

reluctance to be drafted may have been exaggerated, but he was the ideal candidate for the Republican party's Eastern establishment, worried that the ultra-conservative Taft would lead the party to a sixth presidential election defeat. Halberstam captures extremely well the tensions between the Grand Old Party's Eastern establishment, and its (largely Mid-western) isolationist wing at its 1952 convention.

The author also notes how those who regarded Communism as a monolith were bolstered by Korea. Yet he might have noted how this view of Communism was undermined when the Nixon administration used Kissinger's triangular diplomacy to exploit the Sino-Soviet split. This, in turn, was rooted in Mao's resentment at the Russian failure to provide air cover for China when it invaded South Korea.

This is a compelling book—one which will deservedly become a standard work about the Korean War.

Staffordshire

Reasoning about risk

Dick Pountain

Global Catastrophes and Trends: The Next Fifty Years, by Vaclav Smil. MIT Press. 320 pp. £19.95.

'What is the likelihood that Islamic terrorism will develop into a massive, determined quest to destroy the West?' 'What is the likelihood that a massive wave of global Islamic terrorism will accelerate the Western transition to non-fossil fuel energies?' Two questions, plucked from a late chapter, exemplify both the style and the substance of Vaclav Smil's impressive and important review of the factors that will shape our global future over the next half century. First there's that word 'likelihood', which for Smil is a quantitative concept, something we must try to measure to the best of our ability while not kidding ourselves about how good our answers are. Second, the questions seek to relate two separate disciplines: politics and energy usage. Smil's answer to both questions is that we don't know and that our best guesses provide 'at best some constraining guidelines but do not

offer any reliable basis for relative comparisons of diverse events or their interrelations'.

Smil is not a proponent of any grand theory about how the world works, but neither is he a passive agnostic wallowing in history-as-a-torrent-of-accidents, nor yet just a smug empiricist. He believes we have a duty to extract all the information we can from past events using the methods of science (particularly statistics intelligently applied), and that even where we can't know for sure, we can often put a figure on the extent of our ignorance. Yet he's acutely aware that risk assessments based only on figures fail to capture the psychological dimension: how unsafe we *feel* is as important politically as how unsafe we actually are.

Global Catastrophes and Trends is a review and interpretation of nearly 800 recent papers in economics, demographics, environmental and political science, but Smil's book goes well beyond mere collection or even distillation. Smil, a professor at the University of Manitoba and himself an acclaimed expert on the energetics of complex systems (those 800 papers or so include 15 of his own), largely succeeds in imposing on this mass of technical material a uniform and rational framework for thinking about risks and challenges. We are currently living through a period of doom and gloom in which we face not only a variety of real threats—economic recession, terrorism, climate change, political instability—but also a constant bombardment of sensationalised predictions from our attention- and sales-seeking mass media that make it very difficult to think straight about such threats. Smil is determined not to join this babble and so eschews forecasts and scenarios: you will find no predictions here that 'X will happen by year Y' or that 'trend X will peak in year Y'.

Instead Smil starts by drawing a basic distinction between fatal discontinuities (i.e., low-probability events that could 'change everything' like a huge volcanic eruption or collision with an asteroid) and persistent, gradually unfolding trends like global warming that might have equally profound effects over the long term. He establishes common units for assessing and comparing the probabilities of such threats and for quantifying the damage they would cause. Chapter Two attempts to compute the probabilities of vari-

ous fatal discontinuities, concluding that the least unlikely—and the ones we can do *something* about—remain nuclear war (accidental or deliberate) and virulent influenza pandemic. It is worth spending money on vaccines and antiviral drugs, and also on astronomical surveys of asteroid orbits, but otherwise resources are better spent to avert more gradual threats like global warming.

Chapter Three discusses gradual trends, which covers both the transition to an economy based on non-fossil fuels and the rise and decline of the most prominent nations over the next fifty years. He is sceptical about the prospects for alternative energy sources (on scientific grounds based on energy density, which he explains with great clarity) and for carbon sequestration, concluding that our best hope of slowing global warming is to reduce overall energy consumption through more efficient usage and serious lifestyle changes. Smil's approach to environmental degradation avoids moralising and ideology, usefully pointing out that the carbon cycle is not the only one with whose operation we are interfering, and that the nitrogen cycle is even harder to mend.

His summary of the prospects of each competitor for global supremacy is equally devastating: Europe and Japan are doomed to runner-up status by ageing populations; Islam is too divided to achieve the New Caliphate despite high fertility; American power is already waning (here Smil pre-emptively confirms the recent National Intelligence Council's report *Global Trends 2005*) thanks to its colossal trade deficit and the decline of its manufacturing relative to China; and China itself has insuperable environmental problems and lacks 'soft power' because of its language and restricted intellectual freedom. He expects a turbulent next fifty years without a single hegemonic power and with many conflicts over resources and dominance.

Smil writes prose that is mercifully jargon-free, though unavoidably rich in technical terms: he makes judicious use of well-chosen graphs, but I should warn non-mathematical readers that familiarity with logarithmic scales, in particular log/log graphs, will help in following some of his arguments. He quantifies risk starting from the central fact of human life, general mortality (we all die

eventually) which he assigns a value of 10^{-6} deaths/person-exposure-hour: in the West, one person in a million dies every hour on average. Other risks are compared to this baseline value on a log/log scale, which chillingly suggests that death in hospital from preventable medical error is a greater danger than smoking, terrorism or car crash, and that young black male citizens of Philadelphia actually *reduce* their chance of gunshot death by serving in Iraq rather than staying at home. For me, the book's most significant omission is that Smil doesn't quantify the risk of not living in the affluent West.

