

Thu, 24 Sep 2009 13:52:09 -0400

To: "Dr. Richard Atkinson" <rcatkinson@ucsd.edu>, "Dr. Baruch Fischhoff - Chair, Analysis for National Security Project" <baruch@cmu.edu>

From: Lloyd Etheredge <lloyd.etheredge@yale.edu>

**Subject: 15. Restarting Content Analysis: Forecasting Political  
Violence/ Instability as an Effect of Global Economic  
Hardship**

Dear Dr. Atkinson & Dr. Fischhoff:

I am forwarding a recent overview for the President's Council of Advisers on Science and Technology re the potential to restart content analysis methods to improve intelligence analysis. They would be especially relevant to test new methods to forecast political instability and violence that are rising from economic causes. By now there has been low- to moderate- political instability, including regime change, in 25%+ of countries, including the US and (recently) Japan.

My letter to PCAST notes Admiral Blair's testimony/expectations of much greater violence and quickly-emerging prevention challenges. Independent of the content analysis restart, I hope that Dr. Fischhoff will move quickly: These are naturally occurring experiments in intelligence analysis that should be captured (for rapid learning) by your Committee on Behavioral and Social-Science Research to Improve Intelligence Analysis for National Security.

**A Bolder Future for Social Science**

The pioneers of content analysis (e.g., Lasswell, Pool) edited a message-in-a-bottle volume in 1959: The limited technologies of their day made it too expensive and time-consuming to develop these methods, especially when the meaning of every word had to be coded by hand and input retyped on punch cards. Today many technology breakthroughs - including the work of Google et al. to use sophisticated probability processing and large N databases in different domains to "understand" search inquiries and meaning - open a new universe. It also is possible to move beyond text-restricted analysis to include images of violence, of America, of political ene-

mies and domestic political elites, etc. And to include formal cognitive measures (e.g., integrated complexity).

Lasswell, Pool, and other pioneers envisioned that content analysis could become a set of rich measurement capabilities that would give to other social sciences the same statistical capacities as the new national income accounting tools for macroeconomics that also began in the 1930s. Beyond the simple frequency counts that they were able to do, they envisioned (and Leites et al. began to pioneer) "operational code" analyses to understand the deeper generative grammars of different cultures and political movements. Today, beyond traditional national/ethnic/political movement cultures, there are youth cultures, women's cultures, etc. A great deal of change, with inter-connecting subjectivities, to be monitored and understood worldwide. . .

### **\$9 trillion deficits**

As you may recognize (i.e., and I think of DBASSE members as the de facto Board of Directors of the social sciences), the \$9 trillion federal deficit projections will have social science funding, and our de facto survival, in the cross-hairs of the OMB Director, as part of the "non defense controllable" section of the budget. . . If you move quickly, restarting content analysis can be what President Obama called a "two for . . ." - there will be short term funding for post-docs and research for bridge financing and to help the next generation of social scientists survive. And in the long run, content analysis methods have obvious implications for better empathy-based intelligence forecasts and - in the private sector - such areas as cross-cultural/global marketing and advertising, which is a key area of growth and competition.

### **Recommendations**

There are not many social scientists left, who bridge the institutional memory from the earlier generation and who can handle the concurrent engineering to bring these new capabilities online as quickly as we need them. Roger Hurwitz at the MIT AI Lab is an obvious member of any working group. I also have written to Henry Brady, current APSA President (and an MIT graduate) who may have ideas re fast discovery capabilities for forecasting political violence/instability and prevention.

best wishes,

Lloyd Etheredge

Dr. Lloyd S. Etheredge - Director, Government Learning Project

Policy Sciences Center Inc.

127 Wall St., Room 322 - Box 208215

New Haven, CT 06520-8215

URL: [www.policyscience.net](http://www.policyscience.net)

301-365-5241 (v); [lloyd.etheredge@yale.edu](mailto:lloyd.etheredge@yale.edu) (email)

# THE POLICY SCIENCES CENTER, INC.

127 Wall Street, Room 322

P.O. Box 208215

New Haven, Connecticut 06520-8215 U.S.A.

