Teaching Futures Studies: Some lessons learned

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A SOBERING OPENING THOUGHT.

In 1977, Wayne I. Boucher completed *The Study of the Future: An Agenda for Research* for the US National Science Foundation. It was based on a small seminar of invited futurists. I was privileged to attend.

Twenty-three years later, Boucher published an article titled "The futures examination" in *Futures Research Quarterly*, Winter 2000, pp, 5-10. He started off by commenting that when twenty-two people were asked, by the editor, Harold Linstone, to contribute essays for a special issue of the journal *Technological Forecasting and Social Change* (August 1989) devoted to developing a new agenda for forecasting, "there is not a single reference to the 'old' agenda…to which some of the same authors had contributed. Accordingly there is not a single word on the progress that had been made on that agenda in the preceding 12 years." (5)

So Boucher proceeded to construct a twenty-question examination that any futurist educated according to the original "Agenda" should be able to pass. He said he envisions his exam for the B. A. level but is sure most futurists would view it as a PhD examination. However, Boucher suggests that "they are probably not asked on any level in any field at any institution of higher education these days, and, judging by the 'futures' literature, it seems certain that virtually all of today's practicing futurists would flunk if they had to provide reasonably sophisticated answers--theoretically grounded, analytically sound, and historically informed--to even half of them. That is to say, had there been 'serious progress', nearly everyone now associated with the teaching or practice of futures research would be unqualified for a B. A. in their own area of professional expertise." (5f)

A serious charge indeed.

Is it true? Does it matter if it is or not?

INTRODUCTION

I have been teaching futures studies for a very long time. I first formulated some ideas about the field while I was teaching in the College of Law and Politics of Rikkyo University in Tokyo, Japan, during the early 1960s. I introduced some futures-oriented elements in my teaching then. When I returned to the United States in 1966, I was able to introduce (in 1967 at Virginia Polytechnic Institute and State University) what is said to

be the first officially-recognized college course, entirely oriented towards the future, although I know that Alvin Toffler had taught a futures course at the New College for Social Research in New York City before this, and there might have been others as well (see comments by Rojas & Eldredge, below).

Indeed, I soon discovered that I was not alone. The very year I returned from Japan, a group of people Washington, DC, formed the World Future Society, and a largely different group of people met in Oslo, Norway, to form what soon came to be the World Futures Studies Federation. I immediately became involved in both, though I devoted substantially more of my time to the World Futures Studies Federation for various reasons.

I moved to the University of Hawaii in 1969 specifically to teach futures studies. The Legislature of the State of Hawaii created the Hawaii Research Center for Futures Studies and placed it at the University of Hawaii in 1971. I have served as director of the Center since then.

An MA program in Alternative Futures was established in the Department of Political Science of the University of Hawaii in 1977. I have served as its coordinator since then. During the 1970s and 80s, I also conducted futures courses sponsored by the World Futures Studies Federation through the InterUniversity Consortium in Dubrovnik, Yugoslavia, every year. For the past decade, I have also annually taught futures courses for the International Space University in Strasbourg, France.

In addition to extensive face-to-face teaching, I also have taught futures courses by newspaper, live (interactive) and/or taped radio, live (interactive) and/or taped television, via live interactive satellite (PEACESAT), and for the past five years, entirely or partially online and/or over the Internet.

A book I edited titled *Advancing Futures: Teaching Futures at the University Level* (Wesport, Conn: Praeger Press, 2002) includes essays written at my request by university professors teaching futures studies in nearly twenty countries.

Over the last several months, I have gone back to some of the earliest futures work I was familiar with--the meetings and discussions leading up to the eventual creation of the World Futures Studies Federation, and the work and writing, at the same time, coming from the early days of the World Future Society.

While I was developing my first futures course at Virginia Tech, one things I did in order to develop a syllabus (and to get the course officially approved) was to create a bibliography of futures-oriented publications. That was subsequently published as a supplement to the *World Future Society Bulletin* in April 1969, and caught the attention of Eleonora Masini and others then of the IRADES group (Istituto Ricerche Applicate Documentazioni e Studi) in Italy. Masini was also interested in documentation, and in fact produced a series of pamphlets and eventually a huge (800 page) book on people,

theories, and methods of futures studies (IRADES, *Social Forecasting: Ideas, Men, Activities. Documentation 1971*. Roma: Irades, 1971).

