Book Proposal

Planet Broadband and Democratic Power: How Visionaries Can Change the World

by

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November, 2003 Lloyd S. Etheredge 7106 Bells Mill Rd. Bethesda, MD 20817 lloyd.etheredge@yale.edu (email); 301-365-5241 (v)

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Title: Planet Broadband and Democratic Power: How Visionaries Can Change the World

Description and Outline

Book Description

This is a public affairs book intended to help thoughtful people rethink the future of international relations in light of the extraordinary new capabilities for global broadband communications, and cooperation on a global scale, that are becoming available.

There is an urgent need for wider public understanding and discussion of these emerging technologies. The "end of history" celebration after the end of the Cold War was premature. Post 9/11, it has become clear that America's extraordinary military and economic power is not enough to assure good results. Progress in addressing many urgent global problems seems to have stalled; there is a growing anti-Americanism even in countries that have been America's staunchest allies (e.g., England).

Part I of the book reviews trends in technology and lessons of history to help the reader think, with greater perspective, about the forces that are shaping the road ahead. Especially, the next evolution of the Internet from its beginning (in text messages, text + graphics Websites, and audio/music files) with one billion+ users worldwide to a growing desktop video/television (Planet Broadband) capability that permits individual users and organizations to transmit and receive globally.

Part II illustrates the new possibilities of the emerging Planet Broadband era. It develops a distinction in the study of international relations between traditional "hard" power (based on guns and money - and that has taken us about as far as it can) and "democratic" power (based on words, respect, and voluntary assent). It discusses five types of projects that will build upon new technologies and market forces; create "killer applications" of international broadband technology; and provide opportunities for individuals and institutions to work together, with counterparts in other nations, and change the world by developing this new dimension of democratic power. An example of these ideas to use emerging global webcasting capabilities has been created by leading foundations, universities, scientific societies, and R&D-oriented corporations in the NYC area (with international partners, anchored at the New York Academy of Sciences) to provide additional American leadership, post 9/11, for fast discovery international science to solve urgent global problems and improve the health of people in all countries.

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Detailed Book Outline

Introduction

Planet Broadband and the Future of World Politics

[Political scientists discuss two types of power: hard power and "soft" (or "democratic") power. For most of history, hard power has shaped world politics. By measures of hard power, America is today the most powerful nation in the history of the world: its nuclear arms can destroy any country; its annual military budget is greater than the combined military spending of the next nine nations combined (and its twelve carrier groups and support aircraft vastly exceed the capacity of other nations). At economic summit meetings of the leading seven nations, the American GDP is 45% of the total and equal to the GDP of the next three contenders, combined. <u>Nobody</u> has ever had this much hard power supremacy.]

[But the state of international politics, today, is about as far as hard power is going to take us. The "end of history" celebration after the end of the Cold War was premature. Post 9/11, it has become clear that America's extraordinary military and economic power is not enough to assure good results. Progress in addressing many urgent global problems seems to have stalled; there is a growing anti-Americanism even in countries that have been America's staunchest allies (e.g., England).]

[There <u>is good news</u>: remarkable new resources for the second kind of power in international relations - democratic power - are becoming available. But we have an urgent need for fresh thinking and public discussion about the best use for these new technologies, and the kinds of projects, organizing, and resources that are needed to secure the benefits of the new Planet Broadband.]

The Plan of the Book

Setting the Stage: A Brief History

[The pace of national and global Internet adoption - now 1 billion+ users worldwide, the majority outside the United States. Initial broadband upgrades are growing and the rate of adoption is accelerating (now, about 1/3 of US users, and higher percentages in Canada and some European and Asian countries). Fiber optic technology (DWDM) and the growth of inter-continent submarine cable and satellite links. We are accustomed to imagine that the growth of new communications technologies will be like the telephone: linkups in local areas, then links between nearby cities, then coast-to-coast long distance, and (finally, several years later) international telephone links. But the new technologies for Planet Broadband have reversed the normal way to imagine progress. Extraordinary new fiber optic capacities for global linkups (handling current traffic, with 98%+ unused capacity] already have been installed. We already can download all of the books in the Library of Congress to India via a new Singapore-India fiber optic link in about 15 seconds. The local "last mile" connections are the bottleneck.] [Definitions of broadband - an evolving capacity meaning (in this book) the send-receive capacity for at least one good quality desktop video/television connection switchable via Internet protocols.]

How to Read This Book [E.g., many readers can skip the first half of chapter one. The projects in part II are presented with an initial briefing, followed by a series of questions that present greater detail.] Acknowledgments

Part I: Trends

Chapter 1 - Emerging Technology The Digital Revolution Moore's Law Packages of Applications and Bottlenecks [introduction to the "last mile" problem for households] **Internet Basics** The New Global, Broadband Internet **Fiber Technology** Satellite Capacity The Final Mile and Broadband Upgrades **Business Plans and Home Users Physical Costs of Fiber Rollout Five Internets** [1.) miniature devices; 2.) portable/wireless Internet (advanced cellphones); 3.) advanced home entertainment/television systems (including digital), mostly linked to cable and direct broadcast satellite; 4.) the home desktop PC Internet, upgraded to provide fast and two-way video linkups on a global scale, coming slowly - in part because of business plans of cable television companies; 5.) fast business (9-5), science, and academic broadband Internets, also on a global scale, coming quickly.]