Tel: (203) 432-1993 • Fax: (203) 432-7247

MYRES S. McDOUGAL  
Chairman (1906-1998)

W MICHAEL REISMAN  
Vice Chairman

ANDREW R. WILLARD  
President

Please Reply to: DR. LLOYD ETHEREDGE  
7106 Bells Mill Road  
Bethesda, MD 20817  
Tel: (301) 365-5241  
Fax: (301) 657-4214  
Internet: [lloyd.etheredge@yale.edu](mailto:lloyd.etheredge@yale.edu)

August 20, 2009

Dr. John Holdren, Co-Chair  
President's Council of Advisers on Science and Technology  
1650 PA Ave., NW – Old EOB  
Washington, DC 20502-0001

&

Dr. Eric Lander, Co-Chair  
President's Council of Advisers on Science and Technology  
Broad Institute – Room 6013  
7 Cambridge Center  
Cambridge, MA 02142

&

Dr. Harold Varmus, Co-Chair  
President's Council of Advisers on Science and Technology  
c/o Memorial Sloan Kettering Cancer Center  
1275 York Ave.  
New York, NY 10065

**Re: World politics: Forecasts and lessons from the Depression; Restarting  
content analysis**

Dear Drs. Holdren, Lander, and Varmus:

I hope that PCAST can solve the enclosed problem:

There is an urgent need for several kinds of institutions – government, the private sector, academic researchers – to work together. The US and other countries need to respond successfully to the effects of economic hardship on political instability and a more violent future in world politics. We also need the help of

an independent social science to compensate for the unexpected decline of the professional journalism (e.g., the analysis of Alex Jones at Harvard in Losing the News: The Future of the News That Feeds Democracy (Oxford University Press, 2009)) that US democratic institutions once relied upon.

#### Background: World Politics and Economic Hardship: Forecasts and Lessons from the Depression

The Depression of the 1930s ignited a cascade of political conflict on a global scale. Messianic leaders and authoritarian dictators of the Left and Right came to power in many countries. New mass communications technologies contributed to mass political movements and the rise of individuals who were skilled in their use. New enemies were imagined to blame for economic hardship (e.g., the capitalist system, anti-Semitism in the case of Germany). Within a decade, Hitler's rise eventually forced the US and its allies to fight WWII.

The enclosed (unique) article from Newsweek (March 9, 2009) reviews similar forecasts, based on Admiral Blair's testimony. By early March we were seeing low to moderate political instability, including regime change, in 25% of countries.

#### David Hamburg's Vision

David Hamburg, the former President of AAAS (and former member of PCAST), organized the Carnegie Commission on the Prevention of Deadly Conflict and has written splendid summaries of 20<sup>th</sup> century lessons, concerning foresight and prevention, developed by social scientists on the basis of the Depression, WWII, the Cold War, and other cases (most recently, Preventing Genocide: Practical Steps toward Early Detection and Effective Action, 2008). Today, the dream of prevention requires data systems to predict economic effects of the global recession in each country, to monitor political effects (often in countries with highly unequal divisions of wealth and power, ubiquitous discrimination, and without social safety nets) and to craft timely humanitarian, economic, and political options. It is a challenge for the social and behavioral sciences that – simply to mention the first step – exceeds readily-available and timely data.

#### Restarting Content Analysis

A solution is outlined in the enclosed paper for the US Institute of Peace. The mass media politics of the 1930s inspired the development of the quantitative content analysis of communications. However, fifty years ago the pioneering generation wrote a message-in-a-bottle volume, edited by my former MIT colleague Ithiel de Sola Pool (1959): they dreamed of an empathy-based social

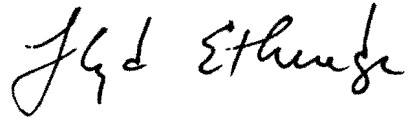
science where rigorous analysis of communication content could equal, for the other social sciences, the capabilities that national income accounting was creating for economic science. However, the computer technologies of their day were too primitive and the methods [requiring retyping on computer cards and hand coding of each word to disambiguate (from among the many dictionary alternatives) its meaning in context] were too expensive. They also anticipated breakthroughs in Artificial Intelligence and machine translations (e.g., perhaps based on Chomsky's ideas and discovering rigorous rules). Today – although rule-based methods did not work - Google and Microsoft (and others, in solving problems of search) have found that very large reference databases and sophisticated statistical processing, for each language and domain, gives impressive results. These achievements can be applied to the current problem.

### The Problem of Organizing

However, how this could happen remains unclear – and it is the problem that I want to bring to your attention. The project requires high-level leadership and management, funding, rapid concurrent engineering across a range of elements (computational linguistics, comparative politics, the political psychology of violence, forecasting) and across a range of countries. The long-term development of content analysis requires that the work (e.g., public reference databases for R&D) be in the public domain, and participation be available to researchers from a range of disciplines, countries, and cultures. The US Institute of Peace (as I feared) is not available for the job, and it was my best shot. And I am a research scientist and not the best person for 24x7 team development and management.

