# Aff: Predictions Critique 7wk Seniors

## Perm

**Permutation solves- combine complexity bottom up approach with federal oversight solves**

**Levy and Lichtenstein, 2011** – Levy is a Professor in Management and Marketing at UMass while Lichtenstein is an associate professor in management at UMass (David and Benyamin, “Approaching Business and the Environment with Complexity Theory”, Oxford Press, http://www.faculty.umb.edu/david\_levy/LevyLicht2011\_complexity\_chap32.pdf) //BZ

Opportunities exist here for research into the appropriate form and combination of top-down governance and bottom-up experimentation. While complexity theory has produced some general insights into the conditions needed for self-organization, these are difficult to apply and operationalize in particular circumstances, such as supply chains and local climate governance experiments. Moreover, the sustainable supply chain and industrial ecology literatures are overly reliant on material and energy flows, while neglecting the social, political, and economic structures in which these systems are embedded. This integrative perspective on bottom-up initiatives and top-down control represents a new and important understanding of complex systems. The notion that selforganization is feasible only in the absence of top-down hierarchical control reflects an inaccurate but popular understanding of complexity science that has generated a faddish wave of organizational consultants invoking complexity in a metaphorical, even mystical manner. Implicit in this approach is a free-market ideology that celebrates individual initiatives and frowns on governmental guidance. Further research can explore the degree, pace, and effectiveness of local environmental initiatives, in the context of complementary dynamics of wider, more structured coordination. If these local initiatives need protection within strategic niches, research is needed into the means of doing so without stifling the active diffusion of successful innovations into the larger system. The development of modeling tools to represent the complexities of business- environment interactions offers substantial potential for future research. Even as we recognize that limitations on long-term forecasting in complex systems, models that are well specified with realistic structures and parameters promise to generate insights into our current environmental and economic trajectory, critical thresholds, and future dangers, as well as points of leverage and intervention. A more modest goal, which is increasingly embraced by systems dynamics researchers, is to develop models using visual representations in an interactive, collaborative manner with decision-makers. These models draw on the collective expertise of professionals in a range of locations across system to capture the core dynamics and interactions at play. The purpose is not just to develop useful models, but more importantly, to encourage participants to develop an understanding of complex systems and forge consensus about likely outcomes and potential interventions. The current polarization and paralysis regarding climate change highlights the need for a broader awareness of the character and behavior complex systems at the interface of business and the environment.

## Predictions anyways

**Even if they aren’t perfect, predictions are necessary for the future**

**Cowen, 2004** – Professor of Economics at George Mason (Tyler, “The Epistemic Problem does not Refute Consequentialism, accessed through Cambridge Journals Online)//BZ

If we know for sure which remedy works, obviously we should apply that remedy. But imagine now that we are uncertain as to which remedy works. The uncertainty is so extreme that each remedy may cure somewhere between three hundred thousand and six hundred thousand children. Nonetheless we have a slight idea that one remedy is better than the other. That is, one remedy is slightly more likely to cure more children, with no other apparent offsetting negative effects or considerations. Despite the greater uncertainty, we still have the intuition that we should try to save as many children as possible. We should apply the remedy that is more likely to cure more children. We do not say: “We are now so uncertain about what will happen. We should pursue some goal other than trying to cure as many children as possible.” Nor would we cite greater uncertainty about longer-run events as an argument against curing the children. We have a definite good in the present (more cured children), balanced against a radical remixing of the future on both sides of the equation. The definite upfront good still stands firm. Alternatively, let us assume that our broader future suddenly became less predictable (perhaps genetic engineering is invented, which creates new and difficult-to-forecast possibilities). That still would not diminish the force of our reason for saving more children. The variance of forecast becomes larger on both sides of the equation - whether we save the children or not - and the value of the upfront lives remains. A higher variance of forecast might increase the required size of the upfront benefit (to overcome the Principle of Roughness), but it would not refute the relevance of consequences more generally. We could increase the uncertainty more, but consequentialism still will not appear counterintuitive. The remedies, rather than curing somewhere in the range of three to six hundred thousand children, might cure in the broader range of zero to all one million of the children. By all classical statistical standards, this new cure scenario involves more uncertainty than the previous case, such as by having a higher variance of possible outcomes. Yet this higher uncertainty lends little support for the view that curing the children becomes less important. We still have an imperative to apply the remedy that appears best, and is expected the cure the greater number of children. This example may appear excessively simple, but it points our attention to the non-generality of the epistemic critique. The critique appears strongest only when we have absolutely no idea about the future; this is a special rather than a general case. Simply boosting the degree of background generic uncertainty should not stop us from pursuing large upfront benefits of obvious importance.

**Even if complexity is true, we still have to make educative predictions to stop catastrophe**

**Garrett, 2012** – BA from Stanford, PhD from Brandeis University, rom Director of Strategic Foresight Initiative at the Atlantic Council (Banning, “In Search of Sand Piles and Butterflies”, [http://www.acus.org/disruptive\_change/search-sand-piles-and-butterflies)//BZ](http://www.acus.org/disruptive_change/search-sand-piles-and-butterflies%29//BZ)

“Disruptive change” that produces “strategic shocks” has become an increasing concern for policymakers, shaken by momentous events of the last couple of decades that were not on their radar screens – from the fall of the Berlin Wall and the 9/11 terrorist attacks to the 2008 financial crisis and the “Arab Spring.” These were all shocks to the international system, predictable perhaps in retrospect but predicted by very few experts or officials on the eve of their occurrence. This “failure” to predict specific strategic shocks does not mean we should abandon efforts to foresee disruptive change or look at all possible shocks as equally plausible. Most strategic shocks do not “come out of the blue.” We can understand and project long-term global trends and foresee at least some of their potential effects, including potential shocks and disruptive change. We can construct alternative futures scenarios to envision potential change, including strategic shocks. Based on trends and scenarios, we can take actions to avert possible undesirable outcomes or limit the damage should they occur. We can also identify potential opportunities or at least more desirable futures that we seek to seize through policy course corrections. We should distinguish “strategic shocks” that are developments that could happen at any time and yet may never occur. This would include such plausible possibilities as use of a nuclear device by terrorists or the emergence of an airborne human-to-human virus that could kill millions. Such possible but not inevitable developments would not necessarily be the result of worsening long-term trends. Like possible terrorist attacks, governments need to try to prepare for such possible catastrophes though they may never happen. But there are other potential disruptive changes, including those that create strategic shocks to the international system, that can result from identifiable trends that make them more likely in the future—for example, growing demand for food, water, energy and other resources with supplies failing to keep pace. We need to look for the “sand piles” that the trends are building and are subject to collapse at some point with an additional but indeterminable additional “grain of sand” and identify the potential for the sudden appearance of “butterflies” that might flap their wings and set off hurricanes. Mohamed Bouazizi, who immolated himself December 17, 2010 in Sidi Bouzid, Tunisia, was the butterfly who flapped his wings and (with the “force multiplier” of social media) set off a hurricane that is still blowing throughout the Middle East. Perhaps the metaphors are mixed, but the butterfly’s delicate flapping destabilized the sand piles (of rising food prices, unemployed students, corrupt government, etc.) that had been building in Tunisia, Egypt, and much of the region. The result was a sudden collapse and disruptive change that has created a strategic shock that is still producing tremors throughout the region. But the collapse was due to cumulative effects of identifiable and converging trends. When and what form change will take may be difficult if not impossible to foresee, but the likelihood of a tipping point being reached—that linear continuation of the present into the future is increasingly unlikely—can be foreseen. Foreseeing the direction of change and the likelihood of discontinuities, both sudden and protracted, is thus not beyond our capabilities. While efforts to understand and project long-term global trends cannot provide accurate predictions, for example, of the GDPs of China, India, and the United States in 2030, looking at economic and GDP growth trends, can provide insights into a wide range of possible outcomes. For example, it is a useful to assess the implications if the GDPs of these three countries each grew at currently projected average rates – even if one understands that there are many factors that can and likely will alter their trajectories. The projected growth trends of the three countries suggest that at some point in the next few decades, perhaps between 2015 and 2030, China’s GDP will surpass that of the United States. And by adding consideration of the economic impact of demographic trends (China’s aging and India’s youth bulge), there is a possibility that India will surpass both China and the US, perhaps by 2040 or 2050, to become the world’s largest economy. These potential shifts of economic power from the United States to China then to India would likely prove strategically disruptive on a global scale. Although slowly developing, such disruptive change would likely have an even greater strategic impact than the Arab Spring. The “rise” of China has already proved strategically disruptive, creating a potential China-United States regional rivalry in Asia two decades after Americans fretted about an emerging US conflict with a then-rising Japan challenging American economic supremacy. Despite uncertainty surrounding projections, foreseeing the possibility (some would say high likelihood) that China and then India will replace the United States as the largest global economy has near-term policy implications for the US and Europe. The potential long-term shift in economic clout and concomitant shift in political power and strategic position away from the US and the West and toward the East has implications for near-term policy choices. Policymakers could conclude, for example, that the West should make greater efforts to bring the emerging (or re-emerging) great powers into close consultation on the “rules of the game” and global governance as the West’s influence in shaping institutions and behavior is likely to significantly diminish over the next few decades. The alternative to finding such a near-term accommodation could be increasing mutual suspicions and hostility rather than trust and growing cooperation between rising and established powers—especially between China and the United States—leading to a fragmented, zero-sum world in which major global challenges like climate change and resource scarcities are not addressed and conflict over dwindling resources and markets intensifies and even bleeds into the military realm among the major actors. Neither of these scenarios may play out, of course. Other global trends suggest that sometime in the next several decades, the world could encounter a “hard ceiling” on resources availability and that climate change could throw the global economy into a tailspin, harming China and India even more than the United States. In this case, perhaps India and China would falter economically leading to internal instability and crises of governance, significantly reducing their rates of economic growth and their ability to project power and play a significant international role than might otherwise have been expected. But this scenario has other implications for policymakers, including dangers posed to Western interests from “failure” of China and/or India, which could produce huge strategic shocks to the global system, including a prolonged economic downturn in the West as well as the East. Thus, looking at relatively slowly developing trends can provide foresight for necessary course corrections now to avert catastrophic disruptive change or prepare to be more resilient if foreseeable but unavoidable shocks occur. Policymakers and the public will press for predictions and criticize government officials and intelligence agencies when momentous events “catch us by surprise.” But unfortunately, as both Yogi Berra and Neils Bohr are credited with saying, “prediction is very hard, especially about the future.” One can predict with great accuracy many natural events such as sunrise and the boiling point of water at sea level. We can rely on the infallible predictability of the laws of physics to build airplanes and automobiles and iPhones. And we can calculate with great precision the destruction footprint of a given nuclear weapon. Yet even physical systems like the weather as they become more complex, become increasingly difficult and even inherently impossible to predict with precision. With human behavior, specific predictions are not just hard, but impossible as uncertainty is inherent in the human universe. As futurist Paul Saffo wrote in the Harvard Business Review in 2007, “prediction is possible only in a world in which events are preordained and no amount of actions in the present can influence the future outcome.” One cannot know for certain what actions he or she will take in the future much less the actions of another person, a group of people or a nation state. This obvious point is made to dismiss any idea of trying to “predict” what will occur in the future with accuracy, especially the outcomes of the interplay of many complex factors, including the interaction of human and natural systems. More broadly, the human future is not predetermined but rather depends on human choices at every turning point, cumulatively leading to different alternative outcomes. This uncertainty about the future also means the future is amenable to human choice and leadership. Trends analyses—including foreseeing trends leading to disruptive change—are thus essential to provide individuals, organizations and political leaders with the strategic foresight to take steps mitigate the dangers ahead and seize the opportunities for shaping the human destiny. Peter Schwartz nearly a decade ago characterized the convergence of trends and disruptive change as “inevitable surprises.” He wrote in Inevitable Surprises that “in the coming decades we face many more inevitable surprises: major discontinuities in the economic, political and social spheres of our world, each one changing the ‘rules of the game’ as its played today. If anything, there will be more, no fewer, surprises in the future, and they will all be interconnected. Together, they will lead us into a world, ten to fifteen years hence, that is fundamentally different from the one we know today. Understanding these inevitable surprises in our future is critical for the decisions we have to make today …. We may not be able to prevent catastrophe (although sometimes we can), but we can certainly increase our ability to respond, and our ability to see opportunities that we would otherwise miss.”

## Experts Good

**Expert predictions and analysis is key- good for political action and epistemological achievements**

**Turner, 2001** – Professor of Philosophy at U of South Florida (Stephen, “What is the problem with Experts?” accessed from JSTOR on 7/1/12)//BZ

The answer to Fish is to treat the liberal principle of neutrality not as an absolute assertion about the nature of beliefs, but as a core rule, whose application varies historically, whose main point is to establish a means of organizing the discussion of political matters, that is to say the discussion of political decisions. We can apply this to the problem of expertise as follows: it is no surprise that, in order for there to be genuine discussion in Schmitt’s sense, some things would be temporarily taken for fact, or, alternatively, some things would be left to the experts to settle. ‘Politicizing’ everything, making everything into the subject of political decisionmaking (or treating it as an analogue to political decision-making), would lose the advantages of the intellectual division of labour and make reasoned persuasion impossible. Some facts need to be taken for granted in order for there to be genuine political discussion, and some of the work of establishing the facts is, properly, delegated to experts. Indeed, to imagine a world in which such delegation did not occur would be to imagine a simpler society, at best a society of Jeffersonian yeomen, in which everyone knew pretty much what everyone else knew that was relevant to public decisionmaking. To preserve the possibility of political discussion that such societies established, it is essential to delegate to experts and grant them cognitive authority. But granting them cognitive authority is not the same as granting them some sort of absolute and unquestionable power over us. The fact that expertise goes through a process of legitimation also means that legitimacy may be withdrawn and the cognitive authority of experts may collapse, and this suggests something quite different than the idea that liberalism is a kind of self-contradiction, and also something much more interesting. We, the non-experts, decide whether claims to cognitive authority, which in political terms are requests to have their conclusions treated as neutral fact, are to be honoured. And we have, historically, changed our minds about who is ‘expert’, and what is to be treated as neutral fact. This is, so to speak, a ‘liberal’ argument about expertise. It grants that cognitive authority and the acceptance of expertise, in modern conditions, is a condition of genuine public discourse. Liberalism, in the form of the principle of neutrality, is a means to the end of the creation of the conditions for public discourse. It is a means, however, that is not given by God, or the courts, or ‘reason’, but lives in the political decisions we make to regard assertions as open to public discussion or not. Historically, liberalism established the space for public discussion by expelling religious sectarian ‘expertise’. The challenge of the present is, in part, to deal with the claims of non-religious experts to cognitive authority. There is no formula for meeting this challenge. But there is a process of legitimation and delegitimation. And it should be no surprise that this process has come to occupy more of public discourse than ever before. But the very vigour of discussion, and the ability of the public to make decisions about what claims are legitimate, belies the image of the liberal public as victim.

## Predictions Good

**Education in good predictive models is necessary to allow for individual political predictive foresight that is necessary to prevent future catastrophe.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

In the twenty-first century, the lines of political cleavage are being drawn along those of competing dystopian visions. Indeed, one of the notable features of recent public discourse and socio-political struggle is their negationist hue, for they are devoted as much to the prevention of disaster as to the realization of the good, less to what ought to be than what could but must not be. The debates that preceded the war in Iraq provide a vivid illustration of this tendency, as both camps rhetorically invoked incommensurable catastrophic scenarios to make their respective cases. And as many analysts have noted, the multinational antiwar protests culminating on February 15, 2003 marked the first time that a mass movement was able to mobilize substantial numbers of people dedicated to averting war before it had actually broken out. More generally, given past experiences and awareness of what might occur in the future, given the cries of ‘never again’ (the Second World War, the Holocaust, Bhopal, Rwanda, etc.) and ‘not ever’ (e.g., nuclear or ecological apocalypse, human cloning) that are emanating from different parts of the world, the avoidance of crises is seemingly on everyone’s lips - and everyone’s conscience. From the United Nations and regional multilateral organizations to states, from non-governmental organizations to transnational social movements, the determination to prevent the actualization of potential cataclysms has become a new imperative in world affairs. Allowing past disasters to reoccur and unprecedented calamities to unfold is now widely seen as unbearable when, in the process, the suffering of future generations is callously tolerated and our survival is being irresponsibly jeopardized. Hence, we need to pay attention to what a widely circulated report by the International Commission on Intervention and State Sovereignty identifies as a burgeoning “culture of prevention,”3 a dynamic that carries major, albeit still poorly understood, normative and political implications. Rather than bemoaning the contemporary preeminence of a dystopian imaginary, I am claiming that it can enable a novel form of transnational socio-political action, a manifestation of globalization from below that can be termed preventive foresight. We should not reduce the latter to a formal principle regulating international relations or an ensemble of policy prescriptions for official players on the world stage, since it is, just as significantly, a mode of ethico-political practice enacted by participants in the emerging realm of global civil society. In other words, what I want to underscore is the work of farsightedness, the social processes through which civic associations are simultaneously constituting and putting into practice a sense of responsibility for the future by attempting to prevent global catastrophes. Although the labor of preventive foresight takes place in varying political and socio-cultural settings - and with different degrees of institutional support and access to symbolic and material resources - it is underpinned by three distinctive features: dialogism, publicity, and transnationalism. In the first instance, preventive foresight is an intersubjective or dialogical process of address, recognition, and response between two parties in global civil society: the ‘warners,’ who anticipate and send out word of possible perils, and the audiences being warned, those who heed their interlocutors’ messages by demanding that governments and/or international organizations take measures to steer away from disaster. Secondly, the work of farsightedness derives its effectiveness and legitimacy from public debate and deliberation. This is not to say that a fully fledged global public sphere is already in existence, since transnational “strong publics” with decisional power in the formal-institutional realm are currently embryonic at best. Rather, in this context, publicity signifies that “weak publics” with distinct yet occasionally overlapping constituencies are coalescing around struggles to avoid specific global catastrophes.4 Hence, despite having little direct decision-making capacity, the environmental and peace movements, humanitarian NGOs, and other similar globally-oriented civic associations are becoming significant actors involved in public opinion formation. Groups like these are active in disseminating information and alerting citizens about looming catastrophes, lobbying states and multilateral organizations from the ‘inside’ and pressuring them from the ‘outside,’ as well as fostering public participation in debates about the future. This brings us to the transnational character of preventive foresight, which is most explicit in the now commonplace observation that we live in an interdependent world because of the globalization of the perils that humankind faces (nuclear annihilation, global warming, terrorism, genocide, AIDS and SARS epidemics, and so on); individuals and groups from far-flung parts of the planet are being brought together into “risk communities” that transcend geographical borders.5 Moreover, due to dense media and information flows, knowledge of impeding catastrophes can instantaneously reach the four corners of the earth - sometimes well before individuals in one place experience the actual consequences of a crisis originating in another. My contention is that civic associations are engaging in dialogical, public, and transnational forms of ethico-political action that contribute to the creation of a fledgling global civil society existing ‘below’ the official and institutionalized architecture of international relations.6 The work of preventive foresight consists of forging ties between citizens; participating in the circulation of flows of claims, images, and information across borders; promoting an ethos of farsighted cosmopolitanism; and forming and mobilizing weak publics that debate and struggle against possible catastrophes. Over the past few decades, states and international organizations have frequently been content to follow the lead of globally-minded civil society actors, who have been instrumental in placing on the public agenda a host of pivotal issues (such as nuclear war, ecological pollution, species extinction, genetic engineering, and mass human rights violations). To my mind, this strongly indicates that if prevention of global crises is to eventually rival the assertion of short-term and narrowly defined rationales (national interest, profit, bureaucratic self-preservation, etc.), weak publics must begin by convincing or compelling official representatives and multilateral organizations to act differently; only then will farsightedness be in a position to ‘move up’ and become institutionalized via strong publics.7 Since the global culture of prevention remains a work in progress, the argument presented in this paper is poised between empirical and normative dimensions of analysis. It proposes a theory of the practice of preventive foresight based upon already existing struggles and discourses, at the same time as it advocates the adoption of certain principles that would substantively thicken and assist in the realization of a sense of responsibility for the future of humankind. I will thereby proceed in four steps, beginning with a consideration of the shifting socio-political and cultural climate that is giving rise to farsightedness today (I). I will then contend that the development of a public aptitude for early warning about global cataclysms can overcome flawed conceptions of the future’s essential inscrutability (II). From this will follow the claim that an ethos of farsighted cosmopolitanism - of solidarity that extends to future generations - can supplant the preeminence of ‘short-termism’ with the help of appeals to the public’s moral imagination and use of reason (III). In the final section of the paper, I will argue that the commitment of global civil society actors to norms of precaution and transnational justice can hone citizens’ faculty of critical judgment against abuses of the dystopian imaginary, thereby opening the way to public deliberation about the construction of an alternative world order (IV).

**Reinvigoration in preventive policies is critical to overcome complacency in face of crisis. Predictive models are necessary to prevent and mitigate disasters.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

In the previous section, I described how the capacity to produce, disseminate, and receive warning signals regarding disasters on the world stage has developed in global civil society. Yet the fact remains that audiences may let a recklessness or insouciance toward the future prevail, instead of listening to and acting upon such warnings. There is no doubt that the short-sightedness and presentism are strong dynamics in contemporary society, which is enveloped by a “temporal myopia” that encourages most individuals to live in a state of chronological self-referentiality 22 whereby they screen out anything that is not of the moment. The commercial media, advertising, and entertainment industries are major contributors to this 23 “tyranny of real time” that feeds a societal addiction to the ‘live’ and the immediate while eroding the principle of farsightedness. The infamous quip attributed to Madame de Pompadour, ‘apres nous, le deluge,’ perfectly captures a sense of utter callousness about the future that represents one of presentism’s most acute manifestations. Two closely related notions underlie it: the belief that we should only concern ourselves with whether our actions, or lack thereof, have deleterious consequences visible to us in the short- to medium-term (temporally limited responsibility); and sheer indifference toward the plight of those who will come after us (generational self-centeredness). Substantively, the two are not much different because they shift the costs and risks of present-day decisions onto our descendants. “The crisis of the future is a measure of the deficiency of our societies, incapable as they are of assessing what is involved in relationships with others,” Binde writes. “This temporal myopia brings into play the same processes of denial of others as social shortsightedness. The absence of solidarity in time between generations merely reproduces selfishness 24 in space within the same generation. Thus, to the NIMBY (‘not-in-my-back- yard’) politics of the last few decades can be added the ‘not-in-my-lifetime’ or ‘not-to-my-children’ lines of reasoning. For members of dominant groups in the North Atlantic region, disasters are something for others to worry about - that is, those who are socio-economically marginal, or geographically and temporally distant. The variations on these themes are numerous. One is the oft-stated belief that prevention is a luxury that we can scarcely afford, or even an unwarranted conceit. Accordingly, by minimizing the urgency or gravity of potential threats, procrastination appears legitimate. Why squander time, energy, and resources to anticipate and thwart what are, after all, only hypothetical dangers? Why act today when, in any case, others will do so in the future? Why not limit ourselves to reacting to cataclysms if and when they occur? A ‘bad faith’ version of this argument goes even further by seeking to discredit, reject, or deny evidence pointing to upcoming catastrophes. Here, we enter into the domain of deliberate negligence and “culpable ignorance,”25 as manifest in the apathy of US Republican administrations toward climate change or the Clinton White House’s disen- genuous and belated responses to the genocides in ex-Yugoslavia and Rwanda. At another level, instrumental-strategic forms of thought and action, so pervasive in modern societies because institutionally entrenched in the state and the market, are rarely compatible with the demands of farsightedness. The calculation of the most technically efficient means to attain a particular bureaucratic or corporate objective, and the subsequent relentless pursuit of it, intrinsically exclude broader questions of long-term prospects or negative side-effects. What matters is the maximization of profits or national self-interest with the least effort, and as rapidly as possible. Growing risks and perils are transferred to future generations through a series of trade-offs: economic growth versus environmental protection, innovation versus safety, instant gratification versus future well-being. What can be done in the face of short-sightedness? Cosmopolitanism provides some of the clues to an answer, thanks to its formulation of a universal duty of care for humankind that transcends all geographical and socio-cultural borders. I want to expand the notion of cosmopolitan universalism in a temporal direction, so that it can become applicable to future generations and thereby nourish a vibrant culture of prevention. Consequently, we need to begin thinking about a farsighted cosmopolitanism, a chrono-cosmopolitics that takes seriously a sense of “intergenerational solidarity” toward human beings who will live in our wake as much as those living amidst us today.26 In the previous section, I described how the capacity to produce, disseminate, and receive warning signals regarding disasters on the world stage has developed in global civil society. Yet the fact remains that audiences may let a recklessness or insouciance toward the future prevail, instead of listening to and acting upon such warnings. There is no doubt that the short-sightedness and presentism are strong dynamics in contemporary society, which is enveloped by a “temporal myopia” that encourages most individuals to live in a state of chronological self-referentiality 22 whereby they screen out anything that is not of the moment. 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Cosmopolitanism provides some of the clues to an answer, thanks to its formulation of a universal duty of care for humankind that transcends all geographical and socio-cultural borders. I want to expand the notion of cosmopolitan universalism in a temporal direction, so that it can become applicable to future generations and thereby nourish a vibrant culture of prevention. Consequently, we need to begin thinking about a farsighted cosmopolitanism, a chrono-cosmopolitics that takes seriously a sense of “intergenerational solidarity” toward human beings who will live in our wake as much as those living amidst us today.26

**Civil society needs preventive foresight, which allows cultivation of authenticity and responsibility.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

Does this mean that we can expect all impending disasters to be comprehensively addressed before long? Apart from the unabashed assertion of national and commercial interests, at least two other structural factors make such an outcome unlikely within the existing world order. In the first place, because of the decentralized institutional design of global civil society, there exist few coordination mechanisms between its different participants and no single clearing-house for the collection and analysis of information about possible cataclysms - information that could then be transmitted to the general public, governments, or international organizations. Warnings may not always reach these addressees, or may get lost in the clamor of multiple campaigns and messages. The second problem is the asymmetry between the official and unofficial spheres of world politics. Despite mounting evidence that states and multilateral institutions are responding to preventive claims and requests, global civil society remains a weak public deprived of direct decision-making power. It has made important advances in gaining lobbying influence over and access to decision-making bodies, yet its main tool continues to be the mobilization of public opinion to pressure or convince these bodies to act. Until global civil society can convert itself into a strong public, it is not in a position to ensure the translation of demands for prevention from below into prevention from above. We should acknowledge that these two limits pose serious obstacles to a more muscular culture of prevention without meaningful institutional reforms of the global system. At the same time, and in lieu of a major overhaul of the regime of international governance, it would be a mistake to underestimate or simply dismiss the impact of the web of treaties, summits, judicial innovations, and grassroots ‘naming and shaming’ tactics and protest movements that have come to form, in recent years, a vast preventive infrastructure. I have argued that this dynamic is itself constitutive of global civil society and can thus best be appreciated when observed from below. Civic associations are engaging in dialogical, public, transnational struggles to avert catastrophe, cultivating a farsighted and dystopian flavored form of social action that is ethically and politically oriented toward the future. I further claimed that the work of preventive foresight is composed of three sets of practices striving to overcome difficulties constituent of the predicament of our times. Participants in global civil society are engaged in developing an early warning capacity about upcoming crises by collecting evidence, disseminating it, and laboring to have it publicly recognized. This sort of farsightedness responds to the contingent nature of the future without succumbing to the conviction that it is absolutely unknowable and indecipherable. Transnational associative groups are also nurturing intergenerational solidarity, a sense of care for those who will follow us. I suggested that, to adequately combat the presentist and shortsighted indifference toward the future that is typical in the contemporary world, a more explicitly farsighted cosmopolitanism needs to take root within global civil society. Normative thickening of this ideal could be accomplished via the long-term consequentialism of Jonas’s imperative of responsibility, a prospect whose basis we can already find in growing public appeals to the moral imagination and reason to activate our concern for later generations.

**Informative predictions are paramount to revitalizing citizenry and equipping individuals with skills, which is the only hope for public spaces that prevent future disasters.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

Lastly, I contended that the work of preventive foresight can parry alarmist misappropriation or resignation by advocating a process of public deliberation that blends the principles of precaution and global justice. A farsighted politics can function through the public use of reason and the honing of the capacity for critical judgment, whereby citizens put themselves in a position to debate, evaluate, and challenge different dystopian narratives about the future and determine which ones are more analytically plausible, ethically desirable, and politically effective in bringing about a world order that is less perilous yet more just for our descendants. Many fora, ranging from local, face-to-face meetings to transnational, highly mediated discursive networks, are sowing the seeds of such a practice of participatory democracy. None of this is to disavow the international community’s rather patchy record of avoiding foreseeable calamities over the last decades, or to minimize the difficulties of implementing the kinds of global institutional reforms described above and the perils of historical contingency, presentist indifference toward the future, or alarmism and resignation. To my mind, however, this is all the more reason to pay attention to the work of preventive foresight in global civil society, through which civic associations can build up the latter’s coordination mechanisms and institutional leverage, cultivate and mobilize public opinion in distant parts of the world, and compel political leaders and national and transnational governance structures to implement certain policies. While seeking to prevent cataclysms from worsening or, better yet, from occurring in the first place, these sorts of initiatives can and must remain consistent with a vision of a just world order. Furthermore, the labor of farsightedness supports an autonomous view of the future, according to which we are the creators of the field of possibilities within which our successors will dwell. The current socio-political order, with all its short-term biases, is neither natural nor necessary. Accordingly, informed public participation in deliberative processes makes a socially self-instituting future possible, through the involvement of groups and individuals active in domestic and supranational public spaces; prevention is a public practice, and a public responsibility. To believe otherwise is, I would argue, to leave the path clear for a series of alternatives that heteronomously compromise the well-being of those who will come after us. We would thereby effectively abandon the future to the vagaries of history (‘let it unfold as it may’), the technocratic or instrumental will of official institutions (‘let others decide for us’), or to gambles about the time-lags of risks (‘let our progeny deal with their realization’). But, as I have tried to show here, this will not and cannot be accepted. Engaging in autonomous preventive struggles, then, remains our best hope. A farsighted cosmopolitanism that aims to avert crises while working toward the realization of precaution and global justice represents a compelling ethico-political project, for we will not inherit a better future. It must be made, starting with us, in the here and now.

**Predictions are useful to develop a superior framing of ideas**

**Mearsheimer, 2001** (John, professor of political science at the University of Chicago, The Tragedy of Great Power Politics, 2001 p. 8, googleprint)

As a result, all political forecasting is bound to include some error. Those who venture to predict, as I do here, should therefore proceed with humility, take care not to exhibit unwarranted confidence, and admit that hindsight is likely to reveal surprises and mistakes. Despite these hazards, social scientists should nevertheless use their theories to make predictions about the future. Making predictions helps inform policy discourse, because it helps make sense of events unfolding in the world around us. And by clarifying points of disagreement, making explicit forecasts helps those with contradictory views to frame their own ideas more clearly. Furthermore, trying to anticipate new events is a good way to test social science theories, because theorists do not have the benefit of hindsight and therefore cannot adjust their claims to fit the evidence (because it is not yet available). In short, the world can be used as a laboratory to decide which theories best explain international politics. In that spirit I employ offensive realism to peer into the future, mindful of both the benefits and the hazards of trying to predict events.

## Solves extinction

**Good models of predictions is necessary to prevent extinction – fundamentalism, ethnic conflict, climate change, disease, nuclear war can be prevented through predictive aversion and prevention.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

Although farsightedness has a long history in world affairs, we can trace back the factors responsible for its present-day standing to the second half of the twentieth century. Societies emerging from the horrors and devastation of two world wars came to recognize that certain dangers (principally wars of aggression, genocide, crimes against humanity, and nuclear armageddon) needed to be averted at all costs. The international community thereby devised a number of institutional responses, such as the Charter giving birth to the United Nations, the signing of the Universal Declaration of Human Rights, and the UN Convention on the Prevention and Punishment of the Crime of Genocide. However, by paralyzing the United Nations system and fuelling a nuclear arms race, the onset and escalation of the Cold War rendered the institutional sphere largely ineffective. In response to this paralysis came the nuclear disarmament and peace movements, which were spurred on by the terrifying realization that human beings had devised the means for their own annihilation and that the two geopolitical blocs were pursuing an exterminist logic; given that human survival could no longer be entrusted to governments or multilateral institutions, citizens had to organize themselves to tackle the problem head-on. In the 1970s and 1980s, widely circulated reports from the Club of Rome and the Brundtland Commission8 combined with environmental activism brought another global threat to public attention, the prospect of ecological ruin caused by a rampant industrialism that mercilessly depleted the earth’s resources and polluted it at an unsustainably destructive pace. Yet it is since the end of the Cold War that the idea of prevention has truly come into its own in both the formally and informally organized domains of global governance. The dissolution of the bipolar stalemate between East and West opened the door to greater inter-state coordination and collaboration, perhaps most significantly at the United Nations Security Council.9 The creation of supranational judicial institutions (e.g., the International Criminal Tribunal for the former Yugoslavia and the International Criminal Court) are also signal achievements of the post-Cold War world order, for they may well have a latent deterrence effect despite the fact that they are designed to prosecute crimes against humanity ex post facto. The Rome Treaty establishing the International Criminal Court is itself part of an expanding infrastructure of multinational conferences and agreements that has come into being over the past decade or so; governments and NGOs have participated in large-scale, UN-sponsored summits that have yielded agreements or declarations incorporating strong preventive language: the Rio Summit on the environment, the Kyoto Protocol on climate change, the Inter-national Treaty to Ban Landmines, and, of most relevance for our purposes, the Declaration on the Responsibilities of the Present Generations Towards Future Generations.10 Furthermore, the unfolding of a process of globalization from below has meant that certain civil society organizations are increasingly vocal in demanding that governments, multilateral institutions and transnational corporations take preventive action or cease to engage in activities and support policies that imperil humankind. In addition, farsightedness has become a priority in world affairs due to the appearance of new global threats and the resurgence of ‘older’ ones. Virulent forms of ethno-racial nationalism and religious fundamentalism that had mostly been kept in check or bottled up during the Cold War have reasserted themselves in ways that are now all-too-familiar - civil warfare, genocide, ‘ethnic cleansing,’ and global terrorism. And if nuclear mutually assured destruction has come to pass, other dangers are filling the vacuum: climate change, AIDS and other diseases (BSE, SARS, etc.), as well as previously unheralded genomic perils (genetically modified organisms, human cloning). Collective remembrance of past atrocities and disasters has galvanized some sectors of public opinion and made the international community’s unwillingness to adequately intervene before and during the genocides in the ex-Yugoslavia and Rwanda, or to take remedial steps in the case of the spiraling African and Asian AIDS pandemics, appear particularly glaring,

**Good forms of predictions are key to combat alarmism and apocalyptic scenarios.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

Foremost among the possible distortions of farsightedness is alarmism, the manufacturing of unwarranted and unfounded doomsday scenarios. State and market institutions may seek to produce a culture of fear by deliberately stretching interpretations of reality beyond the limits of the plausible so as to exaggerate the prospects of impending catastrophes, or yet again, by intentionally promoting certain prognoses over others for instrumental purposes. Accordingly, regressive dystopias can operate as Trojan horses advancing political agendas or commercial interests that would otherwise be susceptible to public scrutiny and opposition. Instances of this kind of manipulation of the dystopian imaginary are plentiful: the invasion of Iraq in the name of fighting terrorism and an imminent threat of use of ‘weapons of mass destruction’; the severe curtailing of American civil liberties amidst fears of a collapse of ‘homeland security’; the neoliberal dismantling of the welfare state as the only remedy for an ideologically constructed fiscal crisis; the conservative expansion of policing and incarceration due to supposedly spiraling crime waves; and so forth. Alarmism constructs and codes the future in particular ways, producing or reinforcing certain crisis narratives, belief structures, and rhetorical conventions. As much as alarmist ideas beget a culture of fear, the reverse is no less true. If fear-mongering is a misappropriation of preventive foresight, resignation about the future represents a problematic outgrowth of the popular acknowledgment of global perils. Some believe that the world to come is so uncertain and dangerous that we should not attempt to modify the course of history; the future will look after itself for better or worse, regardless of what we do or wish. One version of this argument consists in a complacent optimism perceiving the future as fated to be better than either the past or the present. Frequently accompanying it is a self-deluding denial of what is plausible (‘the world will not be so bad after all’), or a naively Panglossian pragmatism (‘things will work themselves out in spite of everything, because humankind always finds ways to survive’).37 Much more common, however, is the opposite reaction, a fatalistic pessimism reconciled to the idea that the future will be necessarily worse than what preceded it. This is sustained by a tragic chronological framework according to which humanity is doomed to decay, or a cyclical one of the endless repetition of the mistakes of the past.

**Predictions are necessary to prevent global disasters like climate change and nuclear war.**

**Kurasawa, 2004** – Associate Professor of Sociology at York University (Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight”, Constellations Volume 11, Issue 4, December 2004) //BZ

Moreover, keeping in mind the sobering lessons of the past century cannot but make us wary about humankind’s supposedly unlimited ability for problemsolving or discovering solutions in time to avert calamities. In fact, the historical track-record of last-minute, technical ‘quick-fixes’ is hardly reassuring. What’s more, most of the serious perils that we face today (e.g., nuclear waste, climate change, global terrorism, genocide and civil war) demand complex, sustained, long-term strategies of planning, coordination, and execution. On the other hand, an examination of fatalism makes it readily apparent that the idea that humankind is doomed from the outset puts off any attempt to minimize risks for our successors, essentially condemning them to face cataclysms unprepared. An a priori pessimism is also unsustainable given the fact that long-term preventive action has had (and will continue to have) appreciable beneficial effects; the examples of medical research, the welfare state, international humanitarian law, as well as strict environmental regulations in some countries stand out among many others. The evaluative framework proposed above should not be restricted to the critique of misappropriations of farsightedness, since it can equally support public deliberation with a reconstructive intent, that is, democratic discussion and debate about a future that human beings would freely self-determine. Inverting Foucault’s Nietzschean metaphor, we can think of genealogies of the future that could perform a farsighted mapping out of the possible ways of organizing social life. They are, in other words, interventions into the present intended to facilitate global civil society’s participation in shaping the field of possibilities of what is to come. Once competing dystopian visions are filtered out on the basis of their analytical credibility, ethical commitments, and political underpinnings and consequences, groups and individuals can assess the remaining legitimate catastrophic scenarios through the lens of genealogical mappings of the future. Hence, our first duty consists in addressing the present-day causes of eventual perils, ensuring that the paths we decide upon do not contract the range of options available for our posterity. Just as importantly, the practice of genealogically- inspired farsightedness nurtures the project of an autonomous future, one that is socially self-instituting. In so doing, we can acknowledge that the future is a human creation instead of the product of metaphysical and extra-social forces (god, nature, destiny, etc.), and begin to reflect upon and deliberate about the kind of legacy we want to leave for those who will follow us. Participants in global civil society can then take - and in many instances have already taken - a further step by committing themselves to socio-political struggles forging a world order that, aside from not jeopardizing human and environmental survival, is designed to rectify the sources of transnational injustice that will continue to inflict needless suffering upon future generations if left unchallenged.

**Future-oriented politics are key to prevent extinction from technology. Even if technological power is the cause we should explicitly plan and expose possibilities for human extinction.**

**Jonas, 1996** [Hans, Former Alvin Johnson Prof. Phil. – New School for Social Research and Former Eric Voegelin Visiting Prof. – U. Munich, “Morality and Mortality: A Search for the Good After Auschwitz”, p. 108-110]

But to return to our subject: Modern megatechnology contains both of the threats we have named—that of physical annihilation and that of existential impoverishment: the former by means of its unquestionably negative potential for catastrophe (such as atomic war), the latter by means of its positive potential for manipulation. Examples of this manipulation, which can lead to our ethical powerlessness, are the automation of all work, psychological and biological behavior control, various forms of totalitarianism, and—probably most dangerous of all—the genetic reshaping of our nature. Finally, as far as environmental destruction is concerned—i.e., not a sudden nuclear apocalypse but a gradual one by means of a completely peaceful technology in the service of humanity— the physical threat itself becomes an existential one if the end result is global misery that allows only for an imperative of naked survival devoid of all feeling of ethical responsibility. With this, we return to the other desideratum for the grounding of an ethics for the future in a technological age: the factual knowledge afforded by "futurology." We said earlier that this knowledge must awaken the right feelings in us in order to motivate us to act with responsibility. A few words are appropriate here about this emotional side of a vision of the future called for by ethics. If we first think, as we cannot help but do, of the fate man has imposed on the planet, a fate staring at us out of the future, then we are right to feel a mixture of fear and guilt: fear because what we see ahead is something terrible; guilt because we are conscious of our own causal role in bringing it about. But can something frightful, which will not affect us but those who come much later, frighten us? Even watching a tragedy on the stage can do this, as we know. This analogy adds to our "fear" and anticipatory "pity" for later generations damned in advance, yet we do not have the consolation afforded by a stage drama that this is mere fiction; the reality of futurology's warning denies us that. Above all, however, its accusation that future generations are our victims makes the selfish distancing of our feelings, which something remote otherwise permits, morally impossible for us. Our horror at what the future holds cries out to us: "That must not be! We must not permit that! We must not bring that about!" An unselfish fear of what will eventuate long after us, anticipatory remorse on its account, and shame on our own account overcome us as sheer reflexes triggered by decency and by solidarity with our species. Here no metaphysical sanction is even necessary, yet it is anticipated in these reflexes and finds in those spontaneous feelings a natural ally for its demands. For this very reason the dismal conclusions of scientific futurology ought to be widely disseminated. In the end, then, it is the "ontological imperative," discussed earlier, of man's "ought-to-be," whether clearly recognized or dimly perceived, which absolutely forbids us to have the contemptible attitude of "after us the deluge." Given the validity of this imperative (which many surely can agree upon without any philosophical substantiation), the responsibility we bear because of our power becomes a compelling law. The role of power in this entire context is complicated and in part paradoxical. On the one hand, it is the cause of the catastrophe we fear; on the other, the sole means of its possible prevention. This prophylaxis demands massive application of the same knowledge which is the source of our fateful power. By struggling against the effects of this power, we are strengthening its roots. Fear of our power has taken the place of the natural euphoria that once accompanied its possession, its enjoyment, and above all its self-engendered growth. It is no longer nature, as formerly, but our power over it which now fills us with fear— for the sake of nature and for our own sakes. Our power has become our master instead of our servant. We must now gain control over it. We have not yet done so, even though our power is entirely the result of our knowledge and our will. Knowledge, will, and power are collective, and therefore control of them must also be collective: it can come only from forces within the public sector. In other words, it must be political, and that requires in the long run a broad, grass-roots consensus.

**Even if predictions aren’t perfect, giving up on them is ludicrous. Game theory can provide reliable models of the world**

**de Mesquita  11** [Bruce Bueno de Mesquita is Silver Professor of Politics at New York University and a senior fellow at the Hoover Institution B.A. from Queens, M.A. from Michigan, PhD from Michigan, "FOX-HEDGING OR KNOWING: ONE BIG WAY TO KNOW MANY THINGS" July 18 [www.cato-unbound.org/2011/07/18/bruce-bueno-de-mesquita/fox-hedging-or-knowing-one-big-way-to-know-many-things/](http://www.cato-unbound.org/2011/07/18/bruce-bueno-de-mesquita/fox-hedging-or-knowing-one-big-way-to-know-many-things/%22%20%5Ct%20%22_blank) LO]

It is hard to say which is more surprising, that anyone still argues that we can predict very little or that anyone believes expertise conveys reliable judgment. Each reflects a bad habit of mind that we should overcome. It is certainly true that predictive efforts, by whatever means, are far from perfect and so we can always come up with examples of failure. But a proper assessment of progress in predictive accuracy, as Gardner and Tetlock surely agree, requires that we compare the rate of success and failure across methods of prediction rather than picking only examples of failure (or success). How often, for instance, has The Economist been wrong or right in its annual forecasts compared to other forecasters? Knowing that they did poorly in 2011 or that they did well in some other selected year doesn’t help answer that question. That is why, as Gardner and Tetlock emphasize, predictive methods can best be evaluated through comparative tournaments. Reliable prediction is so much a part of our daily lives that we don’t even notice it. Consider the insurance industry. At least since Johan de Witt (1625–1672) exploited the mathematics of probability and uncertainty, insurance companies have generally been profitable. Similarly, polling and other statistical methods for predicting elections are sufficiently accurate most of the time that we forget that these methods supplanted expert judgment decades ago. Models have replaced pundits as the means by which elections are predicted exactly because various (imperfect) statistical approaches routinely outperform expert prognostications. More recently, sophisticated game theory models have proven sufficiently predictive that they have become a mainstay of high-stakes government and business auctions such as bandwidth auctions. Game theory models have also found extensive use and well-documented predictive success on both sides of the Atlantic in helping to resolve major national security issues, labor-management disputes, and complex business problems. Are these methods perfect or omniscient? Certainly not! Are the marginal returns to knowledge over naïve methods (expert opinion; predicting that tomorrow will be just like today) substantial? I believe the evidence warrants an enthusiastic "Yes!" Nevertheless, despite the numerous successes in designing predictive methods, we appropriately focus on failures. After all, by studying failure methodically we are likely to make progress in eliminating some errors in the future. Experts are an easy, although eminently justified, target for critiquing predictive accuracy. Their failure to outperform simple statistical algorithms should come as no surprise. Expertise has nothing to do with judgment or foresight. What makes an expert is the accumulation of an exceptional quantity of facts about some place or time. The idea that such expertise translates into reliable judgment rests on the false belief that knowing “the facts” is all that is necessary to draw correct inferences. This is but one form of the erroneous linkage of correlation to causation; a linkage at the heart of current data mining methods. It is even more so an example of confusing data (the facts) with a method for drawing inferences. Reliance on expert judgment ignores their personal beliefs as a noisy filter applied to the selection and utilization of facts. Consider, for instance, that Republicans, Democrats, and libertarians all know the same essential facts about the U.S. economy and all probably desire the same outcomes: low unemployment, low inflation, and high growth. The facts, however, do not lead experts to the same judgment about what to do to achieve the desired outcomes. That requires a theory and balanced evidence about what gets us from a distressed economy to a well-functioning one. Of course, lacking a common theory and biased by personal beliefs, the experts’ predictions will be widely scattered.

**Accurate predictions can be made using logic and evidence. Game theory is right 90% of the time.**

**de Mesquita  11** [Bruce Bueno de Mesquita is Silver Professor of Politics at New York University and a senior fellow at the Hoover Institution B.A. from Queens, M.A. from Michigan, PhD from Michigan, "FOX-HEDGING OR KNOWING: ONE BIG WAY TO KNOW MANY THINGS" July 18 [www.cato-unbound.org/2011/07/18/bruce-bueno-de-mesquita/fox-hedging-or-knowing-one-big-way-to-know-many-things/](http://www.cato-unbound.org/2011/07/18/bruce-bueno-de-mesquita/fox-hedging-or-knowing-one-big-way-to-know-many-things/%22%20%5Ct%20%22_blank) LO]

Good prediction—and this is my belief—comes from dependence on logic and evidence to draw inferences about the causal path from facts to outcomes. Unfortunately, government, business, and the media assume that expertise—knowing the history, culture, mores, and language of a place, for instance—is sufficient to anticipate the unfolding of events. Indeed, too often many of us dismiss approaches to prediction that require knowledge of statistical methods, mathematics, and systematic research design. We seem to prefer “wisdom” over science, even though the evidence shows that the application of the scientific method, with all of its demands, outperforms experts (remember Johan de Witt). The belief that area expertise, for instance, is sufficient to anticipate the future is, as Tetlock convincingly demonstrated, just plain false. If we hope to build reliable predictions about human behavior, whether in China, Cameroon, or Connecticut, then probably we must first harness facts to the systematic, repeated, transparent application of the same logic across connected families of problems. By doing so we can test alternative ways of thinking to uncover what works and what doesn’t in different circumstances. Here Gardner, Tetlock, and I could not agree more. Prediction tournaments are an essential ingredient to work out what the current limits are to improved knowledge and predictive accuracy. Of course, improvements in knowledge and accuracy will always be a moving target because technology, ideas, and subject adaptation will be ongoing. Given what we know today and given the problems inherent in dealing with human interaction, what is a leading contender for making accurate, discriminating, useful predictions of complex human decisions? In good hedgehog mode I believe one top contender is applied game theory. Of course there are others but I am betting on game theory as the right place to invest effort. Why? Because game theory is the only method of which I am aware that explicitly compels us to address human adaptability. Gardner and Tetlock rightly note that people are “self-aware beings who see, think, talk, and attempt to predict each other's behavior—and who are continually adapting to each other’s efforts to predict each other’s behavior, adding layer after layer of new calculations and new complexity.” This adaptation is what game theory jargon succinctly calls “endogenous choice.” Predicting human behavior means solving for endogenous choices while assessing uncertainty. It certainly isn’t easy but, as the example of bandwidth auctions helps clarify, game theorists are solving for human adaptability and uncertainty with some success. Indeed, I used game theoretic reasoning on May 5, 2010 to predict to a large investment group’s portfolio committee that Mubarak’s regime faced replacement, especially by the Muslim Brotherhood, in the coming year. That prediction did not rely on in-depth knowledge of Egyptian history and culture or on expert judgment but rather on a game theory model called selectorate theory and its implications for the concurrent occurrence of logically derived revolutionary triggers. Thus, while the desire for revolution had been present in Egypt (and elsewhere) for many years, logic suggested that the odds of success and the expected rewards for revolution were rising swiftly in 2010 in Egypt while the expected costs were not. This is but one example that highlights what Nobel laureate Kenneth Arrow, who was quoted by Gardner and Tetlock, has said about game theory and prediction (referring, as it happens, to a specific model I developed for predicting policy decisions): “Bueno de Mesquita has demonstrated the power of using game theory and related assumptions of rational and self-seeking behavior in predicting the outcome of important political and legal processes.” Nice as his statement is for me personally, the broader point is that game theory in the hands of much better game theorists than I am has the potential to transform our ability to anticipate the consequences of alternative choices in many aspects of human interaction. How can game theory be harnessed to achieve reliable prediction? Acting like a fox, I gather information from a wide variety of experts. They are asked only for specific current information (Who wants to influence a decision? What outcome do they currently advocate? How focused are they on the issue compared to other questions on their plate? How flexible are they about getting the outcome they advocate? And how much clout could they exert?). They are not asked to make judgments about what will happen. Then, acting as a hedgehog, I use that information as data with which to seed a dynamic applied game theory model. The model’s logic then produces not only specific predictions about the issues in question, but also a probability distribution around the predictions. The predictions are detailed and nuanced. They address not only what outcome is likely to arise, but also how each “player” will act, how they are likely to relate to other players over time, what they believe about each other, and much more. Methods like this are credited by the CIA, academic specialists and others, as being accurate about 90 percent of the time based on large-sample assessments. These methods have been subjected to peer review with predictions published well ahead of the outcome being known and with the issues forecast being important questions of their time with much controversy over how they were expected to be resolved. This is not so much a testament to any insight I may have had but rather to the virtue of combining the focus of the hedgehog with the breadth of the fox. When facts are harnessed by logic and evaluated through replicable tests of evidence, we progress toward better prediction. We can all hope that government, academia, and the media will rally behind Gardner and Tetlock’s pursuit of systematic tests of alternative methods for predicting the future. Methodical tournaments of alternative methods surely will go a long way to advancing our understanding of how logic and evidence can convert mysteries into the known and knowable.

## Complexity fails

**Complexity can't draw causal relationships- if there are really thousands of actors then cause and effects can't be determined- means it fails as a theory.**

**Kissane, 2007** – assistant dean at the Centre d'Etudes Franco-Americain de Management, lecturer at the University of South Australia, PhD from the University of South Australia in International Relations theory (Dylan, “The possibility for theoretical revolution in international politics”, [http://works.bepress.com/dylankissane/16)//BZ](http://works.bepress.com/dylankissane/16%29//BZ)

The second major problem is what has been termed the Problem of Explanation. Essentially, this problem relates to the possibility that, in a chaotic system, almost everything is expected to occur and, in hindsight, can be explained as a direct result of chaos. Consider, for example, the example of the butterfly effect: the wings of the butterfly could incite a hurricane in the Americas or it might not incite a hurricane. Both ends are expected - in the sense that they are both possibilities that are associated with a chaotic system - but a theory that does not favour one over the other is likely to prove poor in explaining international interactions. A theory must, in the words of Kenneth Waltz, be tested by its explanative power: "success in explaining, not in predicting, is the ultimate criterion of good theory” (1997, 916). A theory within which everything and nothing can occur as a result of a single interaction would seem to fail Waltz’s test. A theoretical approach to international relations that expects that anything can occur within the system and which simultaneously cannot fully explain why such an event occurred - outside of some basic notions arising from the nature of the system - may not be much of a theory at all.

**Complexity theory overstates its findings – can’t replace traditional science**

**Morowitz, 1998** – Harold, Robinson Professor of biology and natural philosophy at George Mason University (“A Closet Epistemologist,” Complexity, vol. 2, no. 2, 12/7/98, Wiley)RK

The firm notion emerges that empirical science commences with observations, tempered by the caveat that even the simplest observations are theory-laden to some degree. From observations or collections of observations, theories are formulated and concepts of what underlies the observations are constructed. Theory formulation is a creative part of the scientific enterprise, and we lack very certain ideas as to how this takes place. The universal requirement of all empirical science is that theories have predictions which are subject to verification or falsification by experiment. My old friend Henry Quastler, who had overlapped with Popper in Vienna, used to say to me in his best Austrian accent, “Harold, a theory must be vulnerable.” These philosophical views have served science very well in its simplicity phase when the objects of observations were well defined. In the most favorable cases they became meter readings to some large number of significant figures so that precision could enter into the testing of theories. But when we turn our attention from planetary orbits and electric oscillators to economies, ecological systems, societies and huge arrays of neurons bathing in a sea of biochemicals, the predictions lose their preciseness and the meaning of verification or falsification becomes fuzzy indeed. (Enter handwaving.) There can be no doubt that high speed computing is causing a radical change in how we do science and is altering the meaning of theory. The question arising is how we know that the “science” generated within the complexity domain is the “science” that operated from the PopperMargenau epistemology criteria and provided us the underlying understanding of nature that forms one of the bases of Western culture. How do the approaches differ? They both start with elements or agents understood in some detail and a set of interactions rules (the theory). Traditional science proceeds through logical or analytical operations to predicted results. Although the logic and mathematics may be very elaborate, the nature of the theoretical unfolding tends to be transparent. In complexity theory the intermediate operations are deep within the computer and much less transparent. Complexity theory has one other aspect that seems quite different: because of the large number of agents under study and the combinatoric nature of the interactions, the domain of possible outcomes tends to grow explosively, and pruning algorithms are included as part of the theory. This constant selection makes the unfolding even less transparent, and we are reduced to examining the outcomes with **little insight** into how they were arrived at. And finally, as noted by Hollings, the results of complexity theory to date do not give precise results but “in a qualitative sense resonate with the observable.” One of the most reassuring features of the classical scheme was the precision of prediction in many domains. The best known case, celestial mechanics, yielded very precise predictions about future paths of planetary orbits. But we now work in a domain where precise agreement is replaced by resonating with the observable in a qualitative sense. I believe that these two approaches are sufficiently far apart that we must moderate our claims and separate them from the traditional claims of science. Complexity theory is a very immature discipline, and in the vigor of our pursuit and enthusiasms for the possibilities, some **restraint must be shown.** Well, closet epistemologist that I am, why have I not solved the problems that I have set forth? It is not for lack of trying; rather it has proven much too hard a task for this editorial pen. Then again, the problem may be ten, twenty, or more years premature. I will, however, not refrain from needling my colleagues. We need more certain results or more modesty— maybe both.

## Key to policy making

**Identifying causal forces of past events helps predict the future and better enable policymakers to respond to future crises**

**Walt, 2005** – Prof, Kennedy School of Government @ Harvard (Stephen M., Annu. Rev. Polit. Sci. 2005. 8:23–48, pg. 31, “The Relationship Between Theory and Policy in International Relations,” http://www.iheid.ch/webdav/site/political\_science/shared/political\_science/3452/walt.pdf)

PREDICTION IR theories can also help policy makers anticipate events. By identifying the central causal forces at work in a particular era, theories offer a picture of the world and thus can provide policy makers with a better understanding of the broad context in which they are operating. Such knowledge may enable policy makers to prepare more intelligently and in some cases allow them to prevent unwanted developments. To note an obvious example, different theories of international politics offered contrasting predictions about the end of the Cold War. Liberal theories generally offered optimistic forecasts, suggesting that the collapse of communism and the spread of Western-style institutions and political forms heralded an unusually peaceful era (Fukuyama 1992, Hoffman et al. 1993, Russett 1995, Weart 2000). By contrast, realist theories of IR predicted that the collapse of the Soviet threat would weaken existing alliances (Mearsheimer 1989, Waltz 1994–1995, Walt 1997c), stimulate the formation of anti-U.S. coalitions (Layne 1993,Kupchan 2000), and generally lead to heightened international competition. Other realists foresaw a Pax Americana based on U.S. primacy (Wohlforth 1999, Brooks & Wohlforth 2000–2001), whereas scholars from different traditions anticipated either a looming “clash of civilizations” (Huntington 1997) or a “coming anarchy” arising from failed states in the developing world (Kaplan 2001). Some of these works were more explicitly theoretical than others, but each highlighted particular trends and causal relationships in order to sketch a picture of an emerging world.

**Predictions key to effective policymaking.
Chernoff, 2005** [Harvey Picker Professor International Relations and Director of the International Relations Program at Colgate University (Fred, “The Power of International Theory: Reforging the link to foreign policy-making through scientific enquiry”, p. 9]

Even though many of these authors hope that IR theory can lead to ‘human emancipation’, their meta-theory undercuts its ability to do so. This trend in the theoretical literature in IR severs the link between IR theory and any significant ability to aid policy-makers to bring about emancipation or any other foreign policy goal. If they do not leave room for rationally grounded expectations about the future, that is, scientific-style prediction, then it will be impossible to formulate policies that can be expected to achieve various aims, including the emancipation of oppressed groups. Without the ability to say that a given action option has a higher probability than any of the other options of achieving the objective, e.g., a greater degree of emancipation of the target group, these theorists cannot recommend courses of action to achieve their desired goals. The loss of this essential capability has been largely overlooked by constructivists and reflectvists in the IR literature. All policy decisions are attempts to influence or bring about some future state of affairs. Policy-making requires some beliefs about the future, whether they are called ‘expectations’, ‘predictions’, ‘forecasts’ or ‘prognostications’. The next step in the argument is to show how such beliefs can be justified.

## Evidentiary standard

**Models reduce human error and lead to better predictions – even Tetlock’s study concludes that models can help expert predictions**

**Rieber, 2004** [Steven, Professor at Georgia State University , "How Statistical Models Can Help Intelligence Analysts," http://www.allacademic.com//meta/p\_mla\_apa\_research\_citation/0/7/3/6/0/pages73607/p73607-1.php]

A related point is that the models minimize random error. Human judgment is of course imperfect, and we often fail to treat like cases alike. The statistical models are boringly consistent: they always give the same weight to the same variables. This is not to say that the models are perfect predictors. They are far from perfect, and so are human experts. But using the models reduces one source of error that many experts without the models are subject to, namely random variation in their judgments. In addition to minimizing random error, the models can help counter the types of cognitive biases which plague much expert judgment. For example, many experts tend to overpredict by large margins. One study examined the accuracy of physicians’ predictions of bacteremia (bacteria the bloodstream). 6 When the doctors judged a patient 60% likely to have bacteremia, the actual probability was 12%. And when doctors were 100% certain of a diagnosis of bacteremia, they were correct only 40% of the time. 5 See Richard E. Neustadt and Ernest R. May, Thinking in Time. New York: Free Press (1986). 6 Roy M. Poses and Michelle Anthony, “Availability, Wishful Thinking, and Physicians’ Diagnostic Judgments for Patients with Suspected Bacteremia,” Medical Decision Making, Vol. 11 (1991), pp. 159-168. 5 Predictions by a statistical model are very unlikely to consistently overpredict a type of event. That is because the models are formed on the basis of large samples of similar events – and large samples generally do not undergo sudden and radical change in their basic characteristics. So when experts use the model to supplement their own judgment, they will be less likely to overpredict. Overprediction is one sort of cognitive bias. Another is overextremity (also known as overconfidence). While overprediction involves overestimating the probability in both low and high probability judgments, overextremity means overestimating at high probabilities and underestimating at low probabilities. A set of judgments is overextreme when the judge is overconfident that likely events will occur and overconfident that unlikely events will not occur. Many experts in international affairs have been shown to exhibit overextremity bias. Over the last 20 years Philip Tetlock of UC Berkeley has asked numerous experts to make predictions about events such as the future of the Soviet Union and South Africa. 7 Over all, when experts were 90% confident that an event would occur, they were correct only 59% of the time. And when the experts were 90% confident that an event would not occur, they were correct only 78% of the time. This is a classic case of overextremity bias. Tetlock also tested the results of simple mechanical predictors. As expected, these exhibited no overextremity bias. Thus, using the model can help counter overextreme predictions. Statistical models can help experts predict more accurately. This is because the models use only the relevant variables, they assign the correct values to the variables, they base their predictions on all the data rather than just the most memorable data, they minimize random error, and are not subject to cognitive biases. There exist promising models for predicting foreign events such as civil war, interstate war, and state failure.

**Predictions are feasible. They can be made logically from empirical evidence.**

**Chernoff, 2009** [Fred, Prof. IR and Dir. IR – Colgate U., European Journal of International Relations, “Conventionalism as an Adequate Basis for Policy-Relevant IR Theory”, 15:1, Sage]

For these and other reasons, many social theorists and social scientists have come to the conclusion that prediction is impossible. Well-known IR reflexivists like Rick Ashley, Robert Cox, Rob Walker and Alex Wendt have attacked naturalism by emphasizing the interpretive nature of social theory. Ashley is explicit in his critique of prediction, as is Cox, who says quite simply, ‘It is impossible to predict the future’ (Ashley, 1986: 283; Cox, 1987: 139, cf. also 1987: 393). More recently, Heikki Patomäki has argued that ‘qualitative changes and emergence are possible, but predictions are not’ defective and that the latter two presuppose an unjustifiably narrow notion of ‘prediction’.14 A determined prediction sceptic may continue to hold that there is too great a degree of complexity of social relationships (which comprise ‘open systems’) to allow any prediction whatsoever. Two very simple examples may circumscribe and help to refute a radical variety of scepticism. First, we all make reliable social predictions and do so with great frequency. We can predict with high probability that a spouse, child or parent will react to certain well-known stimuli that we might supply, based on extensive past experience. More to the point of IR prediction – scepticism, we can imagine a young child in the UK who (perhaps at the cinema) (1) picks up a bit of 19th-century British imperial lore thus gaining a sense of the power of the crown, without knowing anything of current balances of power, (2) hears some stories about the US–UK invasion of Iraq in the context of the aim of advancing democracy, and (3) hears a bit about communist China and democratic Taiwan. Although the specific term ‘preventative strike’ might not enter into her lexicon, it is possible to imagine the child, whose knowledge is thus limited, thinking that if democratic Taiwan were threatened by China, the UK would (possibly or probably) launch a strike on China to protect it, much as the UK had done to help democracy in Iraq. In contrast to the child, readers of this journal and scholars who study the world more thoroughly have factual information (e.g. about the relative military and economic capabilities of the UK and China) and hold some cause-and-effect principles (such as that states do not usually initiate actions that leaders understand will have an extremely high probability of undercutting their power with almost no chances of success). Anyone who has adequate knowledge of world politics would predict that the UK will not launch a preventive attack against China. In the real world, China knows that for the next decade and well beyond the UK will not intervene militarily in its affairs. While Chinese leaders have to plan for many likely — and even a few somewhat unlikely — future possibilities, they do not have to plan for various implausible contingencies: they do not have to structure forces geared to defend against specifically UK forces and do not have to conduct diplomacy with the UK in a way that would be required if such an attack were a real possibility. Any rational decision-maker in China may use some cause-and-effect (probabilistic) principles along with knowledge of specific facts relating to the Sino-British relationship to predict (P2) that the UK will not land its forces on Chinese territory — even in the event of a war over Taiwan (that is, the probability is very close to zero). The statement P2 qualifies as a prediction based on DEF above and counts as knowledge for Chinese political and military decision-makers. A Chinese diplomat or military planner who would deny that theory-based prediction would have no basis to rule out extremely implausible predictions like P2 and would thus have to prepare for such unlikely contingencies as UK action against China. A reflexivist theorist sceptical of ‘prediction’ in IR might argue that the China example distorts the notion by using a trivial prediction and treating it as a meaningful one. But the critic’s temptation to dismiss its value stems precisely from the fact that it is so obviously true. The value to China of knowing that the UK is not a military threat is significant. The fact that, under current conditions, any plausible cause-and-effect understanding of IR that one might adopt would yield P2, that the ‘UK will not attack China’, does not diminish the value to China of knowing the UK does not pose a military threat. A critic might also argue that DEF and the China example allow non-scientific claims to count as predictions. But we note that while physics and chemistry offer precise ‘point predictions’, other natural sciences, such as seismology, genetics or meteorology, produce predictions that are often much less specific; that is, they describe the predicted ‘events’ in broader time frame and typically in probabilistic terms. We often find predictions about the probability, for example, of a seismic event in the form ‘some time in the next three years’ rather than ‘two years from next Monday at 11:17 am’. DEF includes approximate and probabilistic propositions as predictions and is thus able to catagorize as a prediction the former sort of statement, which is of a type that is often of great value to policy-makers. With the help of these ‘non-point predictions’ coming from the natural and the social sciences, leaders are able to choose the courses of action (e.g. more stringent earthquake-safety building codes, or procuring an additional carrier battle group) that are most likely to accomplish the leaders’ desired ends. So while ‘point predictions’ are not what political leaders require in most decision-making situations, critics of IR predictiveness often attack the predictive capacity of IR theory for its inability to deliver them. The critics thus commit the straw man fallacy by requiring a sort of prediction in IR (1) that few, if any, theorists claim to be able to offer, (2) that are not required by policy-makers for theory-based predictions to be valuable, and (3) that are not possible even in some natural sciences.15 The range of theorists included in ‘reflexivists’ here is very wide and it is possible to dissent from some of the general descriptions. From the point of view of the central argument of this article, there are two important features that should be rendered accurately. One is that reflexivists reject explanation–prediction symmetry, which allows them to pursue causal (or constitutive) explanation without any commitment to prediction. The second is that almost all share clear opposition to predictive social science.16 The reflexivist commitment to both of these conclusions should be evident from the foregoing discussion.

**Statistical data relies on interpretation to give it meaning. This adds more variables into the equation of predictions making their outcomes suspect.**

**Harding, 1991** [Sandra, professor at the UCLA Graduate School of Education and Information Studies, “Whose science? Whose knowledge?” pg. 79-80]

Science fundamentally consist only of the formal and quantitative statements that express the results of research, and/or science is a unique method. If feminists do not have alternatives to logic and mathematics or to science’s unique method, then their criticisms may be relevant to sociological issues but not to science itself.” Galileo argued that nature speaks in the language of mathematics, so if we want to understand nature, we must learn to speak “her” language. Some conventionalists have understood this to mean that “real science” consists only of the formal statements that express such laws of nature as those discovered by Isaac Newton, Robert Boyle, and Albert Einstein. There can appear to be no social values in results of research that are expressed in formal symbols; however, formalization does not guarantee the absence of social values. For one thing, historians have argued that the history of mathematics and logic is no merely and external history about who discovered what when. They claim that the general social interests and preoccupations of a culture can appear in the forms of quantification and logic that its mathematics uses. Distinguished mathematicians have concluded that the ultimate test of the adequacy of mathematics is a pragmatic one: does it work to do what it was intended to do? Moreover, formal statements require interpretation in order to be meaningful. The results of the scientific inquiry can count as results only if scientists can understand what they refer to and mean. Without decisions about their referents and meanings, they cannot be used to make predictions, for example, or to stimulate future research. And as is the case with social laws, the referents and meanings of the laws of science are continually extended and contracted through decisions about the circumstances in which they should be considered to apply. There is also the fact that metaphors have played an important role in melding nature and specifying the appropriate domain of a theory. To take a classic example, “nature is a machine” was not just a useful heuristic for explaining the new Newtonian physics but an inseparable part of that theory, one that created the metaphors of the theory and showed scientists how to extend and develop it. Thus, social metaphors provided part of the evidence for the claims of the new sciences; some of their more formal proprieties still appear as the kinds of relations modeled by the mathematic expression of the natural sciences. They were not only “outside” the process of testing hypothesis; they were also “inside” it. The social relations of the period, which both made possible and were in turn supported by the machines on which Newton’s mechanistic laws were modeled, functioned as—were- part of the evidence for Newtonian physics. Giving up the belief that science is really or fundamentally only a collection of mathematical statements is necessary if we are to begin to explain the history and practices of science. Insistence on this belief is a way of irrationally restricting thought.

## Passivity Turn

**No predictions means vote aff because the alt is useless at best.**

**Chernoff, 2009** [Fred, Prof. IR and Dir. IR – Colgate U., European Journal of International Relations, “Conventionalism as an Adequate Basis for Policy-Relevant IR Theory”, 15:1, Sage]

Other reflexivist theorists reject prediction more by omission. For example, Walker and Wendt are less explicit but are still quite clear in their rejections of prediction in IR. While Walker (1993) offers a sustained critique of naturalism and the empiricist (though not empirical) approach to the social sciences, he focuses on the logic of explanation and the presuppositions of the dominant forms of theory rather than questions connected to ‘prediction’. He ignores the notion of ‘prediction’. Wendt is of course one of the principal figures in American constructivism and, like others in that group, emphasizes scientific-style explanation. But at no point does he endorse prediction. Wendt lays out his extensive metatheory in Social Theory of International Politics (1999) but barely even mentions ‘prediction’. Rationalist scholars rarely note the problem that prediction – scepticism creates for the empirical value that IR theory might have. John Mearsheimer is one of the exceptions. He observes that reflexivists hope to improve the world by making it more cooperative and peaceful, which they hold will be advanced by eliminating the ‘hegemonic discourse’ of realism. But, as Mearsheimer points out, if the reflexivists were to eliminate the hegemonic discourse, then, since they do not have any way to predict what would follow in its place, the change may be a shift from realism to fascism.12 There is a related but somewhat more radical implication, which Mearsheimer does not mention, namely that without any ability to predict in the social world, it is possible that reflexivists may succeed in creating a more institutionally oriented discourse, but that discourse might not produce any change whatever in real-world politics. If they reject causal (probabilistic) connections projected into the future between events, states of affairs, or event-types, then there is no reason to believe that any specific change will lead to any effect at all.13

**Even if some predictions prove to be wrong, out-right rejections guarantees inaction and even greater impacts to human security**

**James, 2008** [Patrick, professor of International Relations in the USC College and director of USC's Center for International Studies, 2-16- “For U.S. Foreign Policy, Self-Interest Is Morality”, Real Clear Politics]

However, it isn't just important which way U.S. foreign policy shifts; it's the motivation for movement. Critics who call for an emphasis on human rights, human security or other high-sounding principles aren't thinking far enough ahead. Instead, the way forward is a pragmatic building upon the opportunities created by the wars that, for better or worse, are already in progress. This involves identifying the opportunities and pursuing them on the basis of self-interest rather than abstract moral principles. As will become apparent, this approach will create the greatest good for the most people over the longest period of time. Why not a politics of morality? The general answer is that -- with rare exceptions -- it isn't obvious what actions are morally right or wrong at the time they occur. Soviet-imposed dictatorship and South African apartheid look very bad today; yet people of good will differed for decades on what precisely to do about them. No evidence exists that the best policies will come out of any particular moral frame of reference, be it religious, secular progressive or something else. As the saying goes, the road to hell is paved with good intentions. Consider, for example, the lessons to be learned from the Carter administration's emphasis on human rights in foreign policy. One could ask just how much this policy did to produce more human rights. Remember Iran, the test case for the Carter team's new way of doing things? Three decades later, we face a leader who is attempting to dismantle nascent democracy while announcing that his country is free from homosexuality. We might mention that Mahmoud Ahmadinejad likes to talk about weapons of mass destruction as well. Of course, the Carter administration has been gone for a long time, but its petulant shift from political realism to idealism ended up producing less in the way of human rights for Iranians than virtually anything that might have been considered. The best long-term results in terms of either the national interest or moral standing are unlikely to come about through a foreign policy grounded in idealism. The path toward human freedom is best pursued by pragmatically making the most of the opportunities that come along, rather than trying to figure out the "right" thing to do. Was the Iraq war a good idea? The only sensible answer to give right now is: "Who knows?" It could be decades before the impact of this war is appreciated. What we can do now is calculate its likely effect on other pressing problems and make the most of things from the standpoint of America's national interest.

**And, inaction sanctions genocide – this is an independent reason to reject**

**Willis, 1995** (Ellen, The Village Voice)

If intellectuals are more inclined to rise to the discrete domestic issue than the historic international moment, this may have less to do with the decay of the notion of international solidarity than with the decay of confidence in their ability to change the world, not to mention the decay of anything resembling a coherent framework of ideas within which to understand it. Certainly the received ideas of the left, to the extent that a left can still be said to exist, have been less than helpful as a framework for understanding the Bosnian crisis or organizing a response to it. Although the idea of American imperialism explains less and less in a world where the locus of power is rapidly shifting to a network of transnational corporations, it still fuels a strain of reflexive anti-interventionist sentiment whose practical result is paralyzed dithering in the face of genocide. Floating around "progressive" circles and reinforcing the dithering is a brand of vulgar pacifism whose defining characteristic is not principled rejection of violence but squeamish aversion to dealing with it. In the academy in particular, entrenched assumptions about identity politics and cultural relativism promote a view of the Balkan conflict as too complicated and ambiguous to allow for choosing sides. If there is no such thing as universality, if multiethnic democracy is not intrinsically preferable to ethnic separatism, if there are no clear-cut aggressors and victims but merely clashing cultures, perhaps ethnic partition is simply the most practical way of resolving those "implacable ancient rivalries."

## Paralysis Turn

**The bystander effect creates complacency in face of danger; individuals stare frozen, without their autonomy to act against atrocities. This makes extinction inevitable as individuals refuse to take action.**

**Yudkowsky, 2008** - Research Fellow at the Singularity Institute for Artificial Intelligence (Eliezer, “Cognitive biases potentially affecting judgment of global risks”, peer edited by the Singularity Institute, [http://singularity.org/files/CognitiveBiases.pdf)//BZ](http://singularity.org/files/CognitiveBiases.pdf%29//BZ)

My last bias comes, not from the field of heuristics and biases, but from the field of social psychology. A now-famous series of experiments by Latanée and Darley (1969) uncovered the bystander eﬀect, also known as bystander apathy, in which larger numbers of people are less likely to act in emergencies—not only individually, but collectively. 75% of subjects alone in a room, noticing smoke entering from under a door, left to report it. When three naive subjects were present, the smoke was reported only 38% of the time. A naive subject in the presence of two confederates who purposely ignored the smoke, even when the room became hazy, left to report the smoke only 10% of the time. A college student apparently having an epileptic seizure was helped 85% of the time by a single bystander and 31% of the time by five bystanders. The bystander eﬀect is usually explained as resulting from diﬀusion of responsibility and pluralistic ignorance. Being part of a group reduces individual responsibility. Everyone hopes that someone else will handle the problem instead, and this reduces the individual pressure to the point that no one does anything. Support for this hypothesis is adduced from manipulations in which subjects believe that the victim is especially dependent on them; this reduces the bystander eﬀect or negates it entirely. Cialdini (2001) recommends that if you are ever in an emergency, you single out one single bystander, and ask that person to help—thereby overcoming the diﬀusion. Pluralistic ignorance is a more subtle eﬀect. Cialdini (2001) writes: Very often an emergency is not obviously an emergency. Is the man lying in the alley a heart-attack victim or a drunk sleeping one oﬀ? . . . In times of such uncertainty, the natural tendency is to look around at the actions of others for clues. We can learn from the way the other witnesses are reacting whether the event is or is not an emergency. What is easy to forget, though, is that everybody else observing the event is likely to be looking for social evidence, too. Because we all prefer to appear poised and unflustered among others, we are likely to search for that evidence placidly, with brief, camouflaged glances at those around us. Therefore everyone is likely to see everyone else looking unruﬄed and failing to act. The bystander eﬀect is not about individual selfishness, or insensitivity to the suﬀering of others. Alone subjects do usually act. Pluralistic ignorance can explain, and individual selfishness cannot explain, subjects failing to react to a room filling up with smoke. In experiments involving apparent dangers to either others or the self, subjects placed with nonreactive confederates frequently glance at the nonreactive confederates. I am sometimes asked: “If 〈existential risk X〉 is real, why aren’t more people doing something about it?” There are many possible answers, a few of which I have touched on here. People may be overconfident and over-optimistic. They may focus on overly specific scenarios for the future, to the exclusion of all others. They may not recall any past extinction events in memory. They may overestimate the predictability of the past, and hence underestimate the surprise of the future. They may not realize the diﬃculty of preparing for emergencies without benefit of hindsight. They may prefer philanthropic gambles with higher payoﬀ probabilities, neglecting the value of the stakes. They may conflate positive information about the benefits of a technology as negative information about its risks. They may be contaminated by movies where the world ends up being saved. They may purchase moral satisfaction more easily by giving to other charities. Or the extremely unpleasant prospect of human extinction may spur them to seek arguments that humanity will not go extinct, without an equally frantic search for reasons why we would. But if the question is, specifically, “Why aren’t more people doing something about it?”, one possible component is that people are asking that very question—darting their eyes around to see if anyone else is reacting to the emergency, meanwhile trying to appear poised and unflustered. If you want to know why others aren’t responding to an emergency, before you respond yourself, you may have just answered your own question.

**Predictions avoid a state of permanent emergency. They allow us to reclaim our agency from passivity.**

**Bindé, 2000** [Jérôme, Dir. Analysis and Forecasting Office – UNESCO, Public Culture, “Toward an Ethics of the Future”, 12:1, Project Muse]

An ethics of the future is not an ethics in the future. If tomorrow is always too late, then today is often already very late. The disparities between North and South, and increasingly between North and North and between South and South, the growing rift within the very heart of societies, population growth, the threat of an ecological crisis on a planetary scale, and the way societies have lost control and surrendered to the hands of "anonymous masters" all call for a new paradoxical form of emergency, the emergency of the long term. To adopt, as quickly as possible, a constructive and preventive attitude means preserving future generations from the fever of immediacy, from reactive passivity, from refuge in artificial or virtual illusory paradises, and from omnipotent emergency. Through a forward-looking approach, we can be in a position to offer generations to come what we are deprived of today--a future. Institutions have the power to forecast or not to forecast. This is an awesome responsibility. By choosing not to forecast, they choose to postpone indefinitely their much needed long-term action for the sake of short-term emergency: They condemn themselves, literally, to passivity, dependency, and, ultimately, to obsolescence and nonexistence. By choosing to forecast and by refusing to become purely reactive agents, they will not only preserve their institutional independence but also send a strong message to other policymakers and decisionmakers worldwide that the first object of policy, and its first responsibility, is the future. Max Weber justly warned that "the proper business of the politician is the future and his responsibility before the future." The failure to use foresight, in other words, is not just a benign failure of intelligence: It is a culpable neglect of future generations. Is it not therefore surprising that, once foresight has been applied, once an issue has been recognised as a policy priority by all parties concerned, once international instruments have been signed that declare the commitment to act on this [End Page 56] foresight, we should fail so miserably to take the appropriate measures? Take development aid: In 1974, developed countries solemnly agreed to dedicate 0.7 percent of their GDP to development aid; nearly a quarter of a century later, in 1997, they contribute 0.22 percent of their GDP to development aid, and one superpower dedicates only 0.09 percent to it. 5 Take the issue of the global environment: Seven years after the 1992 Earth Summit in Rio, Agenda 21 remains, for the greater part, a dead letter, and the promising but timid advances made at the Kyoto Summit have since been all but forgotten. In both instances, foresight was exerted and solemn oaths taken to act on this foresight, in order to remedy pressing problems. In both instances, action has been delayed, and problems have been allowed to become more pressing. How long can we afford the luxury of inactivity? An ethics of the future, if it remains an ethics in the future, is an injustice committed against all generations, present and future. To paraphrase a common saying, the future delayed is the future denied.

**Predictions necessary to prevent true existential risk – can't just theorize about complexity**

**Yudkowsky, 2008** - Research Fellow at the Singularity Institute for Artificial Intelligence (Eliezer, “Cognitive biases potentially affecting judgment of global risks”, peer edited by the Singularity Institute, [http://singularity.org/files/CognitiveBiases.pdf)//BZ](http://singularity.org/files/CognitiveBiases.pdf%29//BZ)

Thinking about existential risks falls prey to all the same fallacies that prey upon thinking-in-general. But the stakes are much, much higher. A common result in heuristics and biases is that oﬀering money or other incentives does not eliminate the bias. Kachelmeier and Shehata (1992) oﬀered subjects living in the People’s Republic of China the equivalent of three months’ salary. The subjects in these experiments don’t make mistakes on purpose; they make mistakes because they don’t know how to do better. Even if you told them the survival of humankind was at stake, they still would not thereby know how to do better. It might increase their need for closure, causing them to do worse. It is a terribly frightening thing, but people do not become any smarter, just because the survival of humankind is at stake. In addition to standard biases, I have personally observed what look like harmful modes of thinking specific to existential risks. The Spanish flu of 1918 killed 25-50 million people. World War II killed 60 million people. 10 is the order of the largest catastrophes in humanity’s written history. Substantially larger numbers, such as 500 million deaths, and especially qualitatively diﬀerent scenarios such as the extinction of the entire human species, seem to trigger a diﬀerent mode of thinking—enter into a “separate magisterium”. People who would never dream of hurting a child hear of an existential risk, and say, “Well, maybe the human species doesn’t really deserve to survive.” There is a saying in heuristics and biases that people do not evaluate events, but descriptions of events—what is called non-extensional reasoning. The extension of humanity’s extinction includes the death of yourself, of your friends, of your family, of your loved ones, of your city, of your country, of your political fellows. Yet people who would take great oﬀense at a proposal to wipe the country of Britain from the map, to kill every member of the Democratic Party in the U.S., to turn the city of Paris to glass—who would feel still greater horror on hearing the doctor say that their child had cancer— these people will discuss the extinction of humanity with perfect calm. “Extinction of humanity”, as words on paper, appears in fictional novels, or is discussed in philosophy books—it belongs to a diﬀerent context than the Spanish flu. We evaluate descriptions of events, not extensions of events. The cliché phrase end of the world invokes the magisterium of myth and dream, of prophecy and apocalypse, of novels and movies. The challenge of existential risks to rationality is that, the catastrophes being so huge, people snap into a diﬀerent mode of thinking. Human deaths are suddenly no longer bad, and detailed predictions suddenly no longer require any expertise, and whether the story is told with a happy ending or a sad ending is a matter of personal taste in stories.

## Threat Turn

**Turn—rejecting strategic predictions of threats makes them inevitable—decision makers will rely on preconceived conceptions of threat rather than the more qualified predictions of analysts**

**Fitzsimmons, 2007** [Michael, Washington DC defense analyst, “The Problem of Uncertainty in Strategic Planning”, Survival, Winter 06-07, online]

But handling even this weaker form of uncertainty is still quite challeng- ing. If not sufficiently bounded, a high degree of variability in planning factors can exact a significant price on planning. The complexity presented by great variability strains the cognitive abilities of even the most sophisticated decision- makers.15 And even a robust decision-making process sensitive to cognitive limitations necessarily sacrifices depth of analysis for breadth as variability and complexity grows. It should follow, then, that in planning under conditions of risk, variability in strategic calculation should be carefully tailored to available analytic and decision processes. Why is this important? What harm can an imbalance between complexity and cognitive or analytic capacity in strategic planning bring? Stated simply, where analysis is silent or inadequate, the personal beliefs of decision-makers fill the void. As political scientist Richard Betts found in a study of strategic sur- prise, in ‘an environment that lacks clarity, abounds with conflicting data, and allows no time for rigorous assessment of sources and validity, ambiguity allows intuition or wishfulness to drive interpretation ... The greater the ambiguity, the greater the impact of preconceptions.’16 The decision-making environment that Betts describes here is one of political-military crisis, not long-term strategic planning. But a strategist who sees uncertainty as the central fact of his environ- ment brings upon himself some of the pathologies of crisis decision-making. He invites ambiguity, takes conflicting data for granted and substitutes a priori scepticism about the validity of prediction for time pressure as a rationale for discounting the importance of analytic rigour. It is important not to exaggerate the extent to which data and ‘rigorous assessment’ can illuminate strategic choices. Ambiguity is a fact of life, and scepticism of analysis is necessary. Accordingly, the intuition and judgement of decision-makers will always be vital to strategy, and attempting to subordinate those factors to some formulaic, deterministic decision-making model would be both undesirable and unrealistic. All the same, there is danger in the opposite extreme as well. Without careful analysis of what is relatively likely and what is relatively unlikely, what will be the possible bases for strategic choices? A decision-maker with no faith in prediction is left with little more than a set of worst-case scenarios and his existing beliefs about the world to confront the choices before him. Those beliefs may be more or less well founded, but if they are not made explicit and subject to analysis and debate regarding their application to particular strategic contexts, they remain only beliefs and premises, rather than rational judgements. Even at their best, such decisions are likely to be poorly understood by the organisations charged with their implementation. At their worst, such decisions may be poorly understood by the decision-makers themselves.

## AT: Tetlock

**Tetlock doesn’t indict all predictions, just those that are made by pundits without evidence**

**Menand, 2005** [Louis, The New Yorker, 10/5, lexis]

It was no news to Tetlock, therefore, that experts got beaten by formulas. But he does believe that he discovered something about why some people make better forecasters than other people. It has to do not with what the experts believe but with the way they think. Tetlock uses Isaiah Berlin's metaphor from Archilochus, from his essay on Tolstoy, "The Hedgehog and the Fox," to illustrate the difference. He says: Low scorers look like hedgehogs: thinkers who "know one big thing," aggressively extend the explanatory reach of that one big thing into new domains, display bristly impatience with those who "do not get it," and express considerable confidence that they are already pretty proficient forecasters, at least in the long term. High scorers look like foxes: thinkers who know many small things (tricks of their trade), are skeptical of grand schemes, see explanation and prediction not as deductive exercises but rather as exercises in flexible "ad hocery" that require stitching together diverse sources of information, and are rather diffident about their own forecasting prowess. A hedgehog is a person who sees international affairs to be ultimately determined by a single bottom-line force: balance-of-power considerations, or the clash of civilizations, or globalization and the spread of free markets. A hedgehog is the kind of person who holds a great-man theory of history, according to which the Cold War does not end if there is no Ronald Reagan. Or he or she might adhere to the "actor-dispensability thesis," according to which Soviet Communism was doomed no matter what. Whatever it is, the big idea, and that idea alone, dictates the probable outcome of events. For the hedgehog, therefore, predictions that fail are only "off on timing," or are "almost right," derailed by an unforeseeable accident. There are always little swerves in the short run, but the long run irons them out. Foxes, on the other hand, don't see a single determining explanation in history. They tend, Tetlock says, "to see the world as a shifting mixture of self-fulfilling and self-negating prophecies: self-fulfilling ones in which success breeds success, and failure, failure but only up to a point, and then self-negating prophecies kick in as people recognize that things have gone too far." Tetlock did not find, in his sample, any significant correlation between how experts think and what their politics are. His hedgehogs were liberal as well as conservative, and the same with his foxes. (Hedgehogs were, of course, more likely to be extreme politically, whether rightist or leftist.) He also did not find that his foxes scored higher because they were more cautious-that their appreciation of complexity made them less likely to offer firm predictions. Unlike hedgehogs, who actually performed worse in areas in which they specialized, foxes enjoyed a modest benefit from expertise. Hedgehogs routinely over-predicted: twenty per cent of the outcomes that hedgehogs claimed were impossible or nearly impossible came to pass, versus ten per cent for the foxes. More than thirty per cent of the outcomes that hedgehogs thought were sure or near-sure did not, against twenty per cent for foxes. The upside of being a hedgehog, though, is that when you're right you can be really and spectacularly right. Great scientists, for example, are often hedgehogs. They value parsimony, the simpler solution over the more complex. In world affairs, parsimony may be a liability-but, even there, there can be traps in the kind of highly integrative thinking that is characteristic of foxes. Elsewhere, Tetlock has published an analysis of the political reasoning of Winston Churchill. Churchill was not a man who let contradictory information interfere with his idees fixes. This led him to make the wrong prediction about Indian independence, which he opposed. But it led him to be right about Hitler. He was never distracted by the contingencies that might combine to make the elimination of Hitler unnecessary. Tetlock also has an unscientific point to make, which is that "we as a society would be better off if participants in policy debates stated their beliefs in testable forms"-that is, as probabilities-"monitored their forecasting performance, and honored their reputational bets." He thinks that we're suffering from our primitive attraction to deterministic, overconfident hedgehogs. It's true that the only thing the electronic media like better than a hedgehog is two hedgehogs who don't agree. Tetlock notes, sadly, a point that Richard Posner has made about these kinds of public intellectuals, which is that most of them are dealing in "solidarity" goods, not "credence" goods. Their analyses and predictions are tailored to make their ideological brethren feel good-more white swans for the white-swan camp. A prediction, in this context, is just an exclamation point added to an analysis. Liberals want to hear that whatever conservatives are up to is bound to go badly; when the argument gets more nuanced, they change the channel. On radio and television and the editorial page, the line between expertise and advocacy is very blurry, and pundits behave exactly the way Tetlock says they will. Bush Administration loyalists say that their predictions about postwar Iraq were correct, just a little off on timing; pro-invasion liberals who are now trying to dissociate themselves from an adventure gone bad insist that though they may have sounded a false alarm, they erred "in the right direction"-not really a mistake at all.

**They misread Tetlock—his argument is just that you should rationally weigh costs and benefits**

**Tetlock, 2005** [Philip, psychologist, Expert Political Judgement, http://www.pupress.princeton.edu/chapters/s7959.html]

Chapters 2 and 3 explore correspondence indicators. Drawing on the literature on judgmental accuracy, I divide the guiding hypotheses into two categories: those rooted in radical skepticism, which equates good political judgment with good luck, and those rooted in meliorism, which maintains that the quest for predictors of good judgment, and ways to improve ourselves, is not quixotic and there are better and worse ways of thinking that translate into better and worse judgments. Chapter 2 introduces us to the radical skeptics and their varied reasons for embracing their counterintuitive creed. Their guiding precept is that, although we often talk ourselves into believing we live in a predictable world, we delude ourselves: history is ultimately one damned thing after another, a random walk with upward and downward blips but devoid of thematic continuity. Politics is no more predictable than other games of chance. On any given spin of the roulette wheel of history, crackpots will claim vindication for superstitious schemes that posit patterns in randomness. But these schemes will fail in cross-validation. What works today will disappoint tomorrow.34 Here is a doctrine that runs against the grain of human nature, our shared need to believe that we live in a comprehensible world that we can master if we apply ourselves.35 Undiluted radical skepticism requires us to believe, really believe, that when the time comes to choose among controversial policy options--to support Chinese entry into the World Trade Organization or to bomb Baghdad or Belgrade or to build a ballistic missile defense--we could do as well by tossing coins as by consulting experts.36 Chapter 2 presents evidence from regional forecasting exercises consistent with this debunking perspective. It tracks the accuracy of hundreds of experts for dozens of countries on topics as disparate as transitions to democracy and capitalism, economic growth, interstate violence, and nuclear proliferation. When we pit experts against minimalist performance benchmarks--dilettantes, dart-throwing chimps, and assorted extrapolation algorithms--we find few signs that expertise translates into greater ability to make either "well-calibrated" or "discriminating" forecasts. Radical skeptics welcomed these results, but they start squirming when we start finding patterns of consistency in who got what right. Radical skepticism tells us to expect nothing (with the caveat that if we toss enough coins, expect some streakiness). But the data revealed more consistency in forecasters' track records than could be ascribed to chance. Meliorists seize on these findings to argue that crude human-versus-chimp comparisons mask systematic individual differences in good judgment. Although meliorists agree that skeptics go too far in portraying good judgment as illusory, they agree on little else. Cognitive-content meliorists identify good judgment with a particular outlook but squabble over which points of view represent movement toward or away from the truth. Cognitive-style meliorists identify good judgment not with what one thinks, but with how one thinks. But they squabble over which styles of reasoning--quick and decisive versus balanced and thoughtful--enhance or degