

**GEOGRAPHIES OF THE INFORMATION SOCIETY:
PLACE AND IDENTITY IN AN AGE OF TECHNOLOGICALLY
REGULATED MOVEMENT**

8-10 October 1998

**Santa Barbara, California
Research Conference Report**

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Core Planning Group

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TABLE OF CONTENTS

Introduction	1
Call for papers	3
Conference organization	4
Introduction.....	4
Break-out.....	4
Plenary.....	5
Breakout.....	5
Plenary.....	5
Wrapup.....	5
Summary	5
Aftermath	6
Appendix I: Co-Directors and Core planning group	7
Appendix II: Call for papers.....	10
Appendix III: Conference attendees	13
Appendix IV: Guidelines for Proposals for Seed Grants under the Varenus Project.....	15
Appendix V: Seed grants awarded	17
Appendix VI: Paper Abstracts.....	18

GEOGRAPHIES OF THE INFORMATION SOCIETY: PLACE AND IDENTITY IN AN AGE OF TECHNOLOGICALLY REGULATED MOVEMENT

INTRODUCTION

The 1995 NCGIA application to NSF noted that

Geographic information has been produced for decades by a combination of the military, other government agencies, and the private sector.... [But now] New, more efficient techniques are emerging for collecting and processing spatial data and for communicating geographic knowledge from the field to the consumer, all driven by the changing economics of information creation, dissemination, and use.

As a result, it was concluded, there was a need to study the "impacts of geographic information technologies on individuals, groups, and society as a whole."

The February 1997 meeting on Project Varenus cast this concern more broadly:

New information technologies are helping "re-write" both the geographical configuration of material artifacts (the built environment; the spatial organization of economic activities) but also the ways in which people interact with one another and how identities are constructed. A fair bit of work is underway on the former within geography, but there is relatively little systematic understanding of how the Web, telecommuting, etc. is affecting the relationship between identity and place. Traditional conceptions of boundedness (nation state, neighborhood, home) are being undermined; ideas of separateness/belonging are being reconstituted; and notions of place/space as a container and as belonging are shifting.

The leaders of the specialist meeting on "Place and Identity in an Age of Technologically Regulated Movement" drew heavily on this conceptualization of several of the central issues in the geography of the information society in developing a call for papers [See Appendix I].

Central to the conceptualization of this meeting were the following premises:

- That in the term "geography of the information society," "geography" is to be understood in its usual meaning as the study of the ways in which people have humanized the face of the earth, rather than in a more constricted way as, for example, "spatial science." And hence, that geographies of the information society need not refer to or

rest upon appeal to spatial metrics. And that care needs to be exercised in the use of the term "geographic information," lest important such information be overlooked.

- That while the term "information society" in the first instance refers to a particular social formation, where information constitutes what might be termed the "crown jewels," all societies exist only through the acquisition and exchange of information. And any study of contemporary information societies needs to consider the relationship between those societies and past societies.
- Finally, that we ought to operate in terms of what is now the consensus among students of the relationships among science, technology, and society, that to conceptualize the matter as one of the "impacts" of technology is fundamentally to misconstrue the nature of technologies, science, and societies.

As described in the call for papers, the specialist meeting saw the central questions in the following way:

The nation-state is rather new, but identity and boundaries have always been related, just because identity-formation involves the differentiation of oneself or one's group from others. Indeed, the nation-state has been but one particularly powerful of these geographically bounded communities, and identities are often the result of a complex nesting of place-based identities, overlain with non-place-based ones. Still, the nation-state has promoted a powerful image of identity, as something that can be described in terms of borders in a landscape and lines on a map. And even though there have always been forces and pressures--in the form of alternatives such as religion, race, class, and even the corporation—to challenge the association between place and identity, geographically-based forms of identity have remained important, even central, in the lives of most people.

But with the advent of modern communication technologies, apparent alternatives to place-based identity systems have become increasingly visible. Indeed, the Internet or cyberspace has been touted by many as constituting the most far-reaching challenge yet to the strength and persistence of place-based identity. Unfortunately, in the popular literature it is often overlooked that the Internet and the dramatically increased flow of ideas has emerged within a larger context, of the unprecedented flow of people and goods. Where these flows have crossed local, regional, and national boundaries, they have been accompanied by the development of institutions designed to regulate them, and by the increasing ability to track goods, people—and information. The interaction of these phenomena—increasing amounts of mobile information, the increased flows of goods and people, and the rise of new mechanisms for the regulation of each—raises interesting questions about the future of geographically based identities.

The conference addressed these issues in the context of the following themes:

What have been the traditional means for the regulation of borders? In what ways have they been successful in promoting territorially-based identities?

How has the development of modern communications and especially geographical technologies altered the regulation of flows of people, goods, and information?

To what extent has the “regulation of borders” at various scales—from neighborhood to nation state and beyond—moved away from geographical borders, and been replaced by ubiquitous forms of control?

How are these various regulatory regimes related to personal and group identity?

How have alternative, non-place-based identities been promoted and maintained? How have they been controlled, and how successful have these controls been? What lessons relevant to the world of the Internet can be learned from these experiences?

What future is there for borders and boundaries in a world where ‘there is

Based upon this formulation of the important issues, a core planning group was chosen [See Appendix I for details]:

John Agnew, Dept. of Geography, University of California, Los Angeles

Philip Agre, Dept. of Information Science, University of California, Los Angeles

Colin Bennett, Dept. of Political Science, University of Victoria

Helen Couclelis, Dept. of Geography, University of California, Santa Barbara

Audrey Kobayashi, Dept. of Geography, Queen’s University

Carolyn Marvin, Annenberg School of Communication, University of Pennsylvania

Mark Poster, Dept. of History, University of California, Irvine

CALL FOR PAPERS

The call for papers was widely distributed. It was posted to a number disciplinary and sub-disciplinary of list-servs. The leaders sent individual notes to about one-hundred individuals known to be interested in the issues. And it was posted, thanks to Phil Agre, a member of the core planning group, on his Red Rock Eater News Service, which has about 10,000 subscribers.

We received many inquiries, and over fifty final papers. The papers were read by the two conference leaders, by Eric Sheppard, and by several of the core planning group. Invitations to attend were sent, and all but one of those invited actually attended the specialist meeting [Appendix III]. Including the members of the core planning group, twenty-five people attended the meeting.

CONFERENCE ORGANIZATION

The specialist meeting was held over three days in October 1998. The goals of the meeting were:

- To bring together specialists whose work overlaps, but who had not in the past worked together
- To bring together specialists from a variety of disciplines
- To introduce geographical issues to scholars who have not had direct dealings with members of the discipline
- To create a forum for the presentation of research results
- To promote new research

Given the number of participants and the limited time, and given our desire to promote new interaction among individuals and groups, we decided to forego the typical structure, wherein panelists read or otherwise present their research in a plenary session. Instead, we adopted an interactive structure, as follows:

Introduction

Break-out

We divided into four groups, as follows:

- World as object and flow
- The construction of identity
- Place and system
- Technology and the regulation of movement

In each group individuals presented their research and discussed the connections and intersec-

tions among that work.

Plenary

Group leaders presented the work of each group member. Each group member was given time to introduce himself or herself. The audience addressed questions to the group.

Breakout

The group divided into four (different) smaller groups once again. Each group was focused around a single paper (those of Martin Dodge, Dominic Power, Karen Litfin, and Jo Twist, typically, case studies), and was given the task of laying out the central researchable questions.

Plenary

The groups met again, and presented their work.

Wrapup

SUMMARY

Three major sets of issues emerged. The first might be seen as a reaction to the commonplace view that new technologies are resulting in the destruction of places, that there is a process of time-space compression or the collapse of space and time that makes the local less important, and less able to be characterized as unique.

It seems fair to say that the research presented at this meeting showed that this is simply not the case. Indeed, on the evidence the development of new technologies has in a variety of ways increased the need for highly specialized places for the production and use of those technologies, just as it has rendered more valuable those places that remain in some sense unique.

This is not, though, to say that in some important sense the question has been answered. For the recognition of this fact merely generates a new set of questions, questions about the ways in which particular configurations of places and systems interact. Central here are questions of culture and power, of the maintenance of local cultures and the establishment of particular forms of power relations.

A second set of issues arose out of the consideration of the sorts of virtual worlds that are now becoming common on the Internet. If these seem like trivial asides, they in fact raise significant questions. An initial question might be, "Just how much like 'real' places are these virtual places?" But here we need to see such places not simply as pastimes, but rather as elements

of systems that have important implications for all of us. In part this is because they are merely the most visible manifestations of ways in which the developers of new technologies imagine people and places. Here we need to see them as expressions of the more hidden geodemographic systems, and other systems for profiling individuals and groups, and for engaging in site-location decisions. It ought not to be forgotten that these systems do embody images of race, ethnicity, gender, and class.

At the same time, these virtual places raise troubling questions about the relationship between their use and everyday activities. For those who "inhabit" these places also engage in everyday activities, of shopping and using local facilities, and perhaps voting. What is the relationship between the increasing use of new technologies like the Internet and the practice of local politics, or the carrying on of the sorts of everyday activities that are now widely believed to be essential to the maintenance of neighborhoods and cities?

Finally, there are a set of questions about the relationship between new technologies and the movement of individuals. In certain ways, of course, these issues are implicit in the first two sets. For the development of profiling systems has important implications for the possibility of movement, just as the possibility of entering a virtual room allows for new means of movement. Here, though, the central questions seem to concern the ways in which a growing range of technologies are able, and in different ways, to be used to identify individuals, and to determine a variety of geographical facts about them, including where they are, but also where they are from, whether they have a right to be in a certain place, where they have been, and by implication, what they are like and with whom they have been involved.

These are not of course new issues; the relationship between technologies of identification and the conceptualization and maintenance of a right to movement and to privacy is a long one. But the development of new technologies has raised it once again, and today the issues of authentication and identification are right at the heart of a major public debate.

AFTERMATH

In the aftermath of the specialists' meeting a call was made for proposals, for seed grants to support projects related to the aims of the project [Appendix IV]. Eight proposals were received, and six were funded. The funded proposals involve eleven, or about one-half, of the conference participants [Appendix V].

APPENDIX I: CO-DIRECTORS AND CORE PLANNING GROUP

CO-DIRECTORS

Michael Curry

Department of Geography, University of California, Los Angeles

Web: www.geog.ucla.edu/faculty/curry.html

Research interests: Dr. Curry's research concerns the development of and interactions among geographic ideas (space, place, nature); geographic technologies (geographic information systems, the written work, the map); the structure of the discipline of geography; and the broader social, cultural, and legal contexts within which the discipline, ideas, and technologies are situated. He is currently working on a book entitled, *On belonging: Privacy, property, and the primacy of place*.