I have written to Dr. Henry Brady (Berkeley), who is about to become the new President of the American Political Science Association. He is an MIT graduate (and former member of the Harvard faculty) who knows Ithiel Pool's work and the early tradition of content analysis. I have suggested that he appoint a working group to address this restart challenge, with leadership by senior tenured faculty at major research universities. I am not sure that he will find many quantitative academics left, or in the pipeline, who would become involved, even in the face of the current dangerous and emerging (albeit invisibly, in the American press) challenges in world politics, without a realistic prospect of a critical mass of funding and assistance to build upon Google's and Microsoft's achievements. However, he may have ideas that Dr. Holdren can convey to you.

With best wishes for your work,

A handwritten signature in cursive script, reading "Lloyd S. Etheredge". The signature is written in black ink on a white background.

(Dr.) Lloyd S. Etheredge, Director  
Government Learning Project

Cc: Members, PCAST (Bierbaum, Cassel, Chyba, Gates, Jackson, Levin, Mirkin, Molina, Moniz, Mundie, Penhoet, Press, Savitz, Schaal, Schmidt, Schrag, Shaw, Zewail); Dr. Henry Brady (APSA); Dr. David Hamburg

By MARK HOSENBALL and  
MICHAEL HIRSH

**I**N 1930, FEW PEOPLE THOUGHT political turmoil in Germany was the most significant event in the world—not with a global Depression underway. Only the year before, in the German national elections of 1929, Adolf Hitler had still been regarded as “something of a joke, a minor figure from a fringe far-right group” whose Nazi Party managed to win just 2.6 percent of the vote and 12 seats in the Reichstag, Liaquat Ahamed writes in his magisterial new history, “Lords of Finance.” But the next year, with unemployment soaring and Berlin about to default on its international debt payments—and with the German equivalent of “Hoovervilles” rising in the cities—Hitler drew tens of thousands to his rallies by promising to restore prosperity and purge the profiteers. The Nazi Party leapt into second place in the Reichstag with 107 seats. It was the beginning of a downward political spiral that ultimately eclipsed the economic crisis that sparked it, turning the European continent into a slaughterhouse and changing the world forever.

No one sees any Hitlers on the horizon today, and the current global recession is, as yet, nowhere near as devastating as the Great Depression. But the CIA and other U.S. intelligence agencies—with the approval of President Obama—are taking a hard look at the political implications of a worldwide crisis that is being compared more and more to that earlier era. When retired Navy Adm. Dennis Blair took over as Obama’s “intelligence czar” in January, he told his staff he wanted concerns about the recession at the top of his annual “worldwide threat assessment” to Congress. Among the questions: Would Russia be destabilized? What about China and India? Does a huge new humanitarian crisis loom in Africa? As originally drafted, these economic warnings were mentioned along with more familiar issues, like terrorism. But Blair told his new staff that he wanted to do more than list his concerns about the economic crisis—he wanted to open his presentation with them. “He sharpened it,” says one intelligence official familiar with the process who would discuss it only on condition of anonymity.

Blair’s declaration to the Senate intelligence committee on Feb. 12 was blunt. No longer was fighting terrorism or stopping nuclear proliferation at the top of his agenda, though they remained important. “The primary near-term security concern of the United States is the global economic crisis and its geopolitical implications,” the

director of national intelligence said. Last week the new CIA director, Leon Panetta, announced unexpectedly to reporters that his agency had begun to produce a new secret daily bulletin, called the Economic Intelligence Brief, to supplement the President’s Daily Brief (PDB) on more traditional threats. The new CIA assessment is distributed to top economic policymakers in the administration such as Larry Summers and Treasury Secretary Tim Geithner, and items in it may now also be included in the PDB.

Most of the intelligence community’s attention is focused on how the economic crisis could produce internal upheaval in other countries, which in turn could have an impact on U.S. foreign-policy decisions. But in an interview with NEWSWEEK, Deputy Secretary of State James Steinberg

ing the Baltic states, where the collapse of financial markets is already causing political instability, as seen in the recent ouster of the Latvian prime minister. One question is whether Russia, despite being weakened itself by the plunge in energy prices, might move to reassert influence in that region, its sphere of influence during the Cold War. Russia is also working hard to raise its profile in Central Asia at the expense of the United States. Last month Moscow persuaded Kyrgyzstan to kick the U.S. Air Force out of the Manas Air Base, compromising supply lines to Afghanistan. At the same time, Russia has offered to expedite supplies by train via Uzbekistan, which also neighbors Afghanistan. Moscow’s apparent message: we’ll help you Americans succeed in Afghanistan, but butt out of our backyard.