Chapter 2 - Four Rules of Forecasting

Rule 1: "S" Curves of Change: Their Shape and Speed The Advantages and Costs of Changing Old Technologies Complementary Technologies Learning New Technologies [e.g., the Wal-Mart effect & competition] Revenues and Killer Applications Rule 2: Market Forces Shape the Future: Two Cheers and a Warning Business Strategies and the Public's Best Interest

[The historic and continuing battle to achieve and maintain open architecture systems; profit incentives of companies using older technology that slow the introduction of new technologies (e.g., the costs of CD's)].

Boom and Bust Cycles [The recent bubble and collapse of the prices of hightech stocks were a predictable historical pattern of enthusiasm and consolidation associated with new technologies (e.g., railroads and the Panic of 1873).]

Rule 3: He Who Organizes, Wins: The Need for Visionaries and Organizers

Rule 4: Communication Technologies are Technologies of Freedom

New options, not locked-in effects. The need to think about what we want, esp. to achieve public benefits that will not be delivered automatically by market forces to people in their roles as consumers.

Warning: Government Regulations will restrict freedom [Pool thesis] Warning: Code and other Laws of Cyberspace [Lessig thesis]

Chapter 3 - Good News, Mixed Blessings

Benefits

A cornucopia of new devices and applications

Increased productivity

Improved markets

Potentially, remarkable benefits for excluded populations, worldwide

Mixed Blessings

Effects of new communication technology are a reflection of society - good and bad [e.g., all markets improve, including amazon.com as well as for online gambling, Amsterdam-based pornography sites, etc.]. Also, the institutions that are best organized, and with the most resources (e.g., governments and large for-profit institutions) typically have benefitted disproportionately. [Thus - part two, below - equivalent benefits for the public good on a global scale, including poorer and less organized people, will need organizing and resources for equivalent benefits.]

New opportunities for "niche" markets and previously unorganized and/or marginalized groups [e.g., the expansion of cable television in the US permitted the rise of televangelists and strengthened the Religious Right as a force in American politics; the growth of 24x7 special interest channels.] Contact nets, influence & "small world" research: new opportunities for individuals to participate and expand influence.

Accelerations

Accelerated politics. Accelerated organizing for human rights has been an historical consequence of new communication technologies, although typically with increased conflict and violence. Accelerated organizing for international conflict can be observed by Islamic fundamentalists using Al-Jazeera television and other media to build a political movement.

Accelerated markets. Potential for unexpected quick adjustments and meltdowns of inter-connected systems (the example of the collapse of international free trade before World War II; Thomas Friedman's analysis of economic globalization.) Effects of Competition on the Mass Media, Democracy and World Politics Changes to national and local news: cultural effects. [As capa-

Changes to national and local news; cultural effects. [As capabilities of new communications media have grown, there has been intensified competition for profit. By the early 21st century the character of national television news had changed toward sound bites and sensationalism and the mass audience had declined. The PBS News Hour held only a 1.7% share of a national audience. Local politics (except for formula stories and scandal) had almost disappeared from most local television news. Relying upon the mass media and its market economics to support a renewed problem-solving mode in American politics, nationally or locally, is probably unrealistic. Beyond the water's edge, media budgets for sustained or "depth" reporting of international events have diminished steadily - we are increasingly surprised and learn (for example) that "economic globalization" has been a problem only after there are demonstrations and tear gas in the streets of Washington. Competitive pressures are likely to have similar effects on news media in other countries, and there is a real danger of an increase in a kind of prurient anti-Americanism, even in countries that have been traditional allies.

Chapter 4 - Seven Unknowns

The future also will be determined by seven unknowns, which bear watching. And if breakthroughs are possible in some areas (e.g., telepresence, which could be the key for distance learning to take-off) a wider universe of initiatives will be technically feasible, to add to ideas discussed in part II of the book.

Unanticipated changes/tradeoffs. [A general catch-all caution: We are leaving an age of national mass media and we are unlikely to know its many effects until it has departed more fully: 2/3 of Americans have exposed themselves, 5-7+ hours/day, for several decades, to similar values and ideas, ways of speaking (the dialects of American English were standardized as Mid-Western)]. Arthur Clarke: We exaggerate the short-term impact of new technologies, and vastly under-estimate the long-term changes that they bring. McLuhan: in the early years of new technologies, people just use them to continue their old activities - e.g., using the motion picture camera to create movies that were essentially filmed stage plays; or (today) using the early Internet to put mail order catalogs online for consumers, or organizational telephone books. Telepresence.

