically excluded.

## Discipline of Architecture

Now the discipline: By the "discipline of architecture" I understand a collective body of knowledge that is unique to architecture and which, though it grows over time, is not delimited in time or space. For example, post and beam structural systems, and wall and vault construction, appeared early in the history of architecture. These structural types are still studied in purely technical terms. When, however, such systems are understood to create opportunities and constraints for the definition of space, the control of circulation, and the play of light, these are then issues of the discipline of architecture.

The structure of knowledge within the discipline preserves the memory of, indeed continues to study, matter that is not engaged by current practice. Similarly, from a disciplinary base one can make speculative projections about what might be, unconstrained by the need for a synthesis within the time frame of a client. Historically, we see this in Piranesi's *Carceri*, Ledoux's "revolutionary" projects, or Frank Lloyd Wright's "Broadacre City."

There is a distinction in the products of the profession and the discipline. The product of the profession, a physical artifact and typically a building, absolutely requires a synthesis whether well or badly performed. The products of the discipline take many forms and possess their own integrity, but emphasize a given aspect of architecture, establishing resources for an architectural synthesis rather than taking that step.

## Discipline and Profession in Architectural Education II

Turning back to schools and degree programs, I think the implications of my thought are clear. The professional degree programs have come into being, and assume their form and responsibilities, in relation to the profession. The discipline of architecture, including its trans-cultural aspects and its anachronisms and speculations, is primarily the domain of the research degree programs. Exponents of both the profession and the discipline are necessary in architectural education. This entails the presence, within a school of architecture, of persons, types of inquiry, and subjects that do not always address one

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<sup>6</sup> This is not to say that the profession does not leap back over time to embrace once again aspects of the architectural tradition that had become dormant. Classical revivals have been several in the history of architecture. The Bauhaus, famed for its role in the development of modern architecture, began with a favorable reassessment of the practices of medieval guilds. Indeed, as I will argue below, the discipline of architecture maintains a record and an awareness of the architectural tradition that is then used selectively \_ by imitation, but also critically and inventively \_ in the profession.

another directly. Indeed, in the here and now, they may quite properly be irrelevant to one another. Outside current utility, the range and structure of the discipline deserves to be explored in its own right, but also because what appears irrelevant today may yet prove otherwise.

However, it would be a pity if these two enterprises did not recognize significant relations as well. The diagram I evoked earlier included an *intersection* of the profession and the discipline. Within this intersection important transactions are initiated from both sides. Le Corbusier was a passionate practitioner, yet he is so frequently cited because both his ideas and his works contributed to the growth of the discipline. Both Viollet-le-Duc and Gottfried Semper are remembered primarily for their theoretical contributions to the discipline of architecture, yet numerous architectural works could not exist without such theories. The intersection of the profession and the discipline deserves careful attention. Indeed, precisely this aspect of the profession must be emphasized in schools. Other aspects of a student's professional development await immersion in the architectural office. From this intersection the professional degree student ventures into the more esoteric aspects of the discipline, both for an understanding of its past and to revel in imagining a practice that does not yet exist.

We want the discipline to grow and become more articulate. We want professional practice to reach its highest standards. As researchers or professionals we want to make our own contributions to these enterprises. As educators we want to prepare the next generation to make their contributions in each of these areas. Degree programs exist only to serve these ends; to maintain both the fruitful distinction between professional and research degrees, and then also their interaction, is fundamental.

With this background of the profession and the discipline, I return to the questions I raised earlier:

- 1) How and when are teaching and research united? In the early years of a professional education, the neophyte architect needs an intensive teaching environment. The student is not yet ready to conduct research. The teacher who is dedicated to these students may have a research enterprise, but if so, it will rarely be developed within the beginning teaching program. At the least, the time available for research is reduced. Professors should not all have identical profiles; we need those who are more fully devoted to the teaching enterprise.
- 2) The Bologna and Prague documents place great emphasis on research. If, as is often the case in North America, architectural education *begins* at the masters level, these more mature students need almost the same devoted introduction to the profession and discipline as do beginning undergraduates. Of course, the masters level, in other constructions, is also used to move beyond the first professional degree, and thus can have a significant research dimension.
- 3) But we must, as in the Berlin Communiqué, also introduce the issue of doctoral education. Throughout the world, the doctoral degree is the pre-eminent research degree. Once the doctoral degree is introduced to the discussion, a new problematic presents itself within architectural education. I will come back to this issue.
- 4) The Bologna, Prague, and Berlin documents all give great emphasis to mobility of both students and professors. There is a romantic allusion to medieval scholars. There is recognition of the opportunities presented by the European Union and of the still

broader internationalism of our times. But, *is* mobility an unalloyed good? Does the urging of mobility support the call for higher levels of teaching and research? My experience suggests that research professors thrive best when they have stable institutional support from colleagues, students, and an appropriate research environment. The same is true for students in research degrees. If we turn, again, to beginning students, they *do* need to learn of the diversity of their new discipline, and thus travel is enriching – but constancy in their learning environment is also important to *their* success. As I will mention later, it is also through that constancy that these beginning students find entry to the research enterprise of the university.