Masini identified **people and organizations** doing futures studies in Argentina, Austria, Belgium, Bulgaria, Canada, Colombia, Czechoslovakia, Denmark, Finland, France, Germany, Greece, India, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Poland, Romania, Sweden, Switzerland, UK, USA, USSR, and Venezuela.

Topics of futures studies were listed as culture, demography, economy/work/management, environment, family, leisure, methodology, peace and development, planning, politics, psychology, religion, social communications, social forecasting, technology, transport and "urbanistics."

There were other compilations during this same time:

John and Magda McHale, *Typological survey of futures research in the US*. Washington: National Institute of Mental Health, 1970; *Futures studies: an international survey*. New York: United Nations Institute for Training and Research, 1976; *The Futures directory: an international listing and description of organizations and individuals active in futures studies and long-range planning*, also with Guy Streatfeild and Laurence Tobias. Guildford, Surrey, Eng.: IPC Science and Technology Press; Boulder, CO: Westview Press, 1977.

> **Geographical location of futurists** according to the McHales's 1977 *Futures Directory*, (381-383):
>
> Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, Ecuador, Egypt, Finland, France, Germany, Guatemala, Hungary, Indonesia, Iran, India, Ireland, Israel, Italy, Japan, Lebanon, Malta, Mexico, The Netherlands, Nigeria, Norway, Philippines, Poland, Romania, Singapore, South Africa, Spain, Swaziland, Sweden, Sri Lanka, Switzerland, Tanzania, Thailand, Turkey, Uganda, UK, US, USSR, Zaire.
>
> **Areas of concern to futurists** (378-380):
>
> Business and commerce, Communications, Cultural, Defence, Economics, Education, Energy, Environment, Food, Health, Labour, Legal, Methodology, Natural Resources, Policy, Population, Regional, Religion, Science and Technology, Social, Transportation, Urban
>
> **Methods futurists use** (375-377):
>
> Brainstorming, Causal modeling, Contextual mapping, Cross impact analysis, Delphi, Expert panels, Extrapolation, Gaming, Historical analogy, Individual

expert forecasting, Network analysis, Operational models, Probabilistic forecasting, Relevance trees, Scenario building, Simulation, Statistical models.

One of the most important events in the early days of futures studies was a conference held in Kyoto, Japan, in 1970. Papers from it were published in Japan Society of Futurology, ed., *Challenges from the Future: Proceedings of the International Future Research Conference, Kyoto 1970*, (Tokyo: Kodansha, Ltd. 1970), Four Volumes. Participants at the 1970 Kyoto Conference were listed as being from Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, Czechoslovakia, Denmark, France, Germany (East and West), Greece, Holland, Hungary, India, Israel, Italy, Japan, Korea (South), Norway, Pakistan, Poland, Romania, Sweden, Switzerland, Taiwan, Thailand, UK, USA, USSR, Venezuela, Yugoslavia,

Following are **excerpts from some of the papers** that are relevant to our discussion here:

Stephan Schwarz, "Information and epistemology in futuristics," Vol. 1, pp. 53-70. It includes "Proposals for an international computerized bibliography in futuristics" under the following headings:

1. Futuristics (general), 2. Natural sciences and medicine. 3. Applied sciences, technological sciences and engineering, 4. Political and policy sciences. V. Other behavioral and social sciences, social welfare. 6. Humanistic science.