#### INTELLIGENCE

## There’s a World of Trouble Out There

The CIA faces a threat it’s never been great at analyzing: the fallout from global recession.

says the administration is also concerned with ensuring that America maintain its position as global leader. The worry is that if Washington isn’t seen as staying ahead of the crisis, other countries will scapegoat the United States, protectionism will rise and the global economic system could begin to disintegrate. “History doesn’t repeat itself in the same terms,” Steinberg says. “But if we don’t find ways to work together we could well find ourselves in a beggarthy-neighbor situation not unlike in the 1930s.” One potential sign of waning U.S. influence came two weeks ago, when Secretary of State Hillary Clinton, visiting Beijing, forthrightly asked China to keep buying U.S. Treasury bonds. Clinton also said that “human-rights issues can’t interfere” with the critical U.S.-Chinese economic relationship. (Even so, Clinton later signed off on a tough human-rights report on Chinese abuses.)

The CIA’s task is, for the moment, more tightly focused than contemplating the collapse of the global system. Intelligence officials are studying the impact of the crisis on Central and Eastern Europe, includ-

The Obama administration is also examining whether Latin America will endure a repeat of the financial crises that caused political upheaval in the ’80s and ’90s. And it is concerned that China and India may not have the economic strength to pull the world out of recession.

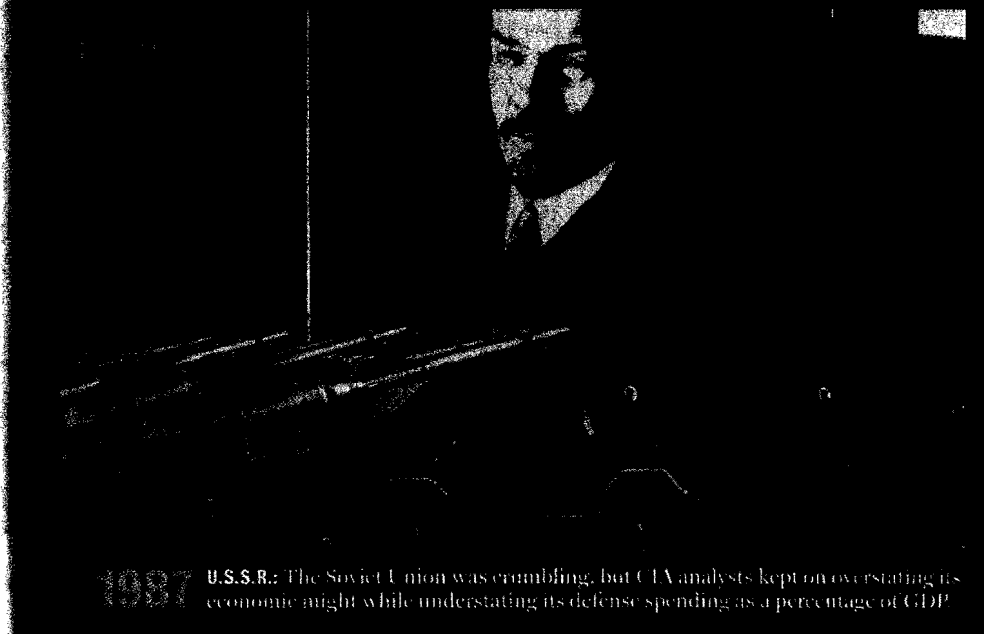
Some critics argue that the U.S. intelligence community is not well equipped for such a giant new task—not when it is still getting up to speed on jihadism. Melvin Goodman, a former top Soviet analyst for the CIA who now is a frequent critic of the agency, says that in the past the CIA’s reputation for economic analysis was damaged by a series of flawed predictions about trends inside the Soviet Union. The CIA was behind in estimating the behavior of the Soviet ruble, defense spending and the ultimate implosion of the Soviet economy, Goodman says. For much of the 1970s and ’80s the CIA officially reported to the president that the Soviet Union was economically stable, and that Soviet defense spending was only a small part of GDP. The agency’s leadership, ensconced in their secretive lair at Lang-