Selected publications: *The work in the world: Geographical practice and the written word* (Minnesota, 1996); *Digital places: Living with geographic information technologies* (Routledge, 1998)

Munroe Eagles

Department of Political Science, SUNY at Buffalo

Web: <http://wings.buffalo.edu/soc-sci/pol-sci/dme.html>

Interests: Comparative politics; electoral and political geography; comparative politics of advanced industrial societies (esp. Britain and Canada). Current research, on Ecological analyses of Canadian constituency politics; geographic information systems, spatial analysis, and the social sciences; constituencies and political representation in Canada; political sociology; geographic perspectives and human capital research.

Selected publications: *The Almanac of Canadian Politics*, co-author, (1995; 1991); *Spatial and Contextual Models in Political Research*, editor (1995); guest editor, *Political Geography* (August-October, 1995).

CORE PLANNING GROUP

John Agnew

Dept. of Geography, University of California, Los Angeles

Web: www.geog.ucla.edu/faculty/agnew.html

Interests: Dr. Agnew is a political geographer. His research focuses on international political economy and the urban geography of Italy, but he has published widely, extending to cultural and social geography, and the history of geography.

Selected Publications: (With S. Corbridge) (1995). *Mastering Space: Hegemony, Territory and International Political Economy*. London and New York: Routledge; (With P. L. Knox) (1994). *The Geography of the World Economy*. London: Arnold; *The Territorial Trap: The Geographical Assumptions of International Relations Theory*. Review of International Political Economy (1994), 1: 53-80; (With J. S. Duncan) *The Power of Place: Bringing Together Geographical and*

Sociological Imaginations. London: Unwin Hyman, 1989.

Philip Agre

Dept. of Information Science, University of California, Los Angeles

Web: <http://communication.ucsd.edu/pagre/agre.html>

Interests: Agre's research focuses on the ideas that shape technology. His dissertation concerned the difficulty of making computational theories of human activity, given that the metaphors of computational research have historically been geared to studying human thinking. Recent research has brought this perspective to several other aspects of his work, such as the privacy issues that arise through the application of devices for tracking the movements of people and things.

Selected Publications: [The Internet and public discourse](#), *First Monday* 3(3), 1998; [Computation and Human Experience](#), Cambridge University Press, 1997; (edited with Marc Rotenberg) [Technology and Privacy: The New Landscape](#), MIT Press, 1997.

Colin Bennett

Dept. of Political Science, University of Victoria

Web: <http://www.cous.uvic.ca/poli/cben.htm>

Interests: A specialist in public policy and administration, Professor Bennett has written on information and communications policy, and comparative policy analysis.

Selected publications: [Regulating Privacy: Data Protection and Public Policy in Europe and the United States](#) (Ithaca, New York: Cornell University Press, 1992). (Winner of the 1993 Charles H. Levine Memorial Book Prize from the Structure and Organization of Government Section of the International Political Science Association)

Helen Couclelis

Dept. of Geography, University of California, Santa Barbara

Interests: Her current research and teaching interests are in the areas of urban and regional modeling and planning, spatial cognition, geographic information science, the geographies of the information society, and the philosophy of space and time. In an earlier incarnation she has been an architect, a planning consultant, and a policy advisor to the Greek government. She is co-editor of the journal *'Environment and Planning B: Planning and Design'*.

Audrey Kobayashi

Dept. of Geography, Queen's University

Web: <http://www.gis.queensu.ca/kobayashi.html>

Interests: My interests and social concerns lie in the intersection of gender and racism. I address these concerns through empirical work on immigrant and refugee women, and through theoretical work on gendered and racialized thinking. Recently, I have been working from the perspective of critical legal studies, examining how the legal system structures social relations, and affects the lives of marginalized people.

Selected publications: Challenging the national dream: gender persecution and Canadian immigration law. In *Racism, Nationalism and the Rule of Law*, ed. P. Fitzpatrick (London: Dartmouth, 1995): 61-74; Learning their place: Japanese/Canadian workers/mothers. In *Women, Work and*

Place, ed. A. Kobayashi (1994).

Carolyn Marvin

Annenberg School of Communication, University of Pennsylvania

Web: www.asc.upenn.edu/general/faculty/fcm.html

Interests: I'm interested in the perceived borders of things. Especially social borders that give a shape to culture. Borders tell who belongs and who doesn't, and what it's all right to do and what isn't okay. Gender, race and class are borders that many people are currently interested in. I'm interested in the fact that they're borders, and I want to know how they do border work. My current research focus is on national symbols and patriotic practices that constitute group borders that are matters of life and death. I want to understand how national symbols acquire power, how that power is replenished, and how it is lost.

Selected Publications: *When Old Technologies Were New: Thinking About Communication in the Late Nineteenth Century* (New York: Oxford University Press, 1988; paperback, 1990); *Quando le Vecchie Technologie erano Nuove* (Turin: VTET-Libreria, 1995); *Capturing the Flag: The Symbolic Structure of Nationalism* (In progress)

Mark Poster

Dept. of History, University of California, Irvine

Web: www.hnet.uci.edu/mposter

Interests/publications: I teach in the History Department of the University of California, Irvine as well as in its Critical Theory Emphasis. I am also associated with the Department of Information and Computer Science. I published recently *The Second Media Age* (Blackwell, 1995) which is version 2.0 of *The Mode of Information* (Chicago Press, 1990). One chapter of this book is available here as "Postmodern Virtualities." I continue my work on the social and cultural theory of electronically mediated information with an essay, "CyberDemocracy," (see below), "Theorizing the Virtual: Baudrillard and Derrida," "The Being of Technologies," "Nations, Identity and Global Culture" and "Virtual Ethnicity." I have also completed *Cultural History and Postmodernity* Columbia University Press, 1997, on the relation of poststructuralist theory to the discipline of History.

APPENDIX II: CALL FOR PAPERS

OPEN CALL FOR PARTICIPATION

Varenius Initiative:

PLACE AND IDENTITY IN AN AGE OF TECHNOLOGICALLY REGULATED MOVEMENT

Between October 8-10, 1998 a three-day specialist meeting will be held in Santa Barbara, California. The purpose of the meeting is to explore the nature of identity in the current era, an era of a vastly increased movement of people, goods, and information, yet also an era in which information and geographic-information technologies portend an equally increased ability to trace and record those movements, not just at border crossings but virtually everywhere. Will the ease of movement of ideas spell the end of spatially bounded communities? Will the threat of surveillance give new life to the most insular, place- and non-place bound communities? Or will, perhaps, the “fragmented identities” celebrated by postmodernists become the norm?

The conference will address this issue in the context of the following themes:

What have been the traditional means for the regulation of borders? In what ways have they been successful in promoting territorially-based identities?

How has the development of modern communications and especially geographical technologies altered the regulation of flows of people, goods, and information?

To what extent has the “regulation of borders” at various scales—from neighborhood to nation state and beyond—moved away from geographical borders, and been replaced by ubiquitous forms of control?

How are these various regulatory regimes related to personal and group identity?

How have alternative, non-place-based identities been promoted and maintained? How have they been controlled, and how successful have these controls been? What lessons relevant to the world of the Internet can be learned from these experiences?

What future is there for borders and boundaries in a world where ‘there is

We seek participants whose interests and expertise complement and expand upon recent work in

geographic information systems and science, and who will be able to address issues such as:

The history of regulation of immigration and human movement; of the movement of goods; and of trans-border data flows.

The nature of current and developing communications and locational technologies.

The relationship between place, community, and identity.

Potential participants should submit proposals consisting of two parts: (1) a 750-1000 word abstract, describing your area of research, its relevance to the conference topic, and a proposed presentation; and (2) a two-page biography or curriculum vitae, listing your relevant publications and experience. References to Web-based materials are invited, but should augment—and not

Participants will be expected to prepare a research paper for distribution one month prior to the meeting, and will be invited to contribute to an edited book.

This specialist meeting is sponsored by the Varenus project, with funding from the National Science Foundation. Varenus is a project of the National Center for Geographic Information and Analysis (NCGIA), and seeks to advance geographic information science through research to extend our understanding in three strategic areas: Cognitive Models of Geographic Space; Computational Implementations of Geographic Concepts; and Geographies of the Information Society. Varenus is a three-year project, and is described in greater detail in materials available at the NCGIA Web site <http://www.ncgia.ucsb.edu>.

Completed proposals should be sent to Munroe Eagles at the State University of New York at Buffalo by **July 10, 1998**, in both hard-copy and email formats (ASCII or WORD/RTF). Notices of acceptance and travel awards will be issued on August 7, 1998. All submissions will be reviewed by the Initiative co-leaders in consultation with the core planning group. Participation will be limited to 25-30 people, and will be by invitation only.

The project will reimburse reasonable travel and accommodation costs for participants. Please include a quote of lowest available airfare in your application. Funded foreign participants must use U.S. air carriers and meet immigration/visa requirements.

Please direct requests for information to the project co-leaders:

Munroe Eagles

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Summary

The nation-state is rather new, but identity and boundaries have always been related, just because identity-formation involves the differentiation of oneself or one's group from others. Indeed, the nation-state has been but one particularly powerful of these geographically bounded communities, and identities are often the result of a complex nesting of place-based identities, overlain with non-place-based ones. Still, the nation-state has promoted a powerful image of identity, as something that can be described in terms of borders in a landscape and lines on a map. And even though there have always been forces and pressures--in the form of alternatives such as religion, race, class, and even the corporation—to challenge the association between place and identity, geographically-based forms of identity have remained important, even central, in the lives of most people.

But with the advent of modern communication technologies, apparent alternatives to place-based identity systems have become increasingly visible. Indeed, the Internet or cyberspace has been touted by many as constituting the most far-reaching challenge yet to the strength and persistence of place-based identity. Unfortunately, in the popular literature it is often overlooked that the Internet and the dramatically increased flow of ideas has emerged within a larger context, of the unprecedented flow of people and goods. Where these flows have crossed local, regional, and national boundaries, they have been accompanied by the development of institutions designed to regulate them, and by the increasing ability to track goods, people—and information. The interaction of these phenomena—increasing amounts of mobile information, the increased flows of goods and people, and the rise of new mechanisms for the regulation of each—raises interesting questions about the future of geographically based identities.