- The future of advertising. [The ability of advertising to sustain quality television, Web sites, print publications, etc., esp. as existing advertising dollars are spread across many more outlets.]
- The future of entertainment. [New (e.g., interactive) kinds of entertainment can alter revenue streams and the development of national/global infrastructure.]
- The organization of work. [Telepresence (above) and other breakthroughs could produce revolutionary improvements in productivity and a new universe of telework and other applications.]
- Generational effects. [The political values, expectations, and to an unknown degree - different subjectivities of young people who have grown-up with the Internet may change political equations quickly. [For example, a Global Virtual Library (chapter nine, below) may seem a cosmic and slightly mad dream to a current generation of Boards of Trustees of large foundations or government leaders; but the project could be seen as so obviously sensible, by young people who already have decided that being over-charged for CD's of popular music is unacceptable, that such a Global Virtual Library can be created quickly in the future.]
- Discovering human nature. [As new communication technologies (i.e., as technologies of freedom) expand ranges of choices, the future is likely to be shaped more consequentially by human nature itself. What this <u>means</u> however, is unknown. Planet Broadband might, for example, become a world in which as a result of technologies for telework and business videoconferencing at the management level - populations of central cities decline as people and institutions find that they prefer to live and work in more open spaces. Or people may retribalize, living in electronic virtual realities.]

Part II: Five Projects That Can Change the World

Introduction to Part II

The contrast between "hard" power and "democratic" power in world politics. The virtue of a strategy for democratic power, as if America was running for election as a world leader and seeking to convey respect and secure voluntary assent of people in other lands, who will benefit in their daily lives. The emerging capacity of Planet Broadband and a new economics in which anything in digital form may be available globally at a marginal transmission cost almost "too small to bill for it." (Cairncross)

Lessons from Part I

The New World of Democratic Power

Hard Power: In History and Now

Democratic Power: In History and Now

The Development of Democratic Power: The Analogy of Running for Office An Outcome-Oriented Framework

An Overview of Part II [The chapters in part II will illustrate what is possible in the world of Planet Broadband. [For example, re a Global Virtual Library: The completion of the Singapore-India submarine fiber optic cable gives us the capability to download all of the books in the Library of Congress to India before breakfast (actually, in about 15 seconds); an inventory of the best 40,000 books in 320 fields has been done; and the cost to digitize a typical book is about \$300.] For all of the projects - and other similar projects - there are many ways to bring the pieces together and pay the costs. The projects will require visionary leadership, organizing, and support (including seed money) - because there are not yet ways to engage the market engine of the for-profit sector to create these "killer applications". But the historic economic and technical barriers are steadily being attenuated.

Chapter 5 - Upgrading the Global Political Process

A proposal (a Global Affairs Channel - building upon the model of CSPAN in the United States - using Internet multimedia technology) to accelerate international discussion and organizing by NGO and government professionals. And to assure that interested "niche markets" of serious and thoughtful people in all countries can identify, and link-up quickly with, other serious and thoughtful people even if there is further erosion toward sensationalism and reduced foreign affairs reporting in traditional media. It will be a high visibility project - if it has the right sponsorship - and a unique capacity for agenda-setting. [A working scientific prototype, www.videocast.nih.gov, is now climbing the charts in the international biomedical world.] A Channel for professionals will not solve global problems, but it can help in areas where people want to link-up and work together.

[A feasibility assessment by a working group of the Center for Strategic and Interna-

tional Studies indicated, in the late 1990s. that at least eighty leading American and Canadian NGOs, foundations, think-tanks, and university policy centers would participate, provide programming material in standard format at their own expense, and help to organize invitations to counterparts in other countries.]

Hard v. Democratic [Examples of international cooperation in public health: The 1918-1919 global flu epidemic when a new and more virulent strain was unchecked and caused 25 million deaths v. the recent swift action of wellnetworked public health professionals to contain SARS.] Proposal Discussion **Ten Questions** Who should start this? Will this work? Is the technology ready? What languages? Will critics of US policy be given free global air time? What about hot-button issues? Isn't it inevitable that this will be centrist? You say this is journalistic. Won't it become political? You have used the analogy of CSPAN. I have some great random hits with CSPAN, but I am not sure it really is very useful. For example, I never know what is on. What topics? How expensive is this?

Chapter 6 - <u>Including Everybody</u>

Bold and visionary global planning is especially attractive if everybody, worldwide, can have access to the benefits. This chapter addresses the problem of how to include poor and previously excluded people in the new world of Planet Broadband. It outlines a startup package and a global online purchasing cooperative for education, health, and science in UDCs.

Introduction

Digital Divides in America For the Third World: Community Resources as a Basic Investment Satellite Links and Digital Divides in the Developing World We Can Communicate Anything [the new economics] Two Cautions What's Next? Global Purchasing Cooperatives The Benefit of Moore's Law [buying superb technology for UDCs at 15% - 25% of original list prices] Satellite Capacity [now abundant, even over "darkest Africa"} Online purchasing services and auctions (e.g., www.covisint.com; the Gates Foundation; Canadian drug purchases for US consumers; a proposal) Startup Package 100,000 Village-Level Education and Health Linkups A Startup Package of Resources for Education, Health & Development Four Questions Is organizing on this scale politically acceptable? How do we know this investment will be well-used? Aside from a village/school/clinic telecenters, do people in the Third World really need the Internet?

How much can this reduce costs?

Chapter 7 - <u>Upgrading Democracy</u>

A proposal to rescue democracies from the derailment of citizen engagement in public affairs, via competition-induced changes in the mass media.