### **Escalation of Research in Professional Architectural Education**

I have argued for maintaining a distinction between the professional and the research degrees in architecture. Both types of degree require devoted teaching, but of different kinds and with different needs and opportunities for research activities.

Maintaining a distinction between professional and research degrees is, however, under challenge. In February 1996, I had the opportunity to attend a meeting of your European Association of Architectural Educators at the Technical University in Delft. The topic was "Doctorates in Design + Architecture." That was eight years ago, so I look forward to learning from you what has happened; but allow me to reflect briefly on what I understood at that time.

The impetus for the Delft meeting was pressure within the European Community to reconceive the basic professional degree in architecture as a doctorate. In the US, a small number of people, increasingly vocal, advocate this same policy. If this were only a change of terminology, it would be merely an unfortunate example of degree inflation. More rationally, advocacy for a change to a doctoral degree is accompanied by a change in the agenda of professional architectural education – purportedly moving it into the realm of a research degree. At first glance, a higher degree title may appear to be a positive step toward a more rigorous architectural education and in concert with changes in architectural production. However, to date professional education in architecture has been a course of long duration that, nevertheless, few among us would argue over-qualifies its graduates. Expressed more positively, architecture students begin with little specialized preparation from secondary or undergraduate education and, encountering a broad and complex field, need the current extended degree programs to comprehend their discipline and emerge as promising architects. It seems implausible either that all of these students want or need an additional research component, or that even the best of them would, in a constrained period of time, excel on two fronts simultaneously.

Actually, the matter is more complex than this and I have over-stated my case. There are important gray tones in this picture. In my own school, for example, professional degree students are increasingly introduced to research techniques; professional students and research degree students in architecture and other fields share studios and workshops; and some professional students participate in faculty research projects. Professional students *do* increasingly engage research agendas. Nonetheless, we would never think

to demand an independent, advanced (never mind *doctoral*) research thesis at the same time that a student is culminating a professional education. If terming a professional degree a doctorate is not just a misnomer, it endangers the professional degree agenda and devalues the traditional doctoral degree. As presented here, such a move would, under its most positive construction, insist on a highly developed thesis in the intersection of the profession and the discipline of architecture – but such a demand asks too much too early of these students.

Nonetheless, the profession of architecture and the professional degree programs are rightly concerned to contribute to the discipline of architecture. In teaching, perhaps even more than in practice, designers should be chosen for their ability to entertain and advance the more general level of discourse about architecture – advances that are simultaneously contributive to the profession and the discipline. This capacity of design professionals should be respected and encouraged. When possible it should also be incorporated into the research degree programs.

In terms of background, orientation, and time, however, it may well be exceptional that design professors can also conduct or direct research in a form that is appropriate for the doctoral degree. Perhaps advanced disciplinary research is the realm for a *professional* doctoral degree in architecture (that is, something other than a Ph.D.), but I think this has yet to be proven. I think rather that the exploration of this intersection of the profession and the discipline can continue in two familiar ways: 1) through projective formulations of designers presented in essays, diagrams, models, and architectural works, as well as through the less formalized demands of the professional and advanced masters degrees; and 2) through the advanced research conducted by those who have completed both professional architectural degrees and traditional doctorates in correlated fields (e.g., engineering, history, social sciences). Such double graduate education is demanding, yet increasingly common among well-qualified candidates.

In the end, I suppose my advocacy is quite simple. Schools of architecture should be devoted to the profession *and* the discipline of architecture; to developing both through research; and to teaching our diverse field from initiation through doctoral studies. Such a large and complex program benefits from teachers of diverse interests and competence. One aspect of that diversity is a range of appropriate ways in which those teachers engage research – and sometimes, honorably, don't. Finally, excellence in both teaching and research is supported by collegial and institutional stability. As concerns mobility, the Europeanization of your higher education area might be fruitfully realized in two ways: by professors receiving long-term appointments across old national boundaries; and, similarly, some or many students from each country earning a degree through a full program of devoted study elsewhere than in his or her home country. The goal should not be a diversity of educational smorgasbords, but the complementarity of well-educated professionals and scholars from diverse schools of high standing.

All this, hopefully in the service of, to quote a last time, "**the great harmonies of our natural environment and of life itself.**"