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1. During the Cold War, a small number of scholars argued that the concept of security should encompass more than military threats and associated vulnerabilities. These scholars were concerned about the volume of public resources being devoted to a very narrow, military understanding of security, in comparison to what was being targeted to address other types of insecurity. Given the experience of two world wars, it is not surprising that preventing nuclear war was generally seen to be far more urgent and important than anything else one might do to promote security at home or abroad. But, this handful of thinkers argued, we inhabit a world increasingly characterized by transnational, interconnected, non-military problems, such as the rapid expansion and movement of populations, the grinding poverty affecting billions of individuals, an explosion of new and resurgent infectious diseases, and diverse forms of environmental degradation. These threats to human welfare, social stability and progress deserve attention as issues of national and international security.

2. Since the late 1980s the discussion of environmental security has continued apace with conceptual arguments intersecting regularly with both empirical research and policy advice. While there is agreement in most of the literature that environmental changes are unlikely to directly cause inter-state warfare, there remains considerable discussion about the likely trajectories of environmental change causing state "failures" and the likely disruptions that might result. Likewise there is considerable discussion of the appropriate policies to anticipate such failures and the possibilities of aid packages as preventative interventions. Not surprisingly the main focus in many of these discussions is on states, their performance, interactions and capabilities. In so far as the conclusion that states are unlikely to go to war as a result of environmental scarcities or changes holds, the question then becomes in what way is this a matter for detailed attention by international relations scholars and especially those interested in security studies.

3. The end of the 1990s has seen a flood of books on the theme of rethinking security, many of which adopt or at least include an environmental perspective. The problem they raise - a lot of people are threatened by an astonishing and growing array of interconnected, transnational forces against which strong militaries may not have the day--is a valid and even urgent one. In light of the billions of people who live on the threshold of starvation, around the corner from a war zone, or in the heart of a disease curtain, one hopes that efforts to reduce their insecurity will continue to attract the attention of diverse and thoughtful scholars, policymakers and activists. One suspects, however, that for much of humankind the next century will hold its full share of threat.

4. The significance of technology and technical innovation for social change is widely recognised in different disciplines. Francis Fukuyama, has argued that there is no significant political innovation since the French Revolution and that this has been confirmed in the triumph of liberal democracy and liberal economy in the Cold War: the 11th of September and the events following it provide no reasons to change this view, but, the bio-technical innovation will lead to significant changes in politics, in the way human beings see themselves and their relation to the Nature and, thus, in the world in general. There is an argument that we need to regulate the innovations smartly, or, we face the post-human future in which we enter far beyond the limits of our knowledge and abilities to manage the risks and be ethically and legally responsible for our actions. Innovations and their use being increasingly subject to international free trade, the regulatory exercise becomes the challenge of the international economic law and governance.

5. In the paradigmatic stage, the contribution of the concept may emerge from contrasting some of the basic principles in the worldview of Western modernity, e.g. those related to globalisation, competition and economic growth. In the practice stage, industrial ecology suggests local/regional solutions that establish networks of companies that cooperate in material and energy flow management, and by doing this, compelements the existing product, process or company-based approaches and tools commonly used in current environmental policy and management.