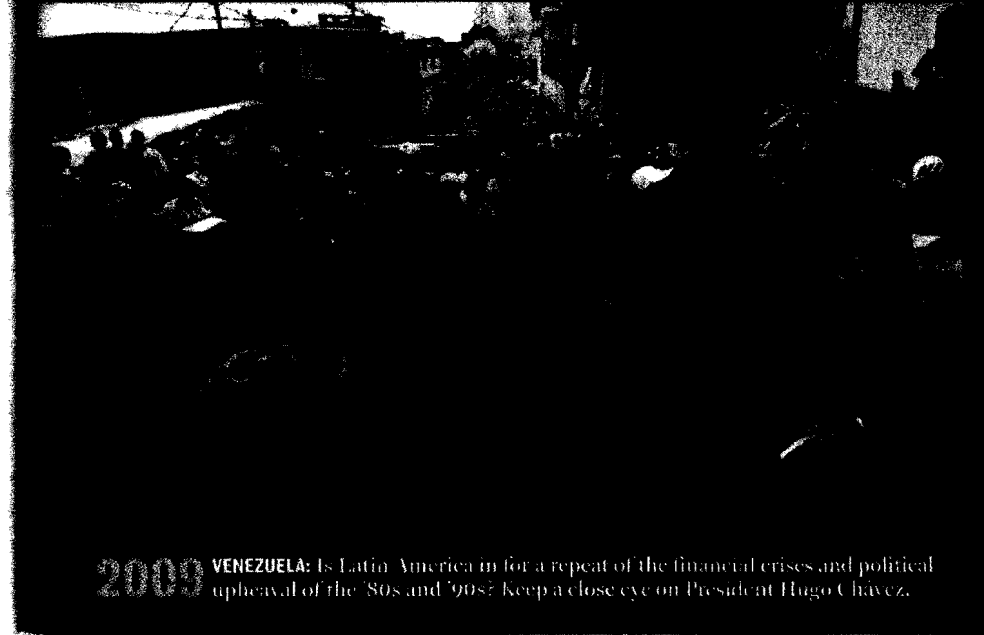
of  
ti-  
ter  
es-  
ng  
gy  
in  
ng  
rd  
he  
th  
ick  
Air  
to  
ias  
via  
ors  
ge:  
in  
rd.



**1933** GERMANY: The world regarded Hitler as a joke until the Depression tilted German voters toward the Nazis. In March 1933 he seized power as dictator.



**1987** U.S.S.R.: The Soviet Union was crumbling, but CIA analysts kept on overstating its economic might while understating its defense spending as a percentage of GDP.



**2009** VENEZUELA: Is Latin America in for a repeat of the financial crises and political upheaval of the '80s and '90s? Keep a close eye on President Hugo Chávez.

m-  
e a  
sed  
Os.  
dia  
to

lli-  
for  
till  
vin  
for  
the  
A's  
vas  
ons  
The  
av-  
ing  
viet  
of  
re-  
viet  
hat  
rall  
tip,  
ng-

PAGES

ley, Va., ferociously rejected alternative views, including a very accurate one from Igor Birman, a young Soviet émigré. Birman, an economist, estimated that the U.S.S.R.'s defense spending was huge, at least 25 percent of GDP. That indicated the Soviet economy was in deep trouble. It was only when such outside analyses were taken onboard that government policymakers developed an accurate read of Soviet decline.

Several critics say private-sector analysts and other government departments not limited by the CIA's culture of secrecy are better suited to produce accurate predictions based on "open source" economic data. Intelligence officials counter that the CIA did produce accurate readings of the Asian financial crisis a decade ago, and they point out that Wall Street analysts

### Terrorism and nuclear proliferation are no longer at the top of the agenda.

don't earn high marks themselves for predicting the current financial debacle. Philip Zelikow, a counselor to former secretary of state Condoleezza Rice who wrote one of the earliest studies of the CIA's capacity for economic analysis, defends the intelligence estimates made by individual analysts within the CIA during the Cold War, and he thinks it's good the agency is getting back into these areas. Zelikow says the government is "breaking new ground here." But he adds that the only way the new approach will work is in coordination with other domestic agencies abounding in economic expertise, like the Treasury Department and the Federal Reserve.

And because the current crisis began in America, the need for information-sharing across the government is all the greater today. As Zelikow notes, "Where it gets hard is when you have to make judgments that include analyses of what the American economy will do. The CIA doesn't like to analyze the American economy," because, he says, the agency's legal mission is to confine itself to overseas threats. "This is why the CIA alone can't do the job. But the CIA pooled together with other agencies can." We can only hope they get it right this time.