A new system of Evidence-Based Policy Centers, to begin in America and supported by the National Science Foundation, will permit all citizens, public officials, and groups at all levels of government to submit researchable questions (e.g., best practices, tests of current or new theories) that can have practical benefits for government policies. The questions will be ranked, posted on the Internet, and the Centers will answer them. [Citizens whose minds have mastered calculus, or who have management experience, will have a <u>de facto</u> research staff and something to work with in public affairs rather than be a passive audience of loud, recycling, policy argument television forever.] The Centers can specialize and develop regular colloquia/Webcasts (e.g., to illustrate best practices, similar to Charles Kurault's <u>On the Road</u>).

Introduction: Good News, Bad News and Good News Good News: A Flood of Information Bad News No Citizen Interest in More Political News and No Politician Interest in More Feedback from Citizens News Media Barriers [expansion of the section in chapter three, above] Washington Politics and the Internet Good News for People Interested in Problem-Solving Proposal: Citizen Questions and Evidence-Based Policy Centers Examples Civic Knowledge as a Public Goods Problem Criteria for Rankings Annual and Measurable Progress Benefits
Seven Questions
In your proposal, the cost to answer a question will not affect its priority. Why?
Isn't it naive to think that research and thinking are going to solve political conflicts that are about ideology and self-interest?
Why require that research questions be submitted by people with plans to use the results?
Why use the National Science Foundation?
Who can apply for grants to operate Centers?
Are there working examples?
Do political leaders care about evidence-based policy?

Chapter 8 - <u>A Commitment to Health</u>

One of the best foreign policy projects for US leadership would be a commitment to the health of people in all countries. This chapter is a proposal to benefit people (in the US and worldwide) by learning from the early years of the Internet. We found that one of the most frequent uses of the Internet (after email) was to search for medical information, either for the user or on behalf of the friend or relative. Yet efforts by commercial markets to meet these needs turned-out not to be competitively viable (only a relatively small segment of health information for relatively healthy people - nutrition, relationships, and lifestyle for women under 50 - met the required demographics). And Internet users have been mistrustful of the quality of information that they find on for-profit sites, and also (correctly) of the privacy of their searches and downloads.

This chapter focuses on serving niche markets, rather than mass markets, and an opportunity for cooperation among non-profit institutions (including a possible new selffinancing PBS channel) and governments. It envisions a new kind of Health Channel (Internet multimedia + cable; online archives; and online backup (print) material being developed at www.medlineplus.gov) including <u>all</u> of the "niche" markets that are created by immediate needs (rather than a mass entertainment market): we know that, each month, <u>x</u> million women (in America and worldwide) will become pregnant for the first time, x million will be diagnosed with arthritis (and/or other chronic conditions), that x million will be diagnosed with different life-threatening illnesses, etc. There will be program updates as medical knowledge improves, but the economics will be different than the fierce competitive pressures to produce new 24x7 entertainment television programs each week. And much programming can be secured at marginal cost (e.g., Sloan Kettering could make its educational lectures for newly-diagnosed breast cancer patients and their families available) or created by non-profit organizations focusing on the conditions. Internet technology also can help to make information accessible to people with disabilities or limited literacy; or elderly patients who want to hear discussions repeated.

Proposal Benefits Five Questions What new programming would the Health Channel make available? How will a Health Channel reach people? Cable Technology Direct Broadcast Satellite Library Broadband Links How much will this cost? Programming Costs Cable/satellite Charges What will be the role of Internet broadband/webcasting? Who pays? [six alternative finance models, not mutually exclusive]

Chapter 9 - New 'Must Have' Applications

The growth of an exciting and extraordinary future, via realizing the potential of Planet Broadband technologies, can be accelerated by a package of "killer applications" - projects that are so beneficial that, once they are created, everyone will want to have upgraded access. A working demonstration of global broadband Webcasting is www.videocast.nih. gov, now expanding to a new generation of global webcasting applications for fast discovery science, organized by the New York Academy of Sciences and strategic partners (www.nyas.org).

The New Economics of Global Sharing **Examples of "Must Have" Projects** Cultural Affairs Channel/Cooperative New sources of financial support [data on advertising budgets of the largest multinational corporations] A Tuesday Global Brownbag: "Inventions Wanted . . . " [accelerating the global creative process Visual Display Systems for Global Projects Global Virtual Library [the best 40,000 books & beyond] How will royalties be paid? How about other books? Is this feasible? Will publishers agree? What about periodicals and scientific journals? Should there be changes in copyright laws? Are there additional sources of financial support? Stakeholder-Supported R&D Channels Renewable Energy Channel [global min-CSPAN] **Global Grand Rounds Channel** Education Research Channel (incl. use of computers & learning foreign languages) Spiritual Growth Research Channel [Possibility of belief-independent spiritual growth; an important inquiry that may avoid the linkup of religious fundamentalisms in renewed political conflict.] Conflict resolution and human rights education [Curriculum development in public education could help to mitigate violence. Global support for teachers on the model of the Annenberg Foundation's www.learner.org]. Review of "Must Have" Applications