Any bookie will tell you that we're pretty poor at estimating risk, but our behaviour suggests we have an innate grasp of general mortality because we only accept risks within around one order of magnitude of it in everyday life—say when we travel by car (10^{-7} d/peh) rather than safer train or plane (10^{-8}), or smoke cigarettes (2×10^{-6} , about the same as hang gliding). Only a handful of thrill-seeking extreme sport nuts will embrace a 10^{-2} risk like BASE Jumping for fun. However, such figures only tell part of the story: psychological factors like 'Understanding', 'Exposure' and 'Dread' are equally important. A citizen of Baghdad faces the same statistical risk of death from bomb or kidnap that a New Yorker does from car crash, but risks we understand like car driving are better accepted than inexplicable acts of random violence; the Baghdadi is exposed 24 hours a day while the New Yorker is exposed for only 1–2 hours; and the idea of being blown to bits is peculiarly horrible. Politicians pay more attention to this psychological dimension than to the underlying physical risks, leading to the paradox (also remarked in David Runciman's recent book *Good Intentions*) that the more responsible the politician, the *more* rather than *less* likely he or she is to over-react to crises like terrorist attacks.

I found this book an enormously refreshing, if demanding, read. In place of the untestable scenarios presented by most 'futurologists', Smil offers hard facts where they are available and sensible cautions where they are not. He offers few concrete policy proposals, but rather a rational method of assessment that ought to constrain and guide thinking about policy. Smil ends on this note:

There is so much we do not know, and pretending otherwise is not going to make our choices clearer or easier. None of us knows which threats and concerns will soon be forgotten and which will become tragic realities. That is why we repeatedly spend enormous resources in the pursuit of uncertain (even dubious) causes and are repeatedly unprepared for real threats and unexpected events.

I think Smil should probably be set as homework for every Member of Parliament, and there *will* be a test later . . .

London

The great war on terror

Gianfranco Pasquino

Terror and Consent: The Wars for the Twenty-first Century, by Philip Bobbitt. Allen Lane. 672 pp. £25.

National, supranational, international, global—that is, defined with reference to the theatre of its operations—terrorism is a very complex phenomenon. In recent times it has become even more complex and more lethal thanks to technological advances. Nor has it become easier to understand, as suggested by the multiplicity of existing interpretations, or to defeat, as shown by its ongoing activities and the controversies surrounding most of the proposals on how to tackle it. Though clearly influenced by the events of 9/11, Bobbitt's monumental book (552 pages of text plus 93 pages of footnotes and 14 pages of a selected bibliography) represents an extremely ambitious attempt not only to cover all possible aspects and implications of terrorism, punctiliously criticising competing explanations, but also to offer detailed proposals for waging and improving the war on terror. Yes, according to Bobbitt, the word 'war' is appropriate. Not only does it describe more properly what the terrorists have deliberately initiated, but it also suggests into what democratic states should engage. In a rather oversimplified manner, he states that 'a war against terror is a war in support of law'.

Bobbitt suggests that scholars and policy makers ought to proceed to the re-definition of two especially important phenomena. The first one is that the Western world is no longer

made of 'nation-states', but of 'market states'. The fundamental promise of contemporary market states is the maximisation of opportunities for civil society and citizens. As a result, market state terrorism has made its appearance: 'global, networked, decentralized, and devolved' relying just as much 'on outsourcing and incentivizing as the market state' also because 'it was bin Laden whose shrewd use of abundant funds created worldwide clients that in turn made possible the conditions for al Qaeda's successes'. There is a connection between the emergence and existence of market states and, the second phenomenon to be redefined: the 'Wars against Terror'. 'The same forces that are empowering the individual and compelling the creation of a state devoted to maximizing the individual's opportunity are also empowering the forces of terror, rendering societies more vulnerable and threatening to destroy the consent of the individual as the essential source of legitimacy.' To strengthen his position, Bobbitt argues that, though it cannot be identified with a specific territory, once an indispensable feature of nation-states, Al Qaeda has many state features. It has a standing army; it has a treasury and a consistent source of finance; it has an intelligence collection and analysis cadre; it runs a rudimentary welfare programme for its fighters; it makes alliances with other states; it promulgates a recognisable system of laws: the sharia; it declares wars. Indeed, 'global war *can* be waged by a market state terrorist network' (his emphasis). While criticising the contrasting points of view proposed by Sir Michael Howard and Professor Mary Kaldor, who both support the idea that 'war on terror' is a dangerous misnomer leading to wrong solutions, Bobbitt does not give attention to the possibility that Al Qaeda has become just a franchise given to or appropriated by several terrorist initiatives and groups because it is useful, menacing and prestigious.

If there is an ongoing war, there are also implications and consequences. The existence of a state of war implies that terrorist enemy combatants, if apprehended, should be treated as prisoners of war. Bobbitt sharply criticises the fact that the Bush administration has been unable to come to terms with this problem, as well as all the violations of domestic and international rules of law into