Under "general futuristics" Schwarz lists:

1.1.1 General aspects on studies of the future
1.1.2 Essays with general scope
1.1.3 Particular sectors with general implication
1.2.1 Intuitive forecasting
1.2.2 Explorative forecasting
1.2.3 Normative forecasting
1.3 Periodicals
1.4 Bibliographies

"A systematic analysis of the documents forming the body of futuristics inevitably leads to the important epistemological problems of the field and thus is a powerful instrument for advancement towards a consensus. (67)

Bart van Steenbergen, "Critical and establishment futurology" *Ibid*., 93-101

"The prediction of future events has always been considered the highest goal of science." (95) "I am convinced that, as soon as we can predict human behavior, we have reached [Herbert Marcuse's] one-dimensional

society in which all radical change attempts, all negations to overthrow the existing social order, are encapsulated." (96)

"Knowledge and science should always stand in that field of tension between actuality and potentiality, between the situation as it is here and now and a future being, a possible being, the idea, between the 'is' and the 'ought'. The true field of knowledge and science is not the study of the phenomena as they are, is not directed on the given fact, but on the critical value judgement which is the prelude to the transcendence of the given form. " (97)

Establishment futurology "which is undoubtedly dominant, now has an outspoken orderperspective on society and has strong ties with the positivist tradition. This school can also be seen in connection with [Robert} Theobald's first school in which "extrapolation" is the basic methodology. The establishment futurologists have strong ties with the existing social order, partly ideological ties, partly financial ones, partly both." (98)

The critical futurologist school "has a conflictperspective on the social process and in their scientific approach they reject positivism and they try to find out what dialectical thinking can teach them." (99) "The more enlightened futurologists often talk about alternative futures (plural) and that is indeed progress. To have a choice between two or more futures is better than the choice of only one future…." (100)

Johan Galtung, "On future research and its role in the world," *ibid*., 103--115.

This paper by Galtung should be required reading for anyone interested in improving futures studies now. Most of the relevant issues and alternatives are laid out very clearly. For example Galtung offers "A typology of future research" (103-108, with a chart on p 109. **See Table One**).

Galtung also makes "Some suggestions for the organization of future research" with fifteen ideas about how to "avoid traditionalism in organizations" (111-115) that also should be read by anyone interested in the past and futures of the WFSF.

Much to my surprise and dismay, Galtung even states that futures studies needs to be based on an interactive triad of future researchers, politicians, and citizens (112)--a suggestion that I thought I had invented and designated with Alvin Toffler's term, "Anticipatory Democracy." Moreover Galtung specifically states that it is necessary "to avoid colonization of future generations" (112), another concept that I thought I had invented!

Sigetaka Uchida, "The scientific basis of futurology and its major task", *ibid*., 125-132

> "In my view, futurology is a third category of social science which I call theoretic science…a synthesis of science and philosophy, reality and ideal, causality and teleology. Such theoretic sciences may indicate the new image of future society and principles of social planning and policies." (125)

Denis Johnston, "Forecasting methods in the social sciences," *ibid*., 135-152:

> "Types of outlook statements": (137)

>> "Predictions" (137f)
>> "Projections" (138f) (all of the "if…then" possibilities)
>> "Forecasts" (139) are "a projection which has been selected as representing the 'most likely outcome'" It "substitutes for predictions".

> Two kinds of projections and forecasts: exploratory and normative (139) leading to a four-fold typology of projections:

>> Qualitative-exploratory projections (140)
>> Qualitative-normative projections (141)
>> Quantitative-exploratory projections (142ff)
>> Quantitative-normative projections (144ff)

H. Wentworth Eldredge, "Education for futurism in the USA--An ongoing survey and critical analysis" in Vol. II, 211-228:

> "As of January 1970, approximately eighty institutions of higher learning were located offering futurism or tech forecasting courses, six of these were Canadian universities. Several institutions actually had two or more courses in futuristics--loosely defined." "Since there are approximately 2500 institutions of higher education in the US and Canada, it does not appear that the present teaching of futurism has overwhelmed the academic community…." (214)

> "There was almost a complete lack of any implicit, much less explicit, social change theory without which there can be no wholistic prediction much less future planning. It should be evident that partial or micro-system extrapolation will inevitably fall on its face due to external variables not accounted for in such an undertaking." (215)

"Predictive Techniques": (217f)
>   Type A: intuitive methods and codified intuition or Delphi
>   Type B: Trend extrapolation
>   Type C: Development of Ideal State and/or Alternate Possible
Futures.
>   Type D: Dynamic Models
>   Type E: Monitoring Change