APPENDIX III: CONFERENCE ATTENDEES

Author	Department	Institution/ location	Topic
Brunn, Stan	Geography	Kentucky	Towards a Treaty of Silicon: Law Sovereignty and Identity in Internet Geopolitics
Dodge, Martin	CASA	UC London	Identity & Meta-Place: The Geography of 3D Virtual Worlds on the Internet
Gibbins, Roger	Canada West Foundation	Calgary	Information Technologies and Territorial Politics: The Impact of Technological Change on Spatial Identities
Litfin, Karen	Political Science	Univ. of Washington	The View from Space: Satellites & the Prospects for Planetary Identity
Marx, Gary	Sociology	UC Boulder	Windows Into the Soul: Surveillance & Society in an Age of High Technology
Mokros, Hartmut	Communication	Rutgers	Place & Identity: A Communicational Perspective
Paasi, Anssi	Geog.	U of Oulu, Finland	Boundaries in the World of De- and Re-Territorialization
Phillips, David	Post-doc	Annenberg, U Penn	The Role of Certification Authorities in the Bounding of Digital Space & Identity
Power, Dominic	PhD Cand.	Oxford Univ.	Place & Political Identity in City of London
Preston, Paschal		Dublin City University	Multimedia Spaces & Places: The Shaping of Multimedia Content Production and Consumption

Raab, Charles	Politics	Edinburgh	Privacy Protection & the Question of Identity
Regan, Pris	Public & International Affairs	GMU	Is There a Dry County in Cyberspace?
Shields, Rob	Interdis. Studies	Carleton U. Canada	Flows of mobile bodies & articulation with place-based systems of control & communication
Toal, Gerard		Virginia Tech	Technogeographies: Speed Space and Sub-Politics
Twist, Jo	Student, Town & Country Planning,	Univ. of Newcastle-upon Tyne	Bordering on and off-line Communities: Rhetoric articulations & representations in a global information society
Varsanyi, Monica	PhD Cand., Geography	UCLA	Undocumented persons

APPENDIX IV: GUIDELINES FOR PROPOSALS FOR SEED GRANTS UNDER THE VARENIUS PROJECT

Purpose

The purpose of seed grants is to sustain the momentum generated at the specialist meetings, and to promote the development of full proposals to NSF and other granting agencies. This program of small seed grants is in particular intended to stimulate research at a wide range of institutions.

Amount

NCGIA anticipates making a total of \$15,000 available for small seed grants following each specialist meeting. These seed grants will be very small (order \$3,000 each) but we expect them to be useful for travel or the hiring of short-term assistants to help prepare more substantial proposals.

Eligibility

The PI on each proposal must have participated in the specialist meeting. Members of steering committees and science panels will be eligible to apply for seed grants, with the exception of science panel chairs, but will be subject to normal procedures for dealing with conflicts of interest. Applicants must be either a U.S. citizen or a U.S. resident, and affiliated with an academic institution. Researchers affiliated with the institutions of the Varenus panel chairs and director are not eligible.

Proposals

During each specialist meeting, the leaders will solicit applications for seed grants. Proposals must be submitted to a designated leader by email within three weeks of the close of the specialist meeting.

Proposals should include:

- the relationship between the proposed activity and the appropriate Varenus research initiative, with specific reference to the initiative's research agenda
- anticipated results of the funded activity (e.g. proposal prepared for submission to NSF)

- experience and qualifications of the proposing researchers (including abbreviated vitae)
- timetable
- budget.

Proposals should not exceed two pages in length, and vitae should be abbreviated to one page. Budgets should estimate direct costs only, as the grants will be administered by direct payment from UC Santa Barbara. Approvals from university officials are not required.

Review procedure

Proposals will be circulated to all members of the initiative steering committee and the appropriate science panel, who will review and provide brief written evaluations of all submitted proposals to the science panel chair and meeting leaders. Following consultation, the science panel chair will present recommendations to the Varenius executive committee. Results will be returned no more than two months following the meeting.

Proposal evaluation criteria

The following criteria will be used:

- relevance to the core research activities of the Varenius project and the specific concerns of the sponsoring Varenius panel
- degree to which proposed project is likely to advance geographic information science
- likelihood of successful funding of subsequent proposals
- degree to which the proposed project involves new disciplines and increases diversity.

APPENDIX V: SEED GRANTS AWARDED

Karen Litfin	Information control and satellite imagery in humanitarian emergencies
Gerard Toal	The Vietnam war and the origins of the geographic information society
Carolyn Marvin	The textualization of American politics
David Phillips, Colin Bennett, Charles Raab, Priscilla Regan, Michael Curry	Emerging GIS and changing patterns of individual identification
Rob Shields, Gerard Toal	Community networking in globalized media
Audrey Kobayashi, Stan Brunn	Transnationalism and racialization

APPENDIX VI: PAPER ABSTRACTS

PROPOSAL

Stan Brunn

I am interested in preparing a research paper for the conference with a tentative title “Towards a Treaty of Silicon: Law, Sovereignty, and Identity in ‘Internet’ Geopolitics.”

Information and communication technologies (fax, EMLs, WWW, and e-mail) are shaping and reshaping the external political relations of states. They also call into question the traditional definitions and significance of boundaries, sovereignty, power, representation, independence, and identity. I discuss the need to consider how these space-adjusting technologies affect the Internet worlds, where rapid speed, the demise of distance, new political actors, and increased transborder flows call for a new agreement to replace the Treaty of Westphalia.

PROPOSAL

Martin Dodge

For this meeting I am interested in exploring the social geography of virtual space, the construction of avatar-based identity and the developments of meta-places. The 3-d, multi-user, virtual worlds that are being inhabited by many thousands of people on the Internet today provide a fascinating environment to study the changing nature of place and identity in the Information Age.

INFORMATION TECHNOLOGIES AND TERRITORIAL POLITICS: THE IMPACT OF TECHNOLOGICAL CHANGE ON SPATIAL IDENTITIES

Roger Gibbins, President Canada West Foundation

The explosive growth of geographic information science, and information technologies more broadly defined, has potentially contradictory effects on the social and political impact of geography. On the one hand, developments such as global positioning systems give a remarkable degree of precision to geographical locations and, in some cases, the location and movement of individuals. On the other hand, developments in communication technologies have enabled individuals to disengage themselves from geographic location. For instance, individuals contacted through cell phones or pagers are not easily placed as to their geographic location, and the Internet opens up a cyberspace world unrelated to conventional notions of geography and spatial location.

It would be astounding if such changes, and particularly the latter, were without political effects. Geography and its accompanying territorial identities have been of foundational importance in western democratic states. Conflicts over "lines on maps," including jurisdictional conflict in federal systems such as Canada and the United States, have been pervasive. A sense of place, moreover, has been a powerful source of political identity, particularly within the North American context where class lines are relatively weak. Although class, ethnicity and gender have all played significant roles, our primary political identities have been territorially distributed. While the territorial referents shaping identity have been far less precise than those employed by GIS, national, state and local communities, and even abstract regional communities such as "the West," have provided the cognitive maps for our political life.

But what happens when a sense of place and the accompanying territorial identities are challenged by technological change? What happens when new information technologies detach individuals from geographical location, be that location national, state or local? Does technological change transform the spatial cognition upon which political identities rest? The proposed paper will explore this question through survey data collected in three major western Canadian cities: Calgary, Saskatoon, and Winnipeg. Western Canada is a region in which models of geographic space (eg; center versus periphery) have shaped basic political orientations since the onset of European settlement. It is also a region where territorial identities have both historic and contemporary relevance; "western alienation" has formed the core of the region's political culture. The Canadian West, then, provides a rich research site for the exploration of spatial identities.

The survey project upon which the paper rests also brings the other half of the equation, technological change, into play. Survey respondents (430 from Calgary, and approximately 200 and 300 from Saskatoon and Winnipeg respectively) are drawn from high-end users of the new information technologies: all have e-mail accounts, and most are heavily engaged in a variety of the new technologies, including the Internet. Given, then, that western Canada is a region where

geography and identity are fused, these particular survey respondents provide a useful window on the potential impact of technological change on spatial identities and spatially-bounded communities.

The larger project within which this paper and proposal are embedded is particularly interested in the emergence of "glocalism," and its transformative impact on spatial identities. To date we have found some evidence for both the strengthening of local identities and the weakening of broader regional identities in the face of technological change. We have also found that technological change appears to strengthen conventional forms of social capital within neighborhood communities, if not necessarily within larger local metropolitan communities. For example, respondents who are the most heavily engaged with the new technologies tend also to have relatively high levels of civic engagement and trust. Thus it appears that technological change may reinforce rather than erode civil society.

The proposed paper will not look directly at the impact of geographical-information technologies on political attitudes, for this impact is only beginning to be felt at the level of political identities and orientations. However, it will look at the opening wedge of such impact by exploring the political identities of those members of the public most likely to be affected by such technologies. The Internet, for example, provides a potentially powerful forum for the development of non-place-based identities.

This project brings together expertise on both sides of the technological change - spatial identity equation. Hill pioneered the e-mail survey methodology in her MA thesis, which explored territorial identities among university students across western Canada. Now, as a research analyst with the Canada West Foundation, she has taken this methodology to adult populations in Calgary, Saskatoon and Winnipeg. Gibbins brings 25 years of academic research experience with territorial identities in western Canada. His work has also been broadly comparative, including research in Australia, New Zealand and the United States.

RELATED PAPERS AND PUBLICATIONS

Carey Hill and Roger Gibbins, "Glocalism and the New Electronic Technologies: Calgary in the Global Environment." Paper presented to the Annual Meeting of the Canadian Political Science Association, Ottawa, June 2, 1998.

Roger Gibbins and Carey Hill, "New Technologies and the Future of Civil Society." Paper presented to the Annual Meeting of the Canadian Communication Association, Ottawa, May 31, 1998.

Carey Hill, "New Technologies and Territorial Identities in Western Canada." MA thesis, Department of Political Science, University of Calgary, 1998.

- Roger Gibbins and Carey Hill, "New Technologies and Regional Identities in Western Canada." Paper presented to the Biennial Meeting of the Association for Canadian Studies in the United States, Minneapolis, Minnesota, November 21, 1997.
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THE VIEW FROM SPACE: SATELLITES AND THE PROSPECTS FOR PLANETARY IDENTITY

Karen Litfin

The powerful experience of belonging to a place has figured prominently in nationalist discourse, which often claims that national identity is natural or primordial. Edmund Burke, for instance, speaks of an '@n instinct" rooted in "a fondness for the place where [people] have been bred, for the habitations [they] have dwelt in" that "binds all creatures to their country." More recently, the experience of connectedness to a particular place or area has been dubbed *topophilia* by Yi-Fu Tuan. In the late modern period, the simultaneous emergence of nearly instantaneous global communication and environmental problems of global scope raise the possibility for alternative forms of place-based identity. The experience of place and sentimental attachments to it can be, and already is being, directed at the earth as a whole, generating an embryonic form of what Daniel Deudney has called *planetary topophilia*.