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Audience and Marketing

Target Audiences

- Pioneers in the development of the computer revolution and the Internet interested in new projects with a global impact. Their experience, entrepreneurial skill, and well-invested seed money can play a vital leadership role.
- Trustees and officers of foundations interested to increase the effectiveness of their programs.
- Thoughtful readers interested in a new framework for American leadership, post 9/11, that can (with a multilateral spirit) accelerate progress in addressing urgent global issues. And with specific interests in cultural affairs, health quality and consumer-oriented resources, fast discovery science, a global virtual library, sustainable development and global purchasing cooperatives (etc. each of the projects in part II). There also may be important international audiences, as I think leaders and thoughtful publics in other countries also are becoming frustrated by the drift and tone of international politics
- Students and idealistic young people, worldwide, who understand the Internet and who are beginning to think about what to do with their lives. [The audiences of young and idealistic people are not simply in America: one of the messages of the book is that you do not have to be American to change the world.]
- Instructors in computer science and social science (including international relations) who are interested in well-written, multi-disciplinary books that open doors, illustrate the social and political relevance of work in their fields, introduce a lot of good ideas for term paper topics, and invite fresh thinking.

Competitive Titles

There are not yet any directly competitive titles. To my knowledge, the first use of the term <u>Planet Broadband</u> was a pioneering book by R. Yassini et al. published by Cisco Press in September 2003. It was designed to inform people and promote broadband, but did not have the current social science, political, or activist dimensions. This new book, which will probably appear in late 2004 or early 2005, when evolving broadband is beginning to capture imaginations and the economic/industry/stock market recovery is confidently established, is more of a complementary volume, concerning the next steps that will timely when it is published.

The pioneering and influential discussion of "hard" and "soft" ("democratic") power in world politics is by Joseph Nye at Harvard's Kennedy School, <u>The Paradox of American</u> <u>Power: Why the World's Only Superpower Can't Go It Alone</u> (Oxford University Press, 2002). We are in agreement about the essentials: I think that <u>Planet Broadband and</u> <u>Democratic Power</u> is a next step in the discussion and will appeal to readers (and visionaries) interested in a more explicit social science/historical framework, a more technical understanding of new communication technologies, and specific proposals.

Benefits and Selling Features

- For the computer and telecommunications industry, global broadband/video applications are the future for growth and revenue. This books outlines five types of exciting "killer applications" that can accelerate adoption of these new technologies.
- The book is right: these new global technologies really do make it possible to benefit the lives of more people on the planet, more quickly, than at any time in history. We should be getting started - and Internet visionaries need informed support. American foreign policy <u>does</u> need more multilateralism and there is urgency to develop the dimension of democratic power.
- This is a Big Think public affairs book that also is well-grounded. The intellectual framework is reliable (i.e., at least at the current state of good social science) and gives a perspective that is beyond the first-generation Internet hype (now, associated with the stock market bubble and collapse). It is a "second generation" Internet book that is, while it is enthusiastic about the potential of broadband, it also has a thoughtful discussion of destabilizing risks and their implications. [E.g., it is useful to recognize that the invention of the printing press (possibly including, in the view of some historians, marketing incentives of new, for-profit printing houses across Europe) turned the principled outrage of an unknown monk in a remote town in northern Europe into the Reformation and Counter-Reformation and left Europe ablaze. Alongside the promotion of Planet Broadband, we have an urgent and specific need to upgrade the global political process and to strengthen peaceful means to promote human rights.]
- Students can learn about uses of social science, lessons of history. world politics, and key
 issues in public policy. And see a timely and engaging example of how to structure an
 analysis of goals, forecasts, analysis of causal processes, invention of policy options,
 etc.

Proposed Timetable

A revised draft was completed in mid-2002. It will require light editing and an update of numbers. It can be ready in about six weeks.

Online Supplementals

I have registered the domain name, www.planetbroadband.org. After the ms. is completed, it would be attractive to seek foundation support to develop a Website as an online supplement for people who are interested in the current status of projects discussed in the book.

Author Bio

Lloyd S. Etheredge (b. 1946) received his undergraduate education in economics at Oberlin College (1968) and graduate training at Yale University (M.A., 1970; Ph. D., 1974) in political science with an NIMH Traineeship Award for additional graduate training in the Psychological Study of Politics. He taught at MIT for eight years (where he received a teaching award from graduate students) and, for two years, was Director of Graduate Studies for International Relations at Yale. He has held Fellowships or visiting positions at the Center for Advanced Study in the Behavioral Sciences, Swarthmore, Duke, Oberlin, UC Berkeley, the University of Toronto, and other institutions.

Dr. Etheredge is the author of two scientific studies of the psychology of international relations: <u>A World of Men: The Private Sources of American Foreign Policy</u> and <u>Can</u> <u>Governments Learn? American Foreign Policy and Central American Revolutions</u>; and editor of two volumes of selections from the work of Ithiel de Sola Pool concerning the social and political impacts of new communications technology, <u>Politics in Wired</u> <u>Nations and Humane Politics and Methods of Inquiry</u>. He is the author of many articles, monographs, and book chapters including <u>The Case of the Unreturned Cafeteria Trays</u>, "Hardball Politics: A Model," and the chapter, "Wisdom in Public Policy," in a forth-coming handbook of psychological research from Cambridge University Press.