With OWEN MATTHEWS in Moscow, MELINDA LIU in Beijing and JOHN BARRY in Washington

## World Politics and Economic Hardship:

### Forecasts and Lessons from the Depression

A Proposal Submitted to the US Institute of Peace

by

Lloyd S. Etheredge<sup>1</sup>

#### Abstract

The Depression of the 1930s ignited domestic political conflicts on a global scale. Messianic leaders and authoritarian dictators of the Left and Right came to power in many countries. New mass communications technologies contributed to mass political movements and the rise of individuals who were skilled in their use. New enemies were imagined to blame for economic hardship (e.g., the capitalist system, Jews in the case of Germany). Within a decade, Hitler's rise eventually forced the US and its allies to fight WWII.

I suggest a two-part project: 1.) to assess and apply current models about the effects of economic hardship on world politics to forecast the road ahead; 2.) to develop new research tools (specifically, computer-assisted analysis of communications) to improve capacities for monitoring trends and early warning.

The two parts of the project are intended to identify fresh ideas and, via early warning, specific initiatives for better outcomes from the turbulent politics that probably lie ahead for many countries.

#### I. Background

The US, using its domestic experience in the current economic crisis as a guide, probably will under-estimate the political strains and potential conflict (including violent conflict) in

---

<sup>1</sup> Director, Government Learning Project. Policy Sciences Center, 127 Wall St., Room 322, P. O. Box 208215, New Haven, CT 06520-8215. Contact: 7106 Bells Mill Rd., Bethesda, MD 20817; (301)-365-5241 (v); [lloyd.etheredge@yale.edu](mailto:lloyd.etheredge@yale.edu) (email).

countries where most of the world's peoples live. As a consequence of globalization, most UDC economies rely upon exports and economic demand from the advanced world and upon capital investments from the advanced world. The US government has a capacity to borrow \$ 1+ trillion/year to cushion economic hardship and re-stimulate its economy, but most of the world's peoples live in countries without an equivalent economic strength. Some states with nuclear weapons (e.g., Pakistan) already are vulnerable to political instability and the Russian government faces added restrictions on resources (from the fall of oil prices). And elsewhere the global economic crisis may be deeper, and more difficult to reverse, than the 12-18 month recovery that, with new leadership and nimble management, the Obama Administration envisions for the US. (For one overview of 1930s effects, see Rothermund, 2007).

We already can forecast - e.g., from the Central American revolutions during the Carter and Reagan Administrations when an economic shock (the Arab oil embargo and global recession) drove GDP downward by 30%-40% - that political systems run by oligarchs, with existing high levels of inequality, are likely locations for increased civil war when there are sudden, deep recessions (although the broader relations of poverty and violence in normal times are more complex). Even in advanced democratic countries it appears more likely that economic hardship will organize political conflict, and terrorist activity, if there is ethnic discrimination and new economic hardships are seen as unfairly imposed on different minority populations. (For example, unemployment and perceived economic discrimination against Muslim immigrant populations in the EU.)

## II. Outline of the Project

### A. ) Review of Literatures and Methods; Baseline Forecasts; Advisory Committee

Since the Depression and Wright's A Study of War (1942) there has been impressive progress in understanding and (to a degree) forecasting domestic and international violence. These methods include traditional correlation studies (e.g., Singer & Wallace, 1979), computer simulations of the global system and individual countries (e.g., Bremer, 1987), specia-

lized studies of economic hardship and violence (e.g., Brainard & Chollet, 2007), syntheses drawn from many disciplines and methods (e.g., Hamburg, 2008; Carnegie Commission, 1998), and new studies of the growing range of global interconnections including diffusion of ethnic conflict via the news media and new communication technology (e.g., Hewitt, Wilkenfeld & Gurr, 2007; Lake & Rothschild, 1998). The first step will be to assess this literature, especially the rigorous and quantitative methods, to see what forecasts and early warnings emerge. Part of the task, using the good offices of the USIP in Washington, will be to meet with US government, World Bank, and IMF experts to identify a plausible range of economic forecasts and numbers for different countries and regions that can be combined with political data.

This step will include identifying an advisory committee for the project, drawn from leading social science researchers. I will ask their help to assure a full range of coverage and to critique an overview paper that I will prepare for an edited volume, World Politics and Economic Hardship: Forecasts and Lessons from the Depression for USIP. I also will ask their guidance for several commissioned, specialized papers by current researchers with models of unusual interest and/or who have suggestions for needed funding and improvements (e.g., Alker et al., 2001; Beck et al., 2001; King and Zeng, 2001).<sup>2</sup>

## B.) Content Analysis and New Data Systems

It is likely that our existing capacities for forecasting and early warning can be improved by better data, especially by monitoring the new communications technologies and communication flows that are likely to be increasingly involved to organize political change. Thus, a second step of the project will be to improve rigorous computer-assisted analysis of commu-

---

<sup>2</sup> I also will contribute a second chapter to the volume, expanding upon Tetlock's (2006) work on expert political judgment and forecasting. The chapter will summarize forecasts by leading individual analysts that I will interview in Washington as part of the project. Although Tetlock's empirical research is skeptical about expert political forecasting, the interviews will be a useful foundation for dialogue, refinement of methods, and, perhaps, testing of practitioner theories that should be included by the academic world.

nication flows, to understand changes in cultures and world politics.