Disciplines involved (p. 228)

>   Interdisciplinary 4
>   Biology 1
>   Zoology 1
>   Sociology 7
>   Political Science 3
>   Geography 1
>   Anthropology 1
>   Business Administration 6
>   Communication 2
>   Philosophy 1
>   Engineering 4
>   Urban Planning 3
>   Education 1
>   Architecture 1

Harold Linstone, "A university for the Post-Industrial society," ibid., 235-258

>   A sketch of a new university, 247 ff.
>   Chart on p. 249.
>   **See Table Two**

Alvin Toffler, ed., *Learning for tomorrow: The role of the future in education*. New York: Vintage Books, 1974 contains the following chapters indicating Toffler's idea of what is important as the focus and subject matter of futures studies at that time:

>   *Part One, "Images of the future and individual development"*
>   Alvin Toffler, "The psychology of the future"
>   Benjamin Singer, "The future-focused role-image"
>   Pauline Bart, "Why women see the future differently from men"
>   Alvin Poussaint, "The Black child's image of the future"

>   *Part Two, "The place of the future in the curriculum"*
>   Wendell Bell, "Social Science: The future as a missing variable"
>   Michael McDanield, "Tomorrow's curriculum today"
>   Irving Buchen, "Humanism and futurism: Enemies or allies?"

Nell Eurich, "The humanities face tomorrow":
John Wren-Lewis, "Educating scientists for tomorrow"
Harold Strudler, "Educational futurism: Perspective or discipline?"

Part Three "Directions and resources"
Harold Shane and June Grant Shane, "Educating the youngest for tomorrow"
Priscilla Griffith, "Teaching the 21st Century in a 20th Century high school:
Billy Rojas, "Futuristics, games, and educational change"
Dennis Livingston, "Science fiction as an educational tool"
Howard Kirschenbaum & Sidney Simon, "Values and the futures movement in education"
Philip Werdell, "Futurism and the reform of higher education,"

Appendix:
Billy Rojas and H. Wentworth Eldredge, "Status report: Sample syllabi and directory of futures studies" (345-399)

"*Section One* [provides] data on the history, number, geographical distribution and nature of futurist courses and activities in educational institutions in North America."

"*Section Two* presents a sampling of actual course syllabi. It covers fifteen college-level and four precollege courses…." (345)

Those wishing to design new curricula or materials may find in these pages syllabi or parts of syllabi that can be modified to suit their needs…." (346)

"*Section Three* consists of a listing of approximately 200 courses offered at approximately 140 institutions."

"*Section Four* provides a reading list consisting of the seventy-five books most frequently used in futures courses.

"*Section Five* consists of the names and addresses of several organizations or institutions with special interest in the filed of educational futuristics. (346)

"In the early 1960s the future became subject matter in the classroom of Richard Meier at the University of Michigan and at the University of California after his move to Berkeley. Other professors took similar initiatives following the publication of Herman Kahn's *On Thermonuclear War* at the beginning of the decade. Special units on the future of Soviet-American relations or the coming impact of automation were included in a number of courses. However, as closely as can be determined, interest in alternative futures as a focus for scholarship did not take hold at this time. The notion that coherent academic programs could be future-oriented had to wait.

"The first university class in futuristics was the brainchild of Alvin Toffler and was offered at the New School for Social Research in Fall

1966. Although the early courses developed elsewhere soon after were, as a rule, conceived without direct knowledge of that pioneering class, it turns out that the New School course contained many of the elements still present in introductory future-studies seminars. [Footnote in text: Just as the early wave of pioneers were generally unaware of each other's work, Toffler, at the time, had not yet discovered the essay written two decades earlier by Ossip Flechtheim in which such courses were first proposed."]. (346f)

"Successive surveys…indicate that by 1968 the number [of futures courses] had risen by sixteen; an additional thirty-one could be counted in 1969." (347) "By 1970…about sixty futuristics courses were being offered at American and Canadian universities." (348) "A reasonable 'guesstimate' of courses taught through June 1971 would be 150 to 175." (348)