During the past decade Dr. Etheredge has been a member of planning groups and a consultant to nonprofit organizations interested in the potential of new communications technologies to increase the effectiveness of their programs. His activities have included membership in the Lederberg Working Group (1994) on the future of scientific communications and followup projects to develop prototypes of global colloquia for fast discovery science; the Reinventing Diplomacy in the Information Age project at the Center for Strategic and International Studies; strategic planning for international human rights; and serving as a consultant to a project of the Robert Wood Johnson Foundation to develop a vision and options for a consumer-oriented Health Channel.

Appendix A: Curriculum Vitae

CURRICULUM VITAE Lloyd S. Etheredge

DATE OF BIRTH: May 31, 1946

CITIZENSHIP: United States of America

ADDRESS:	Policy Sciences Center Inc. &	7106 Bells Mill Rd.
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	New Haven, CT <u>06520-8215</u>	(301)-365-5241 (voice)
	(203)-432-1993	(301)-657-4214 (fax)
		lloyd.etheredge@yale.edu (email)

EDUCATION

Yale University	Ph.D. (Political Science)	1974
Yale University	M. Phil. (Political Science)	1972
Yale University	M.A. (International Relations)	1970
Oberlin College	B.A. (Economics, Honors)	1968

PROFESSIONAL EXPERIENCE

Director, International Scientific Networks Project, Policy Sciences Center; spring, 1991 - ; Director, Government Learning Project, 1995 - ; Consultant, 1995 -

Associate Professor (Visiting), University of Toronto, Department of Political Sciences, 1991-1992

Associate Professor (Visiting), Swarthmore College, Department of Political Science, fall, 1990

___, Duke University Institute of Policy Sciences and Public Affairs, 1989 -

1990

_____, School of Public Affairs, American University, spring, 1989 (Adjunct, School of International Service, summer, 1991)

_____, Dept. of Government, Oberlin College, fall, 1988

Director of Graduate Studies for International Relations, Yale University; Visiting Lecturer, Dept. of Political Science, 1986 - 1988

Visiting Scholar, Survey Research Center, University of California, Berkeley; Visiting Mary Woods Bennett Professor of Government, Mills College, 1985 - 1986

Senior Research Fellow, Rockefeller Institute of Government; Visiting Professor, Graduate School of Public Affairs, SUNY - Albany, 1983 - 1985

Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford, 1982-1983

Associate Professor (Visiting), School of Organization and Management, Yale University, Spring, 1982

Associate Professor, Department of Political Science, Massachusetts Institute of Technology, 1979 - 1983; Assistant Professor, 1975-1979

Assistant Professor, Departments of Psychology and Political Studies, University of Manitoba, 1974-1975; Lecturer, 1972-1974

Teaching Fellow and Assistant in Instruction, Department of Political Science, Yale University, 1969-1972 (International Relations, American Foreign Policy, Research Methodology)

Research Assistant (Summer Jobs), Yale University: Italian Bureaucracy Study, 1971; Quantitative Studies of International Conflict, 1970; Comparative Communist Agricultural Policy (Yale Economic Growth Center), 1969

News Commentator on American politics (occasional), Canadian Broadcast System, 1971 - 1972

Motion Picture Scriptwriter, U.S. Navy contract, summer, 1968

Production Assistant, Audio Visual Systems, Inc., summer, 1967

Intern, U.S. Public Health Service, summer, 1966

Intern, Department of Commerce, Bureau of International Commerce, summer, 1965

FIELDS OF INTEREST

International relations (including non-state actors and effects of new communications technology); policy science and evidence-based government learning; American foreign policy; political psychology.

PROFESSIONAL ORGANIZATIONS

American Political Science Association (1972 - ; Chair, Helen Dwight Reid Award Committee, 1989); American Psychological Association (elected, 1981 -); International Society for Political Psychology (Founding Member. 1979 - present; Governing Council, 1985 - 1987, Editorial Board, 1979 - 1997, Nominations Committee, 1993, Chair, Harold D. Lasswell Award Committee, 1996); International Studies Association (1981 - ; Information Technology Planning Committee, 1993 - 1995; ISA Channel Committee, 1997 - 2000); American Economic Association (2003 -); Joint Program for Conflict Resolution (with Islamic Mental Health Association; Advisory Board, 1991 -); AAAS (1992 -); Internet Society (1994 -); New York Academy of Sciences (1996 -); Policy Sciences Center, Inc. (Trustee, 1994 - 2000); Society for the Policy Sciences (Founding Member 1995 - ; Executive Board, 1995 - 1998).

FELLOWSHIPS AND AWARDS

U.S. Department of State. Secretary's Open Forum Distinguished Public Service Award, 1998.

Ittelson Consultant, Group for the Advancement of Psychiatry - Committee on International Relations, Fall, 1988

Center for Advanced Study in the Behavioral Sciences, Fellowship, 1982-1983

Teaching Excellence Award, MIT Graduate Student Association, 1979

National Institute of Mental Health Traineeship Award, Yale Psychological Study of Politics Program, 1970-1971, 1971-1972

Yale University Fellowships, 1968-1969, 1969-1970

Woodrow Wilson Finalist, 1968

Hanson Prize (Economics), Oberlin College, 1967

PUBLICATIONS¹

1. Books and Book Chapters

<u>Planet Broadband and Democratic Power: How Visionaries Can Change the World</u> (in process.)