Content analysis methods were pioneered to study the mass communications politics of the 1930s, Nazi propaganda in WWII, and the revolutionary Communist and nationalist/anti-colonial politics in the 1950s. However, in 1959, the pioneers stopped their research and contributed to a message-in-a-bottle summary volume, edited by Ithiel de Sola Pool (Pool, 1959; Pool, 1969). They judged that content analysis methods (e.g., that required re-typing on punch cards and hand coding) were too costly. Further progress required improvements, by many orders of magnitude, in technology for acquiring digital input at low cost, mass storage, computer memory and processing capacity, and software to do refined analysis that went beyond the simple frequency counts and ratios used in early work.

Happily, today - fifty years later - the needed technologies are here. The global digital revolution means that all forms of communication (text, audio, and video) from many sources worldwide can be available on desktops for analysis. And the capacity for machine-assisted analysis has improved. Computers are not yet intelligent, by the dreams of early AI theorists, but they are becoming semi-intelligent and can help with basic tasks. Google, for example, has shown that very large online databases for different domains, and highly sophisticated statistical analysis, can quickly match which meanings, of several possible dictionary definitions of words, are intended by a Website designer and by a user conducting a search. (See also, for example, <http://translate.google.com>).

It is unlikely that computers will substitute for human analysts but they can work tirelessly, 24x7, on simple tasks that inform our understanding of distant political forces. They can monitor, index, and sort most of the world's news reports and provide instant desktop access to analysts for items of interest – and analysts can see global culture and world politics change, in real time. They can monitor the emotional intensity of language and television news, the growth and diffusion of aggressive rhetoric, demands for economic protectionism, protests about job discrimination against immigrant workers or ethnic minorities. They can

help to automate and increase the reliability of indices of political events (Schrodt, 2006; Schrodt, various). They can analyze political differences and changes in specific institutions or sub-cultures (e.g., a current MIT project analyzing speeches on Mosque Websites in the Muslim world; youth cultures). And there will be many additional applications.

This second task will use the good offices of USIP in Washington. It will focus on discussions with the US intelligence community, concerning new content analysis capabilities that might be useful to them, and develop a strategic plan of how public domain capabilities, located in the academic world, might be created and supported financially.

The second stage of the project will produce a set of working papers, reviewing needs and opportunities. I will write some of the papers and commission others in consultation with the advisory committee. I think that we will want refined proposals for:

- a.) Large Reference Databases, in the public domain and open to all researchers, to build the sophisticated probability tools for content analysis and the study of cultural and political change. (This will build upon Google's work to create Internet search capabilities; and, perhaps, upon similar probability analysis tools already underway in intelligence agencies.)
- b.) Support for a content analysis engine, similar to SAS or SPSS for numerical data. This open architecture software will be designed to use the Reference Databases, add analysis tools, and permit user-created modules developed by different researchers and research communities.
- c.) One or more NSF-supported centers as institutional homes for this work to grow.
- d.) Several well-targeted initial projects related to economic hardship and political violence in selected countries and/or regions.

This is exciting work which will build new capacity for all of the social sciences and international studies for the 21<sup>st</sup> century. I think the methods can be especially helpful to monitor global political responses to economic hardship and assist with early warning

### III.) Is it Hopeless? Fresh Thinking for Prevention and Management

Underlying the two parts of this project is a commitment to early warning and to identify useful and timely interventions.<sup>3</sup> However – if we are entering any sort of equivalent to the Great Depression – is it hopeless to discuss early warning and the possibility of foresight and timely interventions when the economic resources of all political systems and most individuals will become more limited simultaneously?

I suggest that there *are* grounds for hope even in the midst of a global crisis. First, there is extraordinary wealth in the world, compared with the 1930s. Given the large sums that governments now can spend, global stabilization expenditures in the tens of billions of dollars may be a vanishingly small percentage and, collectively, be diverted through the IMF or World Bank, or other institutions. There may be an abundance of useful and practical ideas that USIP can help to move forward.