"Among respondents to our latest survey, the single largest contingent are political scientists, some twenty-five altogether, followed by twenty-two sociologists and twenty educators. Those drawn from other fields include business and management, 12; engineering and technological forecasting, 9; city planning and architecture, 8; history, 7; theology, 6; physical science, 5; biological science, 4; computer science, 3. Also represented are philosophy, anthropology, English, economics, humanities, geography, and home economics." (349)

[A]bout 90 percent of futures researchers are male and … better than 43 percent belong to a single age cohort: thirty to thirty-nine years. It should be added that nearly 100 percent are white. These conditions have been deplored by some futurists, including Toffler." (351)

"The most common goals [of these courses] are:

1. Help students anticipate change, i.e., make better career choices, develop future-oriented attitudes, contribute to personal growth, etc.
2. Survey forecasting methods.
3. Develop ability to relate ideas and information between disciplines.
4. Facilitate student-student and student-teacher group interaction.
5. Recognize the continuing impact of technology upon society.
6. Develop ability to evaluate forecast and utilize feedback in doing so.
7. Study major trends shaping the future.
8. Explore ideas, images, models of the future.
9. Examine case-study forecasts in specific problem areas.

10. Develop alternative scenarios of the future." (351f)

"The most common background topics include population, ecology and environment, education, international relations, historic concepts of the future, urbanization, privacy, automation, computers and cybernetics, systems thinking, science fantasies and utopias, creativity, concepts of time." (352)

Other topics included: "forecasting methods, biomedical developments, global changes, new values, impact of technology on society, rate of change, economic change, the future of sex and marriage, technological change, planning, social control, post-industrial society, transportation and communication in the future, theories of futuristics, life and influences of individual futurists, prospects for war and peace." (353)

"What is interesting to note is the lack of attention paid to subjects that education-watchers would normally expect to see accorded a reasonably high priority ranking. Few futures classes have dealt with trends in women's role in society, racial and ethnic groups, religion, the arts, and space travel. (This may reflect the fact that most futurist are white and male…)." (353)

There have been several attempts to characterize the futures field since these beginnings. Some of them are listed below. But I conclude this brief overview by referring to the most complete and authoritative of the recent attempts: Wendell Bell's two volume work on *The Foundations of Futures Studies* (New Brunswick, New Jersey: Transaction Publishers, 1997) Passages relevant to our discussion here include:

What should the field be called? (Vol. 1, 68-70).

"Nine major tasks of futures studies:" (Vol. 1, 75-97)

Study of possible futures
Study of probable futures
Study of images of the future
Study of the knowledge foundations of futures studies
Study of the ethical foundations of futures studies
Interpreting the past and orientating the present
Integrating knowledge and values for designing social action
Increasing democratic participation in imaging and designing the future
Communicating or advocating a particular image of the future

"The role of prediction" (97-107)

Futures studies and time (116-140)

"An epistemology for futures studies: from positivism to critical realism" (Chapter 5)

Methods (Chapter 6):
                Pragmatic prediction of one variable by another
                Extrapolation of time series
                Cohort-component methods
                Survey research
                The Delphi method (with cross-impact analysis)
                Simulation and computer modeling
                Gaming
                Monitoring
      `   Content analysis
                Participatory futures praxis
                Social experiments
                Ethnographic futures research

It is worth noting that Bell does not mention envisioning and inventing the futures as a futures method even though these are in fact major techniques futurists use, as he himself implies in his list of "nine major tasks of futurists". Nor does he mention "alternative futures" as a method of analysis (what I call "deductive forecasting" and others might call "backcasting"). And while he does discuss monitoring, he does not tie it to "emerging issues analysis" (a la Graham Molitor's theory). In my understanding, the purpose of monitoring (also called "scanning") is to identify emerging issues, as well as to track ongoing trends, and to integrate them into scenarios--another method Bell does not discuss as such. Finally, Bell somehow overlooks age-cohort analysis a theory/method I have found increasingly useful, especially since the work of William Strauss and Neil Howe, beginning with their book, *Generations: the history of America's future, 1584-2069*. New York : Morrow, 1991.