"Wisdom in Public Policy" in Robert Sternberg and Jennifer Jordan (Eds.), <u>Wisdom:</u> <u>Psychological Perspectives</u> (NY: Cambridge University Press, in press).

"A New Strategy for Human Rights: Five Internet Projects That Can Change the World" in George J. Andreopoulos (Ed.) <u>Concepts and Strategies for International Human Rights</u> (NY: Peter Lang, 2002).

(Ed.) <u>Humane Politics and Methods of Inquiry: Selected Writings</u> <u>of Ithiel de Sola Pool</u> (New Brunswick, NJ: Transaction Books, 2000). Also, "What's Next: The Intellectual Legacy of Ithiel de Sola Pool," pp. 301-316.

(Ed.), <u>Politics in Wired Nations: Selected Papers of Ithiel de Sola</u> <u>Pool</u>. (New Brunswick, NJ: Transaction Books, 1998).

"Human Rights Education and the New Telecommunication Technology" in George Andreopoulos and Richard Claude (Eds.), <u>Human Rights Education for the Twenty-First</u> <u>Century</u> (Philadelphia: University of Pennsylvania Press, 1997), pp. 547 - 564.

"On Being More Rational Than the Rationality Assumption: Nuclear Deterrence, Public Drama Requirements, and the Agenda for Learning," in Eric Singer and Valerie M. Hudson (Eds.), <u>Political Psychology and Foreign Policy</u> (Boulder, CO: Westview Press, 1992), pp. 59-75.

<u>Can Governments Learn?</u>: <u>American Foreign Policy and Central American Revolutions</u> (NY: Pergamon Press, 1985).

"Government Learning: An Overview," in Samuel Long (Ed.), <u>Handbook of Political</u> <u>Behavior</u>, Vol. 2, (NY: Plenum Press, 1981), pp. 73-161.

<u>A World of Men: The Private Sources of American Foreign Policy</u> (Cambridge, MA: MIT Press, 1978).

¹ Reference copies of most publications and working papers are online at www.policyscience. net and (linked from this home page) www.policyscience.ws.

2. Monographs

<u>The Case of the Unreturned Cafeteria Trays</u> (Washington: American Political Science Association, 1976).

<u>American Defense Commitments</u> (Washington: Center for Information on America, 1971).

3. Papers in Refereed Journals

"The Scientific Scandal of the 1980s," Political Psychology 15:1 (1994), pp. 534-539.

"Wisdom and Good Judgment in Politics," <u>Political Psychology</u>, 13:3 (1992). pp. 497 - 516.

"Notes on World History and Learning in International Politics," <u>Mind and Human</u> <u>Interaction</u>, 1:3 (January, 1990), pp. 6-8.

"President Reagan's Counseling," Political Psychology, 5:4 (1984), pp. 737 - 740.

"Thinking About Government Learning" (with James Short), <u>Journal of Management</u> <u>Studies</u>, 20:1 (1983), pp. 41-58.

"The Hypnosis Model of Power," in <u>Psychoanalysis and Contemporary Science</u>, 3:3 (1980), pp. 415-451.

"Hardball Politics: A Model," <u>Political Psychology</u>, 1:1 (Spring, 1979), pp. 3-26.

"Personality Effects on American Foreign Policy, 1898-1968: A Test of Interpersonal Generalization Theory," <u>American Political Science Review</u>, 72:2 (June, 1978), pp. 434-451.

"Perspective and Evidence in Understanding Jimmy Carter," <u>The Psychohistory Review</u>, 6:4 (Spring, 1978), pp. 53-59.

"Optimal Federalism: A Model of Psychological Dependence," <u>Policy Sciences</u>, 89 (1977), pp. 161-171.

4. Other Professional Publications

"Ithiel de Sola Pool." Entry in <u>Dictionary of American Biography</u> (in press).

"Teaching as a Policy Science: 12 Models," <u>News for Teachers of Political Science</u> (APSA), (Fall, 1978), pp. 6-7.

"Toward a Schizophrenogenic Theory of College Teaching," <u>News for Teachers of Political</u> <u>Science</u> (APSA), (Winter, 1977), pp. 1, 10.

"Personality and Foreign Policy," <u>Psychology Today</u>, March, 1975, pp. 37-42. Reprinted in <u>Annual Editions: Readings in American Government, 1975-1976, 1977-1978.</u>

5. Research Reports (partial list; a complete list and copies are available on www.policyscience.net)

"A Breakdown Crafted by Silences: Scientific Mismanagement and National Policy Error," September 2002.

"Consumer-Oriented Broadcasting for Health," Working paper for the Robert Wood Johnson Foundation, 2001.

"A Purchasing Cooperative for Health, Science, and Education." Invited presentation to the World Bank Global Knowledge Partners meeting, United Nations, November 23 - 24, 1997.

"Global Knowledge Management for Policy: A Proposal." Paper presented to the Policy Sciences Institute meeting, Yale University, October 24 - 26, 1997.

"Measuring Hierarchical Models of Political Behavior: Oedipus and Reagan, Russia and America." Paper presented to the International Political Psychology Society Meetings, Vancouver, BC, July, 1996.