The planetary evocation of place is most graphic in the "whole earth" photographs taken from outer space, in which manmade political boundaries are rendered virtually invisible. Here the earth is credibly experienced as a distinctive home, yet one that is also vulnerable, isolated and precious. A striking feature of planetary topophilia is its ability to make a claim to being compatible with the natural science of ecology. Indeed, satellite-based Earth system science offers itself as the scientific basis for "planetary management." Yet a contrary argument can be made that the diffusion of satellite imagery to nonstate actors is generating new networks of surveillance consistent with the Fragmented micro-identities of postmodernity. This position would be echo Ronald Deibert's more general claims regarding the impact of the telecommunications revolution on world politics.

This paper examines recent developments in Earth observations from space, highlighting the commercialization of satellite imagery and satellite-based global environmental science, in order to evaluate these competing arguments.

PROPOSAL

Carolyn Marvin

In the emergence of dramatic new possibilities and practices around the Internet, it is tempting to argue that our most familiar associational forms, particularly those geographically bounded communities we know as nation-states, will be dramatically challenged and perhaps reorganized in entirely new forms. Even taking into account the glamour and cachet (and honoraria) associated with being a high-tech social prophet, this does not look like such an unreasonable argument. Print and telegraphy, the information technologies with the most important historical parallels to computing, have changed many things about the world to which they came. Computing technology has the capacity to utilize the modes distinctive to each of these technologies. It vastly increases the storage capacity of print and expands the real-time interactivity of electric/electronic communication; it is visual as well as auditory.

Ernest Gellner, Benedict Anderson, and others argue that print almost single-handedly gave rise to the nation-state, the historically most powerful community on the world stage during the past two centuries. It follows that something as drastic might be expected from computing.

I beg to differ. Print was a necessary but not sufficient condition for the rise of nation-states, conceived as territorially bounded expanses within which strangers are made to feel that their interests coincide as a matter of life and death. (There are dispersed nations but even these typically imagine a territorial homeland, real or mythic.) It is what else is necessary to nation-states that interests me in the wake of new technological forms of communication.

My own work on visions of the future that proceeded from the introduction of new communications technologies in the late 19th century (When Old Technologies Were New [Oxford, 1988]) suggests that new information technologies change exactly the forms of association that are possible among persons, bringing together some who were apart before, and separating others who were formerly together. But what makes a community or an identity is not only who may be associated or separated, but the strength of association or separation. The interesting problem is why some associations (e.g., nations) in a similar technological environment prevail over others (e.g., class or status).

The same work also showed how little the underlying problems of communities change at base. Who is inside, who is outside, and how to achieve safety, abundance, and meaningful lives for community members are enduring concerns. The strength of human associations has more to do with the particular solutions attempted to these problems than with shifts in the facility with which certain kinds of communication can occur. These problems of human community don't change because enduring communities consist unavoidably and ineradicably of bodies, the biological packages in which humans exist. Seen from this perspective the only problem of human communities, and therefore of human communication, is how to organize, control, and dispose of bodies. Religion, economic life, law, sexual customs, international relations, and bureaucracy all

are ways of addressing this problem.

Some of the more attention-grabbing rhetoric of the information age suggests that association detached from territory is the wave of the future. I propose to argue why it is not and why, even though shifts in the strength of the nation-state over the long haul can be envisioned, whatever changes do take place in the form and persistence of the nation-state are likely to be gradual. While any particular nation-state may find its contingent situation strengthened or weakened by new circumstances of communication, the overall propensity of human beings to organize themselves in geographic communities that defend themselves with blood, is a stable one. It depends, not on communication ultimately, but on religious commitment, defining religion as the coherent set of blood rites and sacred beliefs that bind members of a community to one another and are deeply anchored to in-person bodily rituals such as violent territorial conquest. This notion of religion includes what we commonly think of as sectarian religion, but is not limited to it. Specifically, it includes nationalism.

In elaborating the above set of arguments, I propose to explain why embodiedness is necessary to human community and works in association with communication technologies to guarantee (or fail to achieve) cohesive groups. Extending work incorporated in my forthcoming book (*Blood Sacrifice and the Nation* [Cambridge University Press, in press for Fall 1998]), the central question of which is how groups are able to persuade their members to sacrifice themselves for the good of the group, I argue that territorial groups will continue to be the core element of human communities for the foreseeable future.

WINDOWS INTO THE SOUL: SURVEILLANCE AND SOCIETY IN AN AGE OF HIGH TECHNOLOGY

Gary T. Marx

"It's a remarkable piece of apparatus."--
F. Kafka, The Penal Colony

"I find the information age to be a healthy thing....the more you know about somebody else, the better off everybody is."--
Owner of personal data base company

I am working on a book project on extractive technologies. However the technologies are not pumps or drills, nor is the substance extracted valued because of its physical properties. The technologies are computers, transmitters, spectrographs and video lens. The substance extracted is personal information.

Most analyses focus on only one technology such as computer data bases, drug testing or location monitoring or apply only one perspective --technical, ethical, legal, social or policy. This book in contrast seeks to be integrative and comprehensive --looking across technologies and disciplines.

I treat the various extractive technologies as a unit and from a variety of perspectives. I suggest cross-cutting analytic dimensions which permit uniting seemingly dissimilar, and separating seemingly similar phenomena. I offer a set of questions and concepts intended to help in understanding and contrasting extractive technologies, regardless of their specifics. I apply the approach I used in a 1988 study for the Twentieth Century Fund, Undercover: Police Surveillance in America. In that case the means of data collection was human informers and infiltrators, while for this project material technologies are central. I have been working on this since 1989 when I delivered the Jensen Lectures sponsored by the American Sociological Association and Duke University.

The project focuses primarily on the practices of large organizations relative to individuals. Attention is also given to how the technologies are used in interpersonal relations. The institutional contexts emphasized are work, home, consumption and citizenship. Less attention is given to the inter-organizational relations of corporate, industrial and governmental forms of surveillance.

The book has four major strands: social scientific, cultural, comparative and policy. The methods used are interviews, document analysis, case studies and thinking.

First it empirically describes (what are the facts/data?), classifies (what are the types, dimensions and contexts of variation and generic or ideal-typical forms?) It seeks to explain (what theories or ideas best account for the observed patterns and trends)? Why have we seen such a

rapid expansion in the diffusion of these technologies in the last decade? What inhibits or facilitates the use of extractive technologies? What social processes of facilitation and resistance can be identified?

Secondly, the techniques occur within and against a cultural backdrop which must be understood. How are these techniques treated in popular culture as represented by advertisements, cartoons, music, art and surveillance toys for children? What images and symbols predominate? What does this material tell us about the experience of being either the watcher or the watched?

The third strand of the book is comparative international. It asks what can we learn from other industrial societies such as Great Britain, France, Germany, the Netherlands and Japan? How do they view and threat these technologies? How does China differ from Taiwan and what explains the profound differences between Hong Kong and Singapore with respect the use of these tools? Through research trips and teaching in Europe and Asia, I have considerable information on this.

The final strand of the book treats questions of ethics and public policy. How should the technologies be judged? What is at stake? What competing values are present and how can conflicts between them be best responded to? What is most problematic or desirable about extractive technologies? What are the major forms of abuse and how can they be minimized? When are policy prohibitions or regulations called for? What specific policy mechanisms are available and with what consequences? Laws, organizational policies, etiquette and the design of technology are considered.

Some parts of the book have already been published and are at the following address:

[HTTP//SOCSCI.COLORADO.EDU/~MARXG/GARYHOME.HTML](http://SOCSCI.COLORADO.EDU/~MARXG/GARYHOME.HTML)

Of particular relevance are the papers on privacy and technology, borders, culture, social engineering, ethics and anonymity

For purposes of this conference I will develop a paper from the social science section described above that identifies relevant dimensions of personal information gathering technologies and which seeks to clarify and conceptually elaborate ideas such as surveillance, public, private and privacy. These terms are often left undefined and used in very different ways by scholars and the public. Social scientific understanding and sound policy require greater precision in our use and definition of the basic concepts. Depending on space and time considerations, I may also deal a bit with the comparative use (and absence) of these terms in other cultures.

PROPOSAL

Hartmut Mokros and Christine A. Lemesianou

Area of Research

My research focuses on communication as an explanatory framework. I refer to this explanatory framework as a constitutive theory of communication. Constitutive theory regards communication as not merely a tool/process of message or information exchange. Instead communication is viewed as a constitutive system within which meanings, identities, and the things that are seen to populate the world of human experience are products and byproducts. This view suggests that communication is most fundamentally a matter of space, the articulation and negotiation of a commons. To say that communication represents a constitutive system is not to claim that this system is primarily productive. Quite to the contrary, the constitutivity of communication is seen to reproduce order, structure, meaning and identity, and does so silently, out of awareness. Productive, that is to say change promoting, innovative, or creative communication is, in constitutive terms only sensible indeed possible within this framework of reproduction.

My approach to research involves a process of abduction, a working back and forth between inductive and deductive methods. The site of this engagement is in the context of data that offer traces of human conduct captured through some form of permanent recording, be it audio or video taped interaction, the logged record of human-computer interaction, or printed texts.

The development of a constitutive theory of communication is anchored within 20 years of research addressing most generally the issue of what is a person. This has included microanalytic study of the interplay of structure and strategy in get-acquainted conversation, ethnographic/microanalytic study of the definition of the situation within a traditional work community, epidemiological and clinical study of childhood depression with particular focus on issues of nosology and assessment, psychological autopsy study of adolescent suicide, and interpretive microanalytic study of professional-client interaction. An overarching concern across these research sites has been the development of methods that capture and support a theoretical view of the person as a relational, contingent, positioned, and interactive entity. In the past several years I have assumed administrative responsibilities in my department and school that have further stimulated my thinking as to the practical utility of constitutive theory for professional practice and a more general question about the place and identity of the communication/information professional.

The work of my doctoral students has extended the sites explored from a constitutive perspective and has challenged, expanded, enriched, and validated the development of the theory. Among others, this has included two studies of the textuality and interactivity of architecture, one examining how the physical place of a library virtually interacts with its patrons and potential patrons, the other examining how classroom architecture enables and constrains approaches to teaching and learning, with architecture here treated as a technology. While these studies certainly have relevance to the themes of this conference, it is the work of Christine Lemesianou

that is most directly pertinent to the themes of this conference as described in the Proposed Presentation below.

