

**SEPTEMBER 11 AND THE CRISIS OF EXPERTISE**  
**(Published Title: "There's No Turning Back")**

Thomas Homer-Dixon

Toronto Globe and Mail, September 11, 2002

The attacks of last September 11 tore a ragged hole in the fabric of our reality. Through that hole we glimpsed something hideous. As is in our worst nightmares, it was indistinct and incomprehensible. We couldn't see its beginning, its end, or its true form. But we knew immediately that this thing - whatever it was - was both profoundly dangerous and utterly terrifying.

Our first response was to back away, shield our eyes, and try to return our world to normal as quickly as possible. We did this, partly, by using well-worn categories, distinctions, and theories to explain the horror: moral categories of good and evil, psychological distinctions between sanity and madness, and crude stereotypes about the character of Islam. To the extent that we could see the attacks through these existing lenses, we could understand and discount them. They were just extreme forms of phenomena we already grasped; they were appalling and wrenching, to be sure, but we didn't have to question our basic assumptions about the world.

We also turned for help to people with power and knowledge - that is, to our leaders and experts. We asked our political leaders to develop policies to protect us without requiring great change in our lives. We sought out experts of all types - on terrorism, on the Middle East and the Arab world, and on the economic effects of the attacks. Their incessant background prattle was reassuring, because it helped us believe that someone, somewhere, knew what was going on.

In these ways, we've busily stitched over the tear in reality's fabric. Alas, the stitches aren't strong. Events are multiplying that our conventional categories and theories can't easily explain. Moreover, our leaders' pronouncements and our experts' prattle seem less and less reassuring, because it's dawning on us that, a lot of the time, these people don't really know what's going on at all. Most importantly, they rarely have clear or useful solutions to the truly tough problems we face.

The Middle East is aflame, and no one really has a clue, anymore, how to bring durable peace to the

region. India and Pakistan remain on the brink of a war that could escalate into a nuclear exchange; again, there's a dearth of credible solutions to the underlying crisis in Kashmir. The United States is planning to attack Iraq, but its plans are widely opposed, even by staunch allies, largely because no one can really predict the downside risk. (Will oil prices go through the roof? Will Saddam release smallpox when U.S. forces are at the gates of Baghdad?)

On the economic front, the world is a mess, and critical economic policymakers - such as the heads of national central banks, the IMF, and the World Bank - seem flummoxed. Many of the richest economies are stagnating, while in poor countries nearly three billion people still live on less than \$2 a day. The U.S. economy - critical to world growth - is sliding sideways. European growth is also almost nonexistent, and Germany's unemployment rate is nearing double digits. The Japanese Nikkei Index has dropped to levels unseen in two decades, with renewed doubts about the stability of the country's banking system. Latin America is in financial crisis; a decade of market liberalization on the continent has produced growth rates half those of the '60s and a rise in the number of poor people. Turkey's economy is in shambles. And Africa . . . well, Africa and its 700 million inhabitants aren't even on the economic map.

But it's on environmental issues that our leaders and experts have proved most inadequate. In the last century, humankind's total impact on the planet's environment (measured, principally, by the flow of materials through our economies and our output of wastes) has multiplied about 16-fold. We're now disrupting fundamental flows of energy and materials within the biosphere - that layer of life on Earth's surface as thick, proportionately, as an apple's skin - and we're producing profound changes in cycles of key elements, like nitrogen, sulfur, and carbon. These changes will have immense consequences for life, industry, and agriculture in every corner of the planet. Yet, just when we need, more than ever, aggressive policies to deal with our common environmental challenges, the recent summit in Johannesburg produced a pathetic spectacle of cacophony and global gridlock.

This combination of intractable political, economic, and environmental challenges is not a recipe for a humane and peaceful world society. Looking at them

together, one gets the dismaying sense that deep and inexorable forces are building within the global system. At some point, these forces could combine in unforeseeable ways to cause a sharp breakdown of world order. Then, once again, we'll suddenly see through the fabric of security and regularity that we've so carefully woven for ourselves: it will be torn away, we'll be naked, and we'll feel that dreadful terror once more. Only this time, our leaders and experts won't be able to help us at all.

How can we choose a different future? First, we need to recognize that the relationship between us, on one hand, and our leaders and experts, on the other, is entirely symbiotic: we provide these people with the perks of authority and ego-gratification; they provide us with the illusion that somebody knows what's going on and that we'll be safe. But our leaders and experts increasingly can't fulfill their part of the bargain, because the systems we want them to explain and manage (from the international economy to our relationship with the biosphere) are too complex and opaque and are changing too fast.

Second, we have to extract ourselves from this false bargain and reassert our responsibility for our own future. In other words, if we can't count on our leaders and experts, we have to get more involved in making critical decisions ourselves. And this change will itself require two others: a revitalization of our democratic institutions (perhaps through the creative use of Internet-based debate and voting procedures) so that the average citizen can participate more effectively in governance; and, most importantly, a dramatic improvement in the average citizen's knowledge of current affairs and of the technical and scientific facts that bear on our lives these days.

How can societies make responsible democratic decisions about climate change, for example, when nearly half their citizens - as a recent National Science Foundation poll found in the U.S. - are so ignorant of basic science that they don't know it takes a year for Earth to go around the sun? How can we decide whether we should go to war with Saddam Hussein when so few of us know the difference between plutonium and enriched uranium as the basic material for atomic bombs? (Both are really bad, but we should be much more worried if Saddam has a lot of the latter rather than the former.)

Citizen knowledge is something that we can start improving right away. Better knowledge won't necessarily help us come up with better solutions to our complex problems than those proposed by our current

leaders and experts. But it will help us discriminate, collectively and democratically, between those problems where we know enough to promote decisive solutions and those where solutions are difficult to find, the risks of mistake are large, and prudence and caution are in order until we know more.