

# Information Revolutions and the End of History

Elin Whitney-Smith

*Michael Proust once wrote, "the real voyage of discovery consists not in seeing new lands, but in seeing with new eyes" (from Reinventing Government, David Osborne & Ted Gaebler).*

We have been told that it is the end of history because it is the end of the cold war (Fukuyama, 1992). But it is a particular interpretation of history which is at an end. Evidence that history is continuing can be found in the conflicts and strife which continue to threaten the security of the world and the country. The meeting of the First International Symposium was called to discuss National Security and National Competitiveness: Open Source Solutions. But we don't know, nor have we discussed, what the questions or problems are which open sources will solve.

Since the dissolution of the Soviet Bloc, the military has been involved, and will continue to be involved in small operations. Those operations have begun to define a new notion of peace keeping. But this definition is not one which we have thought over and chosen. It is a definition which has emerged out of the immediacy of the situation. If we sit back and consider what that definition looks like it seems that we are defining peace keeping as something akin to fire fighting.

*Our operational definition of peace keeping is more of a default position than it is a thought-out strategy. And we will be forced into decisions and policies which are not well considered until we can leave the default position.*

Fred Halliday, from the London School of Economics, in an interview on ethnic conflicts (NPR's Fresh Air, Dec. 3, 1992), said the conflicts were not new, not different from each other, and not based in history. Conflicts in the former Yugoslavia, Somalia, Ireland, Kurdistan were all reactions to current economic stress phrased in the rhetoric of the history of the particular region. What was new was that the US and the West had lost the analytical framework used to understand them. We lost the communist - capitalist dichotomy which allowed us to put groups in a conceptual framework. Thus we framed ethnic conflict in Ethiopia as "The Eritreans are communists therefore the others are the good guys," and this gave us a conceptual frame.

*We need to jump start the interpretation of history again by re-examining the underlying questions which drive our policies. The questions which need to be rethought include:*

What do we mean when we say national security?  
How is this best preserved?  
What do we mean when we say global security?  
What role do our allies play?  
Who is now the "enemy"?  
Is there an enemy?

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It would seem that the answers to these questions are, by the nature of the times, more messy than they have been in the past. This suggests that we need to redefine the nature of both the military and the intelligence communities and how they maintain national security.

In the "post-historic" world it may be that the enemy is poverty and underdevelopment more than it is politics. If so, I suggest that we use our military and the power of the digital revolution to get as much information and information technology out to the rest of world so that people in underdeveloped nations can become part of the global community and compete in the world's market for a share of the world's goods.

*Information access is the most important factor in making the world safe and wealthy.* Evidence to support this contention can be found by looking at previous information revolutions to find the kinds of regularities which will allow us to predict.

New information technology always begins a series of cycles which ultimately result in economic restructuring and growth. Cycles of: boom and bust; conservatism and political reform; isolationism and internationalism; social unrest and social reform; elite prosperity and general prosperity; business decline and organizational reform.

Shifts in cycles are, typically, depressions: The 17th century (called the century of instability by historians) followed the 16th century mercantilist boom - the introduction of the printing press. The long depression of the 1870s followed the railroad boom - the telegraph revolution. The Great Depression followed the boom of the twenties - the time of the greatest expansion of telephone usage. We are in the Great Depression following boom of the 80's - the digital revolution.

In each information revolution there have been groups which have opted to control information and information access and groups who have opted for free access. In the information revolution which followed introduction of the press, England and Holland did not control information access and invented capitalism, Spain opted to control information access and information technology; her economy still has not recovered. In the information revolution following the introduction of the telegraph and telephone, France and England did not support the spread of the technology the way the United States did. The economic leadership of the world shifted from London and Paris to New York and Chicago. In today's information revolution we have wrecked the economy of the Soviet Union because we have not controlled information technology access and our industries have benefited.

At the conference, John Perry Barlow talked about the stance of the two superpowers at the end of World War II with respect to nuclear power and electronics. In nuclear power, both countries opted for a policy of secrecy; today, at the "end of history", the two powers are in the same relative position they were at the end of World War II. In the electronics field, the Soviets opted for a policy of secrecy and the US opted for a policy of openness; at the "end of history" the US is far, far, far, ahead of the Soviet Union.

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*The moral of the story is simple. If information access is controlled, development is slow and the economy suffers. If information access is open, development and the economy boom.*

In the interests of national security we need to use this knowledge to bring prosperity to the rest of the world before all its people become immigrants, refugees, or pensioners of the West. Giving people, not governments or political parties, access to information and information technology will allow them to construct many different small scale economic opportunities for themselves. This kind of grass roots development, unlike government or foreign supported projects, will be successful in creating wealth, because the projects will be designed by people who know the existing constraints and needs. Like poverty banks, they will create economic infrastructure which is the basis for prosperity. Prosperity will increase the size of the pot for all and make the ethnic divisions less important.

In addition to this economic reason, there is a more immediate security issue. *Information technology can give the individual citizen the opportunity to realize how the actions of the government or ethnic group are being perceived by the global community.*

For example, during NPR's coverage of a demonstration against the Neo-nazis in Germany, it was remarked that Germans were out demonstrating to show the world that most of Germany does not support the abuse of foreigners. This indicates how self conscious people have become of their image as presented on global TV networks like CNN. This is very different from the impression which one has of the attitude of people in former Yugoslavia. There it seems that there is no concept of "How this is playing in New York or Paris." The culture as a whole has no image of how the rest of the world thinks.

*We should use the power of television, video, telephone, and computer networking to change how people perceive themselves and their ethnic and clan groups.*

I suggest that we develop an international information policy. If Americans are called in to a situation as advisors or as part of an armed force we should require:

That televisions which receive all the international news services like the BBC, CNN be given out to villages.

That broadcast stations be set up in the country for the use of the people, making sure that each political, ethnic or religious group has equal access.

That inexpensive camcorders, like the one which filmed the beating of Rodney King, be distributed.

That people be encouraged to document their lives for broadcast to the rest of the nation and the rest of the world.

That we establish radio, phone, and computer networking systems.

In short, that we support and require the blanketing of the country with information technology and an information infrastructure which is tied to the rest of the world. This will, in effect, deputize the common people to protect their rights and their lives with information as part of a globally connected world. If these things were done it would not take long before people in other nations would realize that they are not alone and the world is watching.

Ultimately we are learning that a Somali child starving is no different than an American child starving. They both suffer in the same way, and Americans will bear the burden of that starvation either in aid, or in military intervention. We have learned this through seeing the ravages of war and famine on TV. We, as a nation, are becoming global citizens. To assure global peace we need to bring the rest of the world's people into our perceptual world. We have the means to bring global awareness to the most remote villages. If we do this, war lords and tyrants will be given the opportunity to realize that they are not being perceived as a force to be reckoned with but as pathetic petty bullies. They will understand that the world is seeing them not as a powerful threat but as strangely out of step and archaic. Nor would it take long until the good people of other nations, like the good people of Germany, will be concerned about how this is playing in Cincinnati.

We must think about prevention rather than about fire fighting. We can't allow the "end of history" — the fact that we have lost our analytical paradigm — to keep us in default mode. We can neither police the world nor its support it economically. We must help it stand on its own.

## References

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Elin Whitney-Smith earned a doctorate in Engineering Management from Old Dominion University in 1991. Her dissertation, *Information Technology and Wealth: Cybernetics, History, and Economics* proposed and tested a model of the impact of new information technology, from the printing press to the computer, on economic development. She can be reached on Internet as [elin@well.sf.ca.us](mailto:elin@well.sf.ca.us) or at (804) 440-8758 in Norfolk, Virginia.

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