Relevance of Area of Research to Conference Topic

Issues of identity and the positionedness of identity are central to my area of research. My theoretical and methodological developments and the extensions of it developed by Ms. Lemesianou have relevance for a variety of themes addressed by this conference, particularly concerns with boundaries, the fluidity of identity, and a relational approach to conceptualizations of place. Ms. Lemesianou and I particularly value the opportunity to engage and profit from participation in what promises to be a very stimulating and timely conference for the further development of our research.

Proposed Presentation

In our presentation, Ms. Lemesianou and I will seek to introduce in greater detail the foundations of constitutive theory and its relevance to the general theme of Place and Identity in an Age of Technologically Regulated Movement. The presentation will include findings from Ms. Lemesianou's dissertation research entitled "The Geographies of Discourse and Lived Experience: A Communication Approach." This research expands constitutive theory by directly considering issues of space/place and boundedness. Bringing to bear developments in contemporary geographic and post-modernist theory, in particular, Lemesianou examines the construct "Generation X," from its introduction and diffusion in discourse as a semiotic invention, to its employment as a resource in social interaction, and to its play in self-reflection. The data from this study will provide the grounding for our discussion of Place and Identity from a Communicational Perspective.

BOUNDARIES IN THE WORLD OF DE- AND RE-TERRITORIALIZATION

Professor Anssi Paasi

Abstract

State boundaries have for a long time been understood as being fixed, stable and concrete entities which divide the global space into bounded units and which change mainly as a consequence of conflicts between territorial powers. Identities and boundary construction are therefore two sides of the same coin. It is now increasingly argued how the processes of globalization and the rise of virtual spaces or information cyberspaces will give rise to new global geographies and increase all kinds of economic, political and cultural links over boundaries. Cyberspace also enables the creation of global-based (national) identity communities which are not territorially bounded. Boundaries are hence increasingly interpreted as being vanishing elements in spatial transformation rather than stable physical lines. This will, the argument goes on, reduce the meanings of state boundaries and sovereignty and finally lead to de- and re-territorialization, i.e. changes in the functions and meanings of boundaries. The notions of de- and re-territorialization are associated with the works of Deleuze and Guattari who used them to describe the effects of capitalism on previous fixed orders of class, kinship, space, etc., but in current geopolitical literature they have become much used metaphors of cultural, social and spatial change.

Much of de-territorializing discourse is therefore linked with the ideas of globalization or the economic, cultural and environmental transformation of the global space. Scholars are not unanimous about the meanings of this phenomenon and its effects on global-local relations and on boundaries, but new rhetoric reflects in any case changes in global activity spaces. In this rhetoric boundaries are often represented as symbols of past world characterized by the *space of places* that will be replaced by a dynamic world characterized by a *space of flows*. The Castellanian flow-rhetoric is persuasive and is used in many different contexts. The space of flows, it is argued, will decrease the roles of 'sovereignty' and 'identities' of states and challenge national identities and boundaries. Side-by-side with previous tendencies nationalism and ethno-regionalism, linked with the flows of displaced people and refugees, create new boundaries and challenge the relations between existing social and physical spaces. This will give rise to conflicts and new boundary-drawing between social groups, i.e. to re-territorialization. Boundaries are thus understood as one dimension of identity formation and territoriality. This means that politics of identity, a constant process of negotiation, becomes a crucial question.

This paper discusses the changing roles of boundaries in the contemporary world. The boundaries between diverging territorial units are comprehended as being contextual, contested and shifting rather than stable categories. The paper aims at providing some new theoretical ideas for border studies and as a background to discuss the arguments that have been set forth regarding the 'disappearance of boundaries' (and nations-state) in the current world. Some theoretical perspectives will be discussed that might be useful for multidimensional boundary studies. The key argument is that instead of understanding boundaries as fixed lines, boundaries should be

understood as one part of the 'discursive landscape' of social power which extends itself into the whole society and which is produced and reproduced in various social and cultural practices. The Finnish-Russian border is discussed as an example to illustrate the theoretical ideas. The roles of this border have varied a lot, reflecting both the Finnish-Russian relations and changes in global and European geopolitics. Current (EU-based) economic practices and discourses strive to open up the border and permit freer movement of capital and people, but in terms of foreign policy, security discourses and territorial control this border is still a relatively closed one. Local meanings of the border have also varied crucially in the course of time.

Border-crossings not only occur in 'physical space' of border areas but also in the spaces of representation and imagination, which puts stress on cyberspaces. The paper therefore also evaluates the roles of internet in border-crossings. The number of computers with internet link in Finland is the highest in the world (88 per 1000 inhabitants, compare: USA 58/1000, Britain 17/1000 and Japan 9/1000 inhabitants). I will argue that in spite of the rapid development of cyberspace, the role of traditional/new social, political and administrative institutions that produce and reproduce boundaries (and state-based national socialization) will still remain strong.

The key point of this article is, therefore, that territoriality is still explicitly linked with nation-states and a major challenge for researchers is to conceptualize borders in new ways to render possible the evaluation of the meanings of boundaries in a world of flows and de-territorialization. Instead of being fixed with just one territorial framework, a modern state typically exploits different territorial strategies in different spheres of social action. The state therefore seems to be a territory, which only partly remains with its territorial boundaries: the borders are actually sets of shifting discourses and social practices.

Boundaries are not only lines but meaningful, historically contingent symbols and institutions which are in a complicated way sedimented in social practices and discourses and which manifest themselves in different spatial scales, from personal and local to global. To understand the current meanings of boundaries requires several 'keys' which are linked with finance, legislation, local and national/local attitudes/identities and which reflect power relations in complicated ways. Perhaps all this is an expression new power relations of 'information age', discussed by Castells. He argues that the new power lies in the 'codes of information' and in the 'images of representation' around which the societies organize their institutions, people build their lives and decide their behaviour. The sites of this power are, Castells argues, 'people's minds'. This must be case with the contemporary forms of territoriality, too. Instead of state territoriality it would be more useful to discuss on territorialities, some of which are bounded with state boundaries, while some others are not.

THE ROLE OF CERTIFICATION AUTHORITIES IN THE BOUNDING OF DIGITAL SPACE AND IDENTITY

David J. Phillips

Introduction

My research investigates socio-technical negotiations regarding the development and standardization of electronic signatures and certifications. These certificates may act as digital passports to identify digital entities and to control access to electronic resources. Thus they serve to bound and regulate digital space. Negotiations over their development and deployment occur in geographic space and utilize entrenched institutional resources. The study of these negotiations may show how the power structures of geographic space are mapped onto electronic space.

Digital signatures as boundary devices

The Internet facilitates the creation of fragmented, mutable, and non place-based entities - programs, personalities, and associations unbounded by traditional constraints of geography and time. There are, however, non-geographic means by which these digital entities may be bounded. Their mutations and interactions may be checked by the application of cryptographic techniques. One of these techniques is the digital signature. Using digital signatures, one can verify several things:

That two digital messages have the same author.

That a digital message has not been altered since its creation.

That the author of a digital message (a contract, perhaps, or a request to enter a certain digital "space" or to access a certain resource) has certain attributes vouched for by another entity (perhaps an employer will vouch that the author is an employee, or a professional certifying authority may vouch that the author has a certain name, address, and social security number).

These signatures, then, serve as boundary devices in two ways. First, they can be used to provide digital entities with relatively fixed identities. Second, they can be used to regulate the accessibility of digital spaces. Actors wishing to influence the social topography of digital space may do so by influencing the technical, legal, and cultural structure of digital signature practice. Current contests about this practice focus on the structure of "certification authorities" (or "CA's").

Certification authorities and the linking of geographic structures to digital space.

The following few paragraphs describe the technical structure of signatures and certificates in only enough detail to allow the reader to understand the various fronts on which social contests are occurring.

Digital signatures are based on public key encryption. Each user of a public key cryptographic system generates two mathematically linked keys, a private key (which is never communicated, but remains on the user's presumably secure system) and a public key (which is widely disseminated). Any message encrypted with the private key can be decrypted only with the public key. If Alice wants to assure Bob that she is the author of a message, she would encrypt it with her private key and send him the encrypted message. When Bob receives it, he attempts to decrypt it with Alice's public key. If the decryption is successful, the message must have come from someone with access to Alice's private key - presumably from Alice herself.

As it stands, this system is vulnerable to an "impostor attack." Someone may pretend to be Alice, publish a key in her name, and author digital messages in her name. Certification authorities mediate the link between individuals and their public keys. In order to prove that a public key belongs to her, Alice would approach a CA with some proof of her identity (perhaps a state issued passport, perhaps a biometric) and her public key (call it X). The CA would then issue her a digital certificate, signed with the CA's private key, attesting that the person identified to them as Alice uses the public key X. Alice then sends the certificate to Bob along with her signed message. Bob checks the signature on the certificate, sees that it was issued by a reputable CA, and is assured that the public key X which verifies Alice's message belongs, in fact, to Alice. But how did Bob know that the public key he used to check the CA's signature on the certificate belonged, in fact, to the CA? Perhaps the CA's signature was certified by another CA, and that by yet another. Eventually, Bob must trust that some digital message is believable - or rather, that the risk of believing a particular digital message is bearable.

As we see, CA's are the mediating structures between geographic identity and organization and digital identity and organization. Contests over different topographies of mutually certifying authorities, the assignment of financial liability among them, and the claiming of legal jurisdiction over them, are contests over the structure of digital space and identity.

Proposed presentation

I propose to present a very brief description of the encryption algorithms on which digital signatures are based, then to present two different sets of technical protocols for combining these algorithms into suites of standard certification interactions. One of these - PKI - implements a hierarchy of certification authorities, with state agencies acting as the root authority. The other, SPKI, implements a more fluid and inter-related structure, with no single prescribed root authority. I will compare the structuring properties of the protocol sets. I will discuss the technical, cultural, legal, and economic resources that actors have used in contests to promote these protocol sets, including legislation enacted or pending in several U.S states to establish root CA's and to limit the financial liability of lower level CA's, the promulgation of federal standards, and the implementation of certification based credit card payment systems and certification capable web browsers. Finally, I will hazard guesses as to how these contest will influence which aspects of geographic and corporeal power relations are mirrored in an increasingly standardized and bounded digital space.