Second, we also have stronger institutions for global problem-solving than in the 1930s and an international economic elite that, as a result of globalization, sees its future in global recovery. Third, we have the extraordinary benefit (compared to the 1930s) of the Keynesian conceptual framework that supports huge government spending – and promises light at the end of the tunnel if there is international cooperation and we avoid a retreat to protectionism.

---

<sup>3</sup>The Central American civil wars, cited above, are one recent example where more far-sighted policies might have been possible (Etheredge, 1986) – a view also held by a Kissinger Commission that studied the conflict and regional development options. Today, major countries may be willing to take a degree of wider regional responsibilities when there are long-term economic ties – e.g., the US for Mexico and Central America; the US and Canada in our hemisphere, China and Japan in Asia, etc.

A fourth ground for hope is that new communications technologies – that may accelerate political conflict – also might be organized to support the work of NGOs and organize private donors from wealthier countries, especially among the world’s youth populations. The \$700+ million raised by the Obama campaign indicates the magnitude of US philanthropy that might be available if leadership and on-line systems could be organized. We may be just beginning to understand how similar global support could be channeled through NGO projects

Fifth, even modest interventions that address only a portion of economic needs may have healthy political impacts (Rajapaksa & Dundes, 2006). Uniting for overarching, humanitarian goals – as Hamburg (2008) and others have emphasized – also can strengthen cultures of global cooperation and political health.

#### References

Alker, Hayward, Gurr, Ted Robert, and Rupesinghe, Kumar (Eds.), Journeys through Conflict: Narratives and Lessons (Lanham, MD; Rowan and Littlefield, 2001).

Beck, Nathaniel, King, Gary, and Zeng, Langche, “Improving Quantitative Studies of International Conflict: A Conjecture,” American Political Science Review, 94:1 (March, 2000), pp. 21-36. See also a subsequent discussion in the March 2004 issue, pp. 379-389.

Bremer, Stuart, The GLOBUS Model: Computer Simulation of Worldwide Political and Economic Developments (Boulder, CO: Westview, Press, 1987).

Carnegie Commission on the Prevention of Deadly Conflict, Preventing Deadly Conflict. (NY: Carnegie Corporation of NY, 1998).

Etheredge, Lloyd S., Can Governments Learn? American Foreign Policy and Central American Revolutions (NY: Pergamon, 1986).

Hamburg, David, Preventing Genocide: Practical Steps Toward Early Detection and Effective Action (NY: Paradigm Publishers, 2008).

Hewitt, J. Joseph, Wilkenfeld, Jonathan, and Gurr, Ted Robert, Peace and Conflict 2008 (NY: Paradigm Publishers, 2007).



King, Garry and Zeng, Langche, "Improving Forecasts of State Failure," World Politics, 53:4 (July, 2001), pp. 623-658.

Lake, David and Rothschild, Donald (Eds.), The International Spread of Ethnic Conflict (Princeton, NJ: Princeton University Press, 1998).

Pool, Ithiel de Sola, "Content Analysis and the Intelligence Function (1969)" reprinted in Lloyd S. Etheredge, (Ed.), Humane Politics and Methods of Inquiry: Selected Papers of Ithiel de Sola Pool (New Brunswick, NJ: Transaction Publishers, 2000), chapter 2, pp. 19-41.

Pool, Ithiel de Sola (Ed.), Trends in Content Analysis (Urbana-Champaign: University of Illinois Press, 1959).

Rajapaksa, Sushama and Dundes, Lauren, "Can Humanitarianism Instill Good Will? American Tsunami Aid and Sri Lankan Reactions." International Studies Perspectives, 7:3 (August, 2006), 231-238.

Rothermund, Dietmar, The Global Impact of the Great Depression, 1929 – 1939 (NY: Taylor & Francis, 2007).

Schrodt, Philip, "Twenty Years of the Kansas Event Data System Project," The Political Methodologist, Spring 2006), 14:1, pp. 2-6.

Schrodt, Philip, various. Kansas Event Data System. Publications and data links online at <http://web.ku.edu/keds/> - see also links and references to the PANDA, WEIS, and related systems.

Singer, J. David Singer and Wallace, Michael, To Augur Well: Early Warning Indicators in World Politics (Beverly Hills, CA: Sage Focus Publications, 1979).

Tetlock, Philip A., Expert Political Judgment: How Good is It? How Can We Know? (Princeton, NJ: Princeton University Press, 2006).

Wright, Quincy, A Study of War (Chicago: University of Chicago Press, 1942), 2 volumes.

February 9, 2009