Other compilations of futurists, futures courses not highlighted in this essay (listed in roughly chronological order) include:

Billy Rojas, *Future studies directory*. Amherst: Program for the study of the Future in Education, School of Education, University of Massachusetts, 1970. "Who is who in educational futuristics," Supplement to the *World Future Society Bulletin,* February 1972.

Michael Marien, *Alternative images of the future: a preliminary inventory*, Syracuse: educational Policy Research Center, 1971; "Futures documentation projects worldwide" Supplement to the *World Future Society Bulletin*, September 1971. *The potential of educational futures* (co-edited with Warren L. Ziegler). Worthington, Ohio, C. A. Jones Publishing, 1972; *Societal directions and alternatives: a critical guide to the literature*. LaFayette, N.Y. : Information for Policy Design, 1976. *What I have learned: thinking about the future then and now* (co-edited with Lane Jennings). New York: Greenwood Press, 1987.

Alvin Toffler, ed., *The futurists*. New York, Random House, 1972; (Grouped as "Social Critics, Scientists, Philosophers and planners").

Edward Cornish, *The study of the future: an introduction to the art and science of understanding and shaping tomorrow's world*. Washington, D.C.: The Society, 1977.

Jib Fowles, ed., *Handbook of futures research*. Westport, Conn: Greenwood Press, 1978

Thomas E. Jones, *Options for the future: a comparative analysis of policy-oriented forecasts*. New York: Praeger, 1980

James Morrison, William Renfro, Wayne Boucher, eds, *Applying methods and techniques of futures research*. San Francisco : Jossey-Bass, 1983.

James Morrison, William Renfro, and Wayne Boucher, *Futures research and the strategic planning process: Implications for higher education*. Washington, DC: Association for the Study of Higher Education, 1984.

World Futures Studies Federation, ed., *Reclaiming the future: A manual on futures studies for African planners*. Published for the United Nations Development Programme by Tycooly International, 1986.

Joseph Coates and Jennifer Jarratt, *What Futurists Believe*. New York: Lamond, 1989

Peter Moll, *From scarcity to sustainability: futures studies and the environment: the role of the Club of Rome.* Frankfurt am Main, P. Lang, 1991

Richard Slaughter, "Future Studies and Higher Education," special issue of *Futures Research Quarterly*, Vol. 8, No. 4, 1992; *Education for the twenty-first century* (with Hedley Beare) London: Routledge, 1993; *The knowledge base of futures studies.* 3 Vols. Hawthorn, Australia, DDM Media Group, 1996; *Futures education* (co-edited with David Hicks) London: Kogan and Page, 1998; "Universities as institutions of foresight," *Journal of Futures Studies*, Vol. 3, No. 1, 1998; "Future of Futures Studies," special issue of *Futures,* Vol. 34, Nos. 3/4, April/ May 2002

Eleonora Barbieri Masini, *Why futures studies?* London, England : Grey Seal, 1993.

Harold Didsbury, ed., *Prep 21. Futures Studies Worldwide*. Bethesda, MD: World Futures Society, 1994.

Graham Molitor, et al., eds., *Encyclopedia of the Future,* New York: Macmillian Publishing Company, 1996

Sohail Inayatullah, ed., "What futurists think" *Futures* August/September 1996; *Futures Studies: Methods, Emerging Issues and Civilisational Visions*, with Paul Wildman. CD Rom; *Questioning the future*. Taipei: Tamkang University, 2002.

Jerry Glenn and Ted Gordon, *Futures Research Methodology*. CD Rom by the Millennium Project of the American Council for the United Nations University

CONCLUSIONS ABOUT FUTURES STUDIES AND FUTURES COURSES

So, what is one to make about futures studies from this historical and contemporary overview? I have come to the following conclusions:

1. Most people get into the futures field in the belief that it is possible to predict the future. They assume that futures studies will provide them with the theories and methods to do that. Some persist in that notion and either keep trying to find a positivistic basis for future studies, or leave the field, declaring it a pseudoscience. Others accept the fundamental uncertainty of the future as a given, and then try to devise a futures studies which deals with that recognition.