PROPOSAL

Dr. Dominic Power

Abstract

My doctoral research, and my continuing research agenda, examine the contemporary nature of space and public space in world cities and financial centres: in particular the City of London. 'The City of London, or 'Square-Mile', is an extremely highly defined and concentrated area within which a staggering scale of global financial dealing is transacted daily. It is an important space positioned at the interface of the global-regional-national-local. However, the nature of its space and the manner in which it is controlled and regulated set it apart from other globally important financial centres, The (re)construction, control and regulation of its space have resulted in a fortified and exclusionary space that stands in opposition to democratic politics, public space, and identities,

In examining various scales and spaces of regulation in the City my research directly addresses many of the concerns underlying the Project's focus on 'place and identity in an age of technologically regulated movement'. Firstly, a variety of spatial, symbolic and institutional borders have been successful in promoting a territorial-based identity in the City, This territorial identity is the result of agency on the part of commercial interests motivated to define the City as an exclusive, private space for capital processes. The increasing reliance of Finance on new technology and communications has not led to a diffusion of their activities or the irrelevance of space to their activities. The development of modern communications has been found, in this case, to increase the need for spatial concentration, specialisation, and consolidation. Thus despite the locational possibilities afforded to finance by modern communications space, territory and the regulation of borders have become increasingly important to capital processes. Secondly, the 'borders' surrounding the City have rapidly embraced technological change. The City now has one of the densest networks of CCTV cameras (estimated at over 3,000 street-level cameras) and has a built environment the syntax of which sets the City apart as a landscape and territory for the Powerful, r Thus the geographical and institutional borders have been rendered more effective than ever before with the advances in technology and communications. Finally, the project asks the question 'What future is there for borders and boundaries in a world where there is no there?' My research suggests that in certain globally crucial spaces there is an increasing consciousness of bounded space and its role in capital processes. This suggests that for the powerful 'there' is a concept alive and well and that as such access to these spaces is central to the political identities and material conditions of the public.

The proposed presentation would address the relationship between place and political identity in the City of London and explore the implications of this for the 'community'. The first part of the presentation would treat the processes of place-making in the City of London. This involves an examination of the regulatory, institutional, political and physical borders drawn around the City. The ways in which modern communications have made such rigid place-making

central to capital processes will be treated. Following this especial emphasis will be placed upon the use of CCTV and new security technologies to control the resultant territory. Finally, the presentation will suggest that such place-making, control and regulation functions to define definite groups of 'insiders' and 'outsiders'. The insiders enjoy privileged access to a crucial set of spaces and activities from which the outsider%; are effectively excluded. This exclusionary situation will be posited to have negative effects upon the constitution of both groups' political identities. The presentation concludes that the effects upon political identities has the further implication of the alienation of the public in general. If an effective public space or domain does not exist then the political power and normative potential democratic theorists invest in the value of community and collectivity disappear. In short the presentation treats a territorial area that has with the advent of new technologies and communications become increasing separate from the community and public, This situation poses significant challenges to democratic identities, practices and politics,

MULTIMEDIA SPACES AND PLACES:THE SHAPING OF MULTIMEDIA CONTENT PRODUCTION AND CONSUMPTION

Paschal Preston

Abstract

This paper engages with a number of the workshop themes, including the changing 'relationship between place, community and identity', and the role of the nation state in promoting territorially-based identities'. In particular it will explore the construction or restructuring of borders/boundaries with respect to the production and consumption of new ICT-based (information and communication technology) multimedia content products and markets.

The paper will argue that even in an era of increased globalisation in relation to mobile investment and extension of 'the space of flows' of goods, information and services that national states and cultural factors still play an important, if somewhat changing, role in relation to the production and consumption of new ICT-based products. The argument and exploration is focused on one particular field of multimedia (MM) applications - the design and production of new media-based 'cultural' content products and services.

The paper explores how Multimedia has emerged in the 1990s as an ambiguous term which has been appropriated by computer suppliers in their search to develop a media friendly term to advance their global search for profits. Meanwhile politicians, in Europe and elsewhere, argue that new multimedia products will generate increased wealth and job opportunities as well as providing a platform for the development of their information society visions. The paper explores the very different meanings attached to the term 'multimedia' and the flexibility of the term with respect to the wider discourses of an emerging 'global information infrastructures' and

The paper moves on to challenge the 'global march of technology' thesis by examining the political, economic and cultural factors which are influencing the development and consumption of multimedia content products. It is mainly concerned with the application and adoption of MM technologies for the design and production of 'new media' and cultural products or services. It defines this MM applications field as both an emerging new media industry and an emergent new cultural form which (like the mature or established media) offers a potential public space and a forum for the negotiation of cultural values and national forms of identity.

The paper will engage with the recent surge of emphasis on the processes of extended globalisation and their links to new communication technologies, and especially how these directly pose (a) key questions concerning changes in the overall role of the nation state as well as (b) more specific questions concerning the past and future role of media in the development of the nation state system. It will address this field in terms of the complex 'web of relations' between international flows of capital and information, nation states and particular cultures of MM development and consumption. It will challenge the dominant conceptions of a singular global

information society or market ('space') and critically engage with the dystopic view that globalisation threatens the nation state and cultural specificities and that new technologies have undermined the expressive communities linked to the established or 'mature' mass media. It will further question aspects of the utopian view that the mere advent of new ICTs both enable and empower all citizens and consumers equally, and that expressive communities will effortlessly become producers and consumers of content via the erosion of traditional communication patterns and flows.

The interdisciplinary perspective adopted for this paper suggests that new MM technologies and content are shaped by their particular institutional contexts of production and consumption and via networks of relations between actors, producers and users. Within these contexts there are brakes and accelerators to the process of innovation which account for the differing rates of diffusion of successive new ICTs throughout the century [e.g. the telephone, the television, teletext, videotext] and the different uses of new ICTs by different social groups in different countries. A technology in development may be adopted, translated and interpreted in many ways and the achievement of a shared understanding of a technology is a process of negotiation between different constituencies. The development, adoption, and application of technology is fundamentally a social, economic and cultural process.

Central to this approach is the idea that both MM technologies and their content must become embedded in specific contexts in order for them to function and have meaning. We might call this a process of appropriation involving the acquisition, placing, interpretation and integration of an artefact into existing or changed/ing social and cultural practices. This process may take place at individual but also at institutional and national level through regulated and non-regulated processes of learning. Of fundamental importance to this process and this perspective is the production of meaning around, and through, the artefact.

These issues are addressed in the light of empirical work carried out in the context of a small nation state where international capital has been actively supported by the political establishment and where new information related industries are becoming one of the main engines of economic growth and employment in the economy. In the context of a rapidly modernising social and economic context the paper argues that national state and cultural influences are playing an important role in shaping multimedia developments at two levels. First at an institutional level, where a mix of industrial development, cultural and other policy and economic factors play an important role.. Second, at a more concrete level where an analysis of the development of multimedia content highlights how the specific cultural identities of designers/authors and other key actors [including users or 'audiences'], play an important role in creatively shaping or negotiating new multimedia content

These arguments will draw on empirical research [in-depth participant observation and interviews] with developers of multimedia products, offline and online, in four cases and a number of sessions with final users of these products. One case study is focused on the attempt by a major international software corporation to move into the field of MM content production; the other three cases are focused on indigenous organisations, including the national broadcasting organisation. All of these studies took place during 1997/98. The issues raised here are from an

initial analysis of the fieldwork and form part of the findings of the Social Learning in Multimedia project, (SLIM) a two year multi-country research project funded under the EC's Targeted Socio-Economic Research programme (1996-1998). The conceptual concerns and issues addressed here in this paper were also informed (and 'shaped') by the SLIM context, especially exchanges and interactions with colleagues based in different disciplinary fields.

SUMMARY OF ARGUMENT/CONCLUSIONS

The paper argues, on theoretical and empirical grounds, for a more nuanced approach to the concept of 'multimedia'. It seeks to wrestle it from the prevailing dominant techno-economic and market-driven logics and to place it alongside the more traditional media with their distinctive set of values and motivations. It proposes that multimedia should be understood as more than mere tools or technologies but rather as an emergent new medium for conveying content and symbolic messages as well as other types of information.

This paper also provides many important challenges to prevailing notions of 'globalisation' or a singular global 'cyber-space' of information production and exchange and it challenges many aspects of the dominant late-1990s discourses asserting the universal flows of benefits to be derived from a 'market-driven' broadband or multimedia 'global information infrastructure'. In curt theoretical terms, our arguments emphasise the need to distinguish between absolute/physical 'space' and the construction or re-structuring of social or cultural spaces (Lefebvre, 1974).

In more concrete terms, the author acknowledges that new ICTs are serving to extend and deepen older forms and scales of international interdependencies and exchanges, not least within the information and communication sectors. The production and consumption of new ICT and multimedia technologies and infrastructures (software and hardware 'tools') are increasingly global in scope. This may also be true of various types of specialised or producer information 'content-rich' services. The Multimedia games industry may seem to replicate the global reach and levels of concentration or domination long-ago established by Hollywood in the field of consumer-orientated entertainment audio-visual 'content' services. But specific kinds of culture-laden and symbolically-rich MM content of concern [and highlighted] in this paper continue to be framed within 'spaces' which are highly bounded and far from global in reach or form. They continue to be framed by a diversity and plurality of culturally specific and symbolically-laden identities, value systems and 'structures of feeling' which cannot be reduced to the identity of free-floating 'consumers' in a global marketplace. These more specific socio-cultural 'spaces' are derived from long-evolving hermeneutic communities which are often based on [embedded in] particular geographically-contiguous national and regional locales. In this domain of multimedia or 'cyberspace' at least, the singular global-market vision is woefully inadequate in relation to both the spheres of production and consumption of such multimedia content products.

The paper also highlights the salience of socio-cultural and other borders or barriers to implementing the technology-centred visions of 'convergence' in the multimedia field. It also highlights the much forgotten point that [even in this era of 'the common digital mode' and the

postmodernist cultural orientation towards 're-cycling' of old media content] the creation of MM content products is relatively expensive and risky. This research also highlights how specific types of MM content may be negotiated and resisted by audiences and the specific manner and costs involved in any 'localisation' of MM content in order for it to be appropriated and incorporated into social practice. There are many barriers and challenges to be overcome in developing and commodifying interactive multimedia content in this still emergent or potential new media field. This point re-enforces the importance of the state (and supranational state organisations such as the EC) in supporting and ensuring some minimal degree of diversity and pluralism in MM cultural content.