"Prospectus: International Scientific Networks Project." Invited paper presented to the United Nations Conference on Conversion for Development: Aerospace Technology. Moscow, October, 1992.

"BCCI: The Real Story," September, 1992. Xerox.

"Relationship Building as an Approach to Security." Discussion paper for the Redefining Security Working Group, Yale Law School. Spring, 1992.

"Public Drama, Economic Growth, and the Agenda for Learning." Xerox.

"A Proposal for the Study of Motivation, Leadership, and Economic Growth." Discussion paper for the Commission on Behavioral and Social Sciences and Education, National Academy of Sciences, fall, 1990.

"Is American Foreign Policy Ethnocentric? Notes Toward a Propositional Inventory." Paper presented to the American Political Science Association, September, 1988.

"The Decision to Change Direction in Foreign Policy: The Role of the Leader's Personality." Paper presented to the Mershon Center Conference on the Decision to Change Direction in Foreign Policy. Fall, 1988.

"Public Drama Requirements for Public Policy." Paper presented to the International Society for Political Psychology, July, 1988.

"Creating an International Foreign Television Network." Yale Center for International Relations and Area Studies, March, 1988.

"Nuclear Deterrence without the Rationality Assumption," September, 1987.

"Dual Track Information Processing in Public Policy Decision-Making: Models of Strong Imagination Systems," symposium paper presented at the American Psychological Association meeting, August, 1984.

"Political Behavior within Imaginative Forms," paper presented at the International Political Science Association World Congress, August, 1982.

"The Liberal Activist Case," August, 1982.

"Why Do Politicians Speak Vaguely?" 1978.

6. Book Reviews

Review of George Breslauer and Philip Tetlock (Eds.), <u>Learning in US and Soviet Foreign</u> <u>Policy</u> (Boulder, CO: Westview Press, 1992). <u>American Political Science Review</u>.

Review of Paul Wachtel, <u>The Poverty of Affluence: A Psychological Portrait of the</u> <u>American Way of Life</u> in <u>Contemporary Psychology</u>, 1987.

Review of Johan Goudsblom, <u>Nihilism and Culture</u> in <u>Review of Psychoanalytic Books</u>, 1986.

Review of Robert S. Robins (Ed.), <u>Psychopathology and Leadership</u> in <u>Journal of Interdisci-</u> <u>plinary History</u>, 11:4 (Spring, 1981), pp. 753-757. Review of H. J. Eysenck and G. Wilson (Eds.), <u>The Psychological Basis of Ideology</u> in <u>Political Psychology</u>, 1:2 (1979), pp. 89-91.

Review of Doris Graber, <u>Verbal Behavior and Politics</u> in <u>American Political Science Review</u>, 72, (1978), pp. 221-222.

Review of Robert Jervis, <u>Perception and Misperception in International Politics</u> in <u>Contemporary Psychology</u>, 22:8, (1977), pp. 601-603.

Review of Robert Axelrod (Ed.), <u>Structure of Decision: The Cognitive Maps of Political</u> <u>Elites</u> in <u>Policy Sciences</u>, 8 (1977), pp. 375-378.

Review of Maurice Bloch (Ed.), <u>Political Language and Oratory in Traditional Society</u> in <u>Contemporary Sociology</u>, 6:3, (1975), pp. 3-10.

Review of Lloyd de Mause (Ed.), <u>The New Psychohistory</u> in <u>Contemporary Sociology</u>, 1975.

Review of Irvine Schiffer, <u>Charisma: A Psychoanalytic Look at Mass Society</u> in <u>Canadian</u> <u>Journal of Political Science</u>, 7:2 (June, 1974), pp. 381-383.

7. Proposal and Manuscript Reviews (partial list)

American Journal of Political Science American Political Science Review Canada Council <u>Canadian Journal of Political Science</u> <u>Comparative Politics</u> Journal of Conflict Resolution Journal of Interdisciplinary History MacArthur Foundation MIT Press National Science Foundation <u>Policy Sciences</u> <u>Political Psychology</u> University of California Press University of Chicago Press

TEACHING EXPERIENCE

International Relations; Conflict Resolution

Introduction to International Relations (undergraduate) Aggression, War, and Civilization (undergraduate) Ending Protracted International Conflicts (undergraduate and graduate) Government Learning in International Relations (undergraduate and graduate)

Research Methods

Statistics and Data Analysis (undergraduate & graduate) Concept Formation and Research Methods (graduate) Survey Research Methods (graduate)

Political Behavior and Psychology

Human Nature and Public Policy (undergraduate) Social Psychology (Introductory and Advanced, undergraduate) Personality and Decision Making (undergraduate) Political Psychology (undergraduate and graduate) Political Power, Leadership, and Public Opinion (graduate)

Policy Science, American Institutions, Public Policy

Introduction to American Politics (undergraduate) The Policy-Making Process (undergraduate) Knowledge and Policy Analysis (undergraduate) The Scope of the Policy Sciences (graduate) Organization Theory (undergraduate) Administrative Behavior (undergraduate) Program Evaluation Methods (graduate) Executive Branch Learning (graduate)

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