2. Most people get into the futures field favoring one particular "future" over others--they may support a "continued growth" or "high tech" or "environmental" or "spiritual" or "feminist" or some other particular view and concern about the future. Some remain devoted to a single preferred future throughout their career, orienting their teaching, research, and consulting around it. Others come to accept the diversity of futures, and build a futures studies around that diversity.

3. Similarly, most people believe there is or should be a single, proper, objective way to view the future, and futures studies. Others come to see that all perspectives on the future are personal--influenced by one's culture, language, and individual life experiences. While it is possible and desirable to be as "unbiased" as possible in some aspects of futures work, it is not possible or desirable to be (or pretend to be) "value-free" in all of it.

4. There appear to be thousands of courses (and even more parts of courses) that deal with a single view of or concern about the future. These courses come and go, and not only do not usually contribute to futures studies as an academic discipline, but do not even know futures studies exist.

The single most common complaint I have as a person who has labored long in this vineyard, and especially as one who reviews manuscripts submitted for publication in the major futures journals, is that the overwhelming majority of the authors of such manuscripts appear to be completely unaware of the existence of a huge literature in

futures. They often fail to cite a single other person who has written about futures before them, and give the impression that they believe they are expressing these ideas for the first time in history.

No one would dare try to publish an essay in any other professional journal without at least having read and thought about ONE book or article in the field! Until the editors and publishers of futures journals refuse to publish naïve essays (except for those that do indeed present fresh ideas!), the field will continue to languish.

5. As Wentworth Eldredge lamented thirty years ago, so now, few futurists have carefully and fully developed theories of social change and stability. Those that do, tend to focus on one single, or one single set, of factors. Though not entirely absent, "theory" still remains the weakest part of futures studies, and is one reason futures studies remains in disrepute among other academic perspectives--or is adopted mainly by other "soft" disciplines or persons, and rejected by the "hard" ones.

6. Futures continues to be dominated by Western, male views and actors, as many people have pointed out. While there have been major improvements in the cultural, epistemological, and perhaps theoretical and methodological mix (thanks to the work of Zia Sardar, Eleonora Masini, Elise Boulding, Anita Rubin, Ivana Milojevic, and many more), much more remains to be done. Perhaps this symposium can also mark a step forward in this regard.

7. I long ago came to the conclusion that futures studies does not study "the future" since "the future" does not exist and therefore cannot be studied, *per se*. What we can study empirically are "images of the future"--ideas about the future that do exist--in each individual (often several contradictory images), in each culture, differing between men and women, young and old, over one's life, depending on past experiences and current events, and, most importantly, serving as a basic rationale for action in the present (which then helps shape the future).

The fact that futures studies is ignored by formal educational systems at all levels, in almost all countries of the world, whereas history and past ideas are taught over and over again throughout one's education, means that people have very immature and largely unexamined images of the future (in contrast to the comparatively more mature and purposely inculcated ideas they have about religion, society, the military, one's country, various occupations, and the rest). Of course people DO have ideas about the future, but they come not from their formal education but rather almost entirely from the media--TV and films, and to a much lesser extent, written fiction. In other words, while formal educational systems works hard to give students a specific (often "scientific") view of the world around them, they are content that students have a science fiction of the world to come.

I believe collecting and studying images, and the consequences of images, of the future should be a main focus of futures studies. Even though the concept "images of the future" is widespread in the futures literature, it does not seem to be the central focus of the field

that I think it should be. [For a good example, see "Giving images a chance" by Anita Rubin in Dator, ed., *Advancing Futures*, Chapter 21.]

8. As the previous pages have demonstrated, there have been many attempts to categorize futurists and futurist's methods. They may be described as extrapolative, normative, or pragmatic. Or optimistic vs. pessimistic. Or possible, probable, and preferable.

Years ago, I toyed with the idea of writing a futures text book that was in two parts. Read one way, the material was all "hardcore" futures--quantitative, mathematical, predictive, and practical. But when the book was turned over and read from what was the "back" but would now be the "front", then the material was all "softcore" qualitative, visual, creative--and perhaps even more practical.

I still find Rick Slaughter's chart to be among the most useful typologies.

> **See Table Three**

Sohail Inayatullah distinguishes between predictive, interpretive, critical, and anticipatory action learning approaches (in his *Questioning the future*. p. 8 and elsewhere). Moreover, Inayatullah's "Causal Layered Analysis" (*Ibid*., Chapter 2 and elsewhere) is the first major new futures theory and method since Delphi, almost forty years ago. CLA is a very sophisticated way to categorize different views of and concerns about the futures, and then to use them to help groups think about the futures far more effectively than they could by using any one of the "layers" alone, as most theory/methods do.

However, I am unaware of anyone using CLA to organize a course syllabus, but it would be a very good way, I imagine.

9. For what it worth, the theories/methods that I find most useful and do use in my teaching and research are:

> I start with a theory of technology as a basic agent of social change that defines "technology" carefully and suggests specifically how it precipitates social and environmental change;
> Which then leads to demographic factors, age-cohorts, and Kondratieff-type long waves serving as independent agents of social and environmental change;
> Requiring scanning to monitor these and other "STEEP" trends, and especially to identify emerging issues.
> The creation of alternative futures from this input, starting with the "generic" four of Continued Growth, Collapse, Disciplined Society and Transformational Society but expanding to others as appropriate.
> Deductive forecasting of social subsystems using the "four futures" basis.
> Futures visioning activities in order to identify preferable futures.
> Where appropriate, tying the above to strategic planning processes.

Given all this, some time ago, I suggested that to be a good futurist, you need the

widest possible knowledge of the history and present condition of as many cultures and civilizations as possible; you must know more than one culture, and thus more than one language, intimately;

widest possible knowledge of all aspects of all the social sciences;

widest possible knowledge of current and emerging developments in the natural sciences, and their emerging sub disciplines and transdisciplines, for example, evolutionary systems theory, chaos theory, and brain science;

widest possible familiarity with developments in engineering (especially electronics, genetics, nanotechnology and new materials), architecture, and space sciences;

widest possible familiarity with philosophy, ethics, morals, and religions, and certainly the ethical discourse of as many different traditions as possible;

widest possible familiarity with law and planning;

an active awareness of esthetics and the esthetic element in all aspects of life. A continuing experience of esthetic expression in some, or preferably many, modes;

creativity, imagination, the willingness to think new thoughts, to make unmade connections, to be ridiculed, laughed at, and to laugh at yourself;

ability to synthesize, combine, invent, create;

willingness to be politically active, to test out new ideas on yourself first and while trying actually to create a better world, or some portion of it;

ability to try to anticipate the consequences of actions before you act, but also the willingness to risk failure and to learn from mistakes and criticism--indeed to seek out and provoke criticism--but to keep trying to do better, and constantly to relearn what 'better' might be;

insatiable curiosity, unbounded compassion, incurable optimism, and an unquenchable sense of humor and delight in the absurd.

All of this can be described in one word--'Aiglatson'--which is 'Nostalgia' spelled backwards and is a word told to me by Gabriel Fackre to symbolize the yearning for things to come; revering the future; without being disrespectful to the past (remembering that once it was all that was humanly possible), preferring the dreams of the future to the experiences of the past; always desiring to try

something new; to go where no one has ever gone before in all areas of human--
and non-human, and, soon, post-human--experience.
(Originally published in Richard Slaughter, ed., *New thinking or a new
Millennium*. New York: Praeger, 1996, p. 112)

CONCLUSION.

So what do we make of Boucher's criticism that I began with?

I agree with Boucher that in many ways futures studies has not progressed beyond its
beginnings nearly as much as we thought we would, and probably should have. But
Boucher seems in his original "agenda" and in the questions on his "futures exam" to still
be rather committed to a "hardcore", single view of the future.

When I asked people to contribute to a book on teaching futures at the university level, I
was surprised and pleased to see how few of them any longer insisted on that. Indeed,
several of them described their own journey from a positivistic prediction-based single
futures perspective to a qualitative, vision-based, alternative futures approach. But even
so, the essays in *Advancing Futures* (and the many ongoing discussions about the
relevance and utility of futures more generally) clearly indicates the tension remains.

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