In contrast to the prevailing 'information society' policy initiatives and the discourse which presuppose that all information (or their related markets or 'spaces') are the same this paper highlights the need to differentiate between different types of content and adopts the phrase 'cultural content' to mark the specificity of certain messages from raw data or other forms of information. Evidence from these case studies would indicate that MM cultural content production is a costly and risky process and diversity/pluralism is not automatically ensured by techno-economic logics. As with older traditional media, the potential for democracy and global/local sharing of culture in the 'information society' cannot be realised through the free movement of capital, services or goods. One important or necessary component centres around the pro-active initiatives of nation states (and relevant supra-national policy bodies) to actively support the production and distribution of the types of MM content which articulates their identity(ies) and so maintain at least some minimal degree of diversity and pluralism.

The paper also points to some implications for future policy orientations. Despite extended tendencies towards globalisation, this paper argues that the nation state and national identities and policies still matter. But if they are to support the development of a content industry national (and EC) policies must be mindful of the specificities of media content generation [as opposed to an assembly or application development industry], and the role and value of national peculiarities and cultural heritage in this context. As with older traditional media, the potential for democracy and global/local sharing of culture with new ICTs cannot be defined as solely or predominantly 'market-driven'. Nor can such developments be equated with the free movement of goods or other commodities. Rather nation states may need to develop pro-active policies to support the production and design of multimedia content which articulates their identity(ies) and maintains a diversity of content.

PROPOSAL

for the Varenius Conference on *Place and Identity in an Age of Technologically Regulated Movement*, 8-10 October, 1998, Santa Barbara, California

Mr. Charles D. Raab

My current research (mainly for a project on "Privacy Protection in the Virtual Society", conducted within the 'Virtual Society?' programme of research funded by the Economic and Social Research Council of the United Kingdom) investigates the revision of the data protection system as a crucial adjunct of the 'Virtual Society'.

With comparative and international reference, the aim is to understand outlooks on issues, roles and emergent relationships amongst main participants in Britain as a new data protection law is implemented. I am examining various methods and roles in the protection of personal information in the light of technology-based innovations in government, business, and society, including the electronic delivery of public services and information, commerce and banking, transport and public order. By investigating the relationship between statutory regulation, organisational self-regulation, 'privacy-enhancing technologies' (e.g., smart cards and encryption), and individual self-protection, I am developing theory concerning policies, criteria and strategies as well as possibly contributing to practical developments in data protection.

Among the theoretical issues are the part played by considerations of equity, democracy, risk, and balance in the 'governance of trust' concerning the use of information technologies that affect personal privacy. Research methods include documentary analysis and interviewing in government and amongst regulatory bodies, industry, technology firms, interest groups and other organisations, mainly in Britain and elsewhere in the European Union.

The proposed paper for the Varenius conference, provisionally entitled 'Privacy Protection and the Question of Identity', considers that these questions in the theory and practice of privacy and privacy protection, as well as the technological context that gives rise to risks and possible safeguards, closely relate to contested issues in the social sciences concerning personal and other identities. Data-handling systems for locating, identifying and recording persons, including the authentication of individuals' claims, provide the infrastructure for many processes. These include surveillance, controls of physical movement across borders, control of access to premises and other spaces, electronic commerce and the electronic delivery of public services. However, the concept of 'identity' is normally used too casually and unreflectively in these practices, and is only glossed over by commentators on such processes and systems who thus fail to engage with recent social-science debates. Practice and discourse concerning privacy (or data) protection, including legislation, also take the definition of identity and related terms, such as the notion of 'sensitive' personal data, for granted.

It is argued that the mismatch between the identity(ies) imputed to persons by the administrative categories used in the data practices of both commerce and government, on the one

hand, and the personal or social identity(ies) that persons choose and acknowledge for themselves, on the other, is at least worthy of note and might have important consequences. This discrepancy and its implications are explored, and the concept of identity - whether place-related or otherwise - re-examined in the context of technologies, policies and practices that concern the invasion or protection of privacy. For example, processes such as profiling, data-matching and data-mining, and the creation of identity documents, affect the way these identities are negotiated, affirmed or denied. So too does the possibility of 'virtual' identity in electronic communication. Moreover, the use of biometric 'identifiers' as mechanisms controlling movement and entitlement raises similar issues, especially concerning the imputation of uniqueness in a context of shifting and perhaps multiple self-identifications.

To bring these issues into focus, the paper draws on a range of sociological (and cognate) literature on identity and boundaries, as well as on current developments regarding identification devices and their use in information systems for a variety of purposes. Reference is also made to developments in border controls in Europe in which personal information is used, to rules concerning that use, and to the regulation of trans-border data flows (and information processes generally) in which, for example, the legislative concept of the 'identifiable person' points up the conceptual problems mentioned above.

In addition to materials and ideas drawn from my current research, the paper is to some extent informed by earlier theoretical and descriptive writing on privacy protection, and by previous joint work on European police co-operation (see list of publications). It also relates to some questions developed in the planning of prospective joint research on frontiers, identity and security, in which the intended focus is on the practices of identity checking and verification at the external and internal borders of the European Union.

The proposed paper is of relevance to the conference topic in several ways. In particular, it concerns the conference's central focus on problematic questions of identity in the context of technological developments and controls, and it also addresses more specific issues of personal data, regulations and borders, and of regimes for governing trans-border data flows.

IS THERE A "DRY COUNTY" IN CYBERSPACE?

Priscilla M. Regan

For the past twenty years, my research interest has involved the effects of new information and communication technologies on the relationships between individuals and organizations. Although the technologies have undergone enormous changes over these twenty years, the effects of the changing technologies on relationships, and the policy and theoretical questions that result, have remained quite consistent. Throughout this time, I have been particularly interested in how communications and information technologies affect individual privacy, the synergy between individual privacy and social privacy, and the effectiveness of national and regional policy responses. The public opinion and pilot project research I conducted during 1995-96 on intelligent transportation systems revealed the public preference to remain anonymous, as well as the capabilities of communications technologies to track and store movements and transactions.

A current research interest concerns the effectiveness of legal and regulatory regimes for the global and seemingly borderless world of the Internet. This Spring I have been involved in the Department of Commerce's evaluation of the effectiveness of self-regulation in protecting privacy on the Internet. In February I presented a "town-gown" lecture, "Is There A Dry County in Cyberspace?," in which I examined four policy issues -- free speech; protection of minors; privacy; and tax collection -- that emerge during debate about online alcohol sales and online gambling. I am currently working on revising and expanding that analysis. The theoretical and policy questions presented by online alcohol sales and online gambling correspond to the themes of the conference. I would welcome the opportunity to further explore this research in the context of the conference.

Internet sites offering home delivery of alcohol and online gambling have proliferated in the last few years. The sites have spawned commercial opportunities and political debate in county councils, state legislatures, Congress, and international bodies. The absence of legally defined boundaries in cyberspace makes it difficult to maintain "dry counties," and state gaming restrictions. Yet ordering a bottle of wine over the Internet involves a purchase in cyberspace and a delivery in a physical space where there are indeed legally defined jurisdictions that contain communities with value preferences and public safety standards, as well as governments with revenue needs. Similarly gambling in cyberspace results in winnings or losses that appear on credit card accounts. These activities in cyberspace do not occur solely in the virtual world. At some point the virtual crosses the boundary to the physical world. At that point the laws and regulations of the physical world may be applied.

The proposed research examines the difficulties of enforcing legal and regulatory regimes in cyberspace, as well as the interdependence of legal and regulatory regimes with technological infrastructures and developments. The enforcement difficulties appear to reveal something of a paradox: the enforcement of laws and regulations in cyberspace may necessitate the authentication of personal identities, including place-identity. An activity in the virtual world may result in

a more complete picture of one's identity than would result from the same activity in the physical world. In cyberspace place and identity are critical components of determining the applicability of laws and regulations. In the physical world, place and identity can be determined with less detailed revelation of information than in the virtual world. In order to ensure the enforcement of local or national laws in cyberspace, Websites or service providers may be liable for ensuring age or location.

As people surf the borderless world of cyberspace, tracking technologies (e.g., cookies) that are embedded in many browsers record where one goes. One can disable the technologies or use anonymizing servers. But if one wishes to purchase wine or engage in online gambling, existing legal restrictions may be relevant and authentication of place identity may be required. If authentication of place-identity is not technically possible or politically feasible, many local or national laws will be unenforceable. Authentication of place-identity is likely to pose costs in terms of individual privacy. If the privacy costs are too high, people may not engage in Internet activities that require the revelation of personal information.

With respect to the enforcement of jurisdictional restrictions on online alcohol sales and online gambling, four policy questions are particularly relevant and would be analyzed in the proposed presentation: 1) is the goal of the existing jurisdictional law or regulation sufficiently important that it be applied to cyberspace activities; 2) are there technical or administrative means to achieve that goals without the revelation of place and identity; 3) what technical or administrative means exist for authenticating place and identity; and, 4) which means for meeting the legal goal entail the least invasion of individual privacy and entail the least burden on electronic commerce.

DEFENDING THE NATION: IMMIGRATION POLICY IN A GLOBALIZING WORLD

Christopher Rudolph

ABSTRACT

How has globalization affected transnational migration and the policies advanced industrialized states implement to deal with such flows? Globalization--marked by increasingly permeable borders to facilitate capital and trade--is witness to a counter-phenomenon--the increasing desire of states to stem labor mobility across national boundaries, even though many economists view such mobility as Pareto optimal. This paper examines how the forces of economic globalization have served to 1) facilitate labor mobility, by creating incentives to both potential migrants and domestic business that enjoy the benefits of immigrant labor; and 2) frustrate state efforts to control unwanted ("illegal") migration. Though restrictionist policy is most often couched in terms of economic interests or concerns over political stability, an examination of current policies in four major points of immigration pressure--the United States, the European Union, Japan, and Australia--reveals that contemporary immigration policy is driven largely by "national" defense (i.e. "national identity") and **the** desire to maintain a sense of "societal security," rather than defense of state interests (in line with the work of Heisler, 1998; Waever et al., 1993).

The paper examines major policy developments in the U.S., E.U., Japan and Australia, focusing on the last 25 years. What such an analysis reveals is that from early attempts at "national quotas" systems in the United States and a culturally based "white Australia" policy "down under," to current measures in Japan that strongly favor admission of *Nikkeijin* (South Americans of Japanese descent) and a European Union working together to stem the flow of "third country nationals," immigration and border policies in these advanced industrialized nations seem more concerned with stemming the cultural affects of globalization than with the economic consequences of immigration (i.e. effect on employment and wages) as is most often professed by policymakers. These effects become increasingly salient, politically and culturally, as cultural demographics begin to replace majority-minority relationships, as is the case in California, where Latinos will shortly become the majority.

And yet, the fact that states find it increasingly difficult to seal their borders leaves one to wonder what effect such state impotence will have on republican notions of national identity. This paper concludes that 1) states will shift their strategies in dealing with migration, moving from domestic-oriented approaches (border enforcement and employer sanctions) to intergovernmental and supranational options, including issue linkage (combining international economic policy with regional migration policy); and 2) although culturally homogeneous polities may be a thing of the past, (post)modern identities will shift toward "composite" forms around some dominant national feature(s) (i.e. language, national myths, etc.) rather than falling into inchoate fragmented forms (as some postmodern scholars would predict).

This examination of "globalization" (in its various forms) and the cultural (i.e. "identity") basis of immigration policy among "countries of immigration" (willing or unwilling) seems ideally suited to the conference theme of space, identity, and movement, concurrently dealing with several of this conference theme's dimensions. The analysis will not only provide an overview of contemporary immigration policy among four major destinations for migrants and the relative efficacy of such state policies, but sheds light on the effects of these trends on identity and state (and "national"/societal) sovereignty. Though increasingly permeable, borders may not become as quickly antiquated as currently forecast by some. Rather, if states are successful in linking trade/investment policies with migration management policies, trends toward increasing mobility may be thwarted as the gains to be had from movement decline relative to the social/cultural losses entailed in transnational migration. However, such moves entail re-thinking our notions of the bond between state sovereignty and immigration, another dimension relevant to the conference's thematic objectives.

Normative considerations may also be drawn from such an analysis, certain to foster debate. Although states and societies are applying increasing pressures to halt illegal immigration (and often immigration in general), if we take this shift toward "composite" identities to be irreversible (due to migration as well as changing internal demographics, i.e. racial/cultural intermarriage) and acknowledge the malleability of cultural forms and identities, perhaps the emphasis in establishing new migration control regimes should be placed on slowing, not halting, flows to allow the process of cultural evolution to develop without negative political repercussions. Given adequate time to redefine both "us" and "I," and assurances that mobility is not completely beyond control, societies may temper their resistance to such movement.

Methodologically, though the focus is clearly on the political dimensions of the questions posed conference organizers, the approach will be largely interdisciplinary, incorporating perspectives and research from other disciplines, including economics, sociology, demography, and law. In addition, the argument will be framed utilizing and critiquing various schools of thought, from realism to postmodernism. It responds to postmodernist critiques that see a world of disintegration and fragmentation by arguing that, although the contemporary international order is gaining in complexity, we are amid a transitional period as states explore new methods and modes to deal with the challenges posed in our quickly changing world. New identities will be formed and old identities will evolve. The interdisciplinary nature of the paper will: 1) make its analysis and conclusions of interest to a diverse audience, 2) serve to foster discussion and debate, and 3) complement and speak to other presentations and papers, regardless of disciplinary orientation.

ABSTRACT

Rob Shields

Foreign tourists and travellers encounter, manipulate and depend on categories of otherness drawn from historical-cultural categorizations including reputation, place-based identities which are both properly geographical (eg. 'Asian') and embodied (eg. the microgeography and physiognomy of 'the brown' body) and other categories of alterity (eg. direction of travel, gender). Unpacking 'place-based identity' into spatial and temporal components allows further specification of conceptual shorthands and cues for social interaction - and anticipations of outcomes which are central to everyday processes of discrimination. This paper considers flows of mobile bodies and their articulation with territorialized, place-based systems of control and communication. The convergence of internet services with tourist communication demands is also considered in this illustrated talk.

TECHNOGEOGRAPHIES: SPEED, SPACE AND SUB-POLITICS.

Dr Gearóid Ó Tuathail (Gerard Toal),

and

Dr Timothy Luke

Geopolitics is a domain of knowledge built upon the stability and inertia of a series of classic modern objects: territory, nation, state and sovereignty. Yet it is also a domain of knowledge that attempts to theorize the implications of technological change, particularly in transportation, communications and weapons technologies, for the great powers dominating the modern world political map. What happens, however, when the nature and pace of technological change begins to tilt power away from objects at rest to objects in motion, when state formations become eclipsed by trans-state "flowmations"? This paper seeks to theorize the nature of this change, exploring the new technogeographies created by informationalization and globalization, and, with reference to Ulrich Beck's notion of "risk society," the new sub-political domains and actors created and empowered by this transformation. Our particular focus will be on the trans-state geopolitics of the problem of the diffusion of weapons of mass destruction, the "flowmations" of material, data, components and scientists involved and the technological systems of surveillance, monitoring, inspection and testing brought to bear upon the problem. The role of geographic information technologies in this process will be given particular attention.

BORDERING ON AND OFF-LINE 'COMMUNITIES': RHETORIC, ARTICULATIONS AND REPRESENTATIONS IN A 'GLOBAL INFORMATION SOCIETY'...

Jo Twist

The research with which I am currently engaged critically explores the multiple academic, media, governmental and commercial discourses and rhetoric that have constructed powerful visions of 'community' and 'place' in the context of a 'global information society' at the end of this century. The initial point of departure addresses articulations between cyberspace or 'virtual on-line communities' and 'physical urban off-line communities'. The common perception is that ICTs (information and communication technologies) and the resultant ease of movement of ideas will spell the end of spatially bounded 'communities'. The key pivot of this research is the massive neglect of the vital point that 'virtual communities' may work best if related positively to specific place-based 'communities'.

'Borders', 'boundaries', 'identities' and 'communities' are terms which all deserve critical examination. They should be challenged as well as challenging. However, they are also terms which have attracted a great deal of added cultural currency, particularly as media and government actors appropriate the terms. The first question to pose is what is understood by 'borders'. Are borders abstract, material or both? When one thinks about borders, one can imagine margins and gaps woven within and between those borders. One can also imagine borders as exclusive and inclusive: borders as divisions and borders as terminals, screens, bodies - fluid, solid, permeable and impermeable. Borders can also be imagined in relation to 'on' as well as 'off line' communities. However, the common soundbite in many commentaries on cyberspace is that *place* is now immaterial and that these borders and boundaries are dissolving: indeed, that 'there is no there'. Langdon Winner eloquently suggests that:

(F)or modernism the prescribed frame for social relations was that of city and suburb. But today, for significant parts of society, attachment is no longer defined geographically at all. Many activities of work and leisure take place in global, electronic settings.

Nonetheless, to some the changing relationships and borders between material places and communities against a background of a 'global information society' continue to be vital in the formation and negotiation of identities. Indeed, it could be argued that individual and group identities are becoming increasingly tied to and dependent upon those physical contexts within which they move.

As humankind moves into the next millennium the concern for cities, 'communities' and social relationships is strong. The prevailing discourse within governmental and commercial sectors is that there is a need to re-create some form of lost 'community' and foster social and cultural interaction, as well as bridge the gap between global commerce and local business. In the last three years, there has been considerable attention to what are known as 'community networks' or 'networking communities'. As a result, the pervasive idea that some multinational

ICTs firms (such as British Telecom) have adopted is that connectivity through the internet will nurture these economic, social and political 'ideal communities' for the next millennium.

This leads to three queries: firstly, how are the 'values' of participation in 'on-line communities' fed back into the participation in 'off-line communities'? Secondly, how can what might be imagined as 'communities' be re-negotiated to include community networks and networking communities? Relating to this, what aspects of 'community' are being encouraged by firms like BT? Ultimately, the future for perceived borders and boundaries of communities is uncertain. At present, it seems that 'community' is only imagined through political and economic enlivening but, to be sure, experiences of 'communities' are related to much more than 'what

PROPOSAL

Monica Varsanyi

Undocumented persons occupy an ambiguous place in contemporary society. While not present in the United States legally, undocumented residents and recent migrants are an increasingly important low-wage and highly flexible segment of many local and regional labor markets. The Los Angeles region is an excellent example of such a phenomenon. Importantly, undocumented persons are not only participants in the region's economy, but many live in the Los Angeles area for years, join clubs and associations, send children to school, participate politically via labor unions and grassroots organizations—generally participate in society—without ever receiving official permission from the Federal government to legally remain within national borders. This paper will be an attempt to understand how undocumented migrants and residents "fit in" to American society. For instance, do they have civil rights? If so, are they more or less inclusive than for citizens? What is the limit of their social membership? Their political membership? By answering these types of questions, I will develop a "cartography of membership" which elucidates the position of undocumented persons within American society—a national community whose shape and structure is being strained by the increasingly global flow of finance, goods, ideas, and people.

In the first section of the paper, I will discuss the idea that the presence of undocumented persons in the United States is not a simple question of breaking the law and deportation. Rather, I will discuss the ways in which the persistence of undocumented populations within the U.S.—Los Angeles, specifically—represents not an inconsistency, but a fundamental requirement for the functioning of the contemporary globalizing economy at the regional scale. Secondly, I will develop a cartography of membership which seeks to characterize the position of undocumented residents within American society. This cartography will deviate significantly from T.H. Marshall's well-known model of liberal democratic citizenship in which civil, political, and social forms of citizenship are nested within one another—implying that a full member of society has access to all three. Next, I will discuss two competing moral arguments on membership which can elucidate an emerging model of membership in a globalizing world: Michael Walzer's discussion of membership and Joseph Carens' argument for open borders. Finally, I will present several examples of ways in which undocumented residents participate in the political life of Los Angeles, and using these examples, conclude by sketching out a second cartography of membership which reflects a Walzer- and Carens-inspired viewpoint regarding the *de jure* inclusion of undocumented residents into American political life.

This paper touches upon several of the central themes of the conference. First, it will provide a general overview of globalization and the global city, in order to establish the context in which traditional territorially-based identities (such as citizenship) are being challenged. Next, it will present a more standard theoretical understanding of membership and citizenship. Finally, it will challenge the traditional conception of citizenship by engaging the discussion surrounding the changing nature of territoriality and identity in a globalizing world. In general, this paper will

complement some of the more technology-based papers which will be presented at the conference. As I will be driving to Santa Barbara from Los Angeles, I will not require airfare.

My primary research interests revolve around the existence and forms of globalizing processes (the increasing internationalization of production, the globalization of financial flows, the trans-border movement of people and ideas, the changing meaning of international borders, etc...). I am especially interested in the impact of these processes at the urban scale, in the urban landscape, and in the formation of global cities. Within this broad topic, my research has followed three routes: (1) the effect which Los Angeles' growing status as a global city had on the passage of California's Proposition 187 in 1994, (2) the changing boundary between public and private in such an era, especially in the provision of public services, infrastructure, and spaces, and (3) the changing structure of membership, citizenship, and the meaning of "the public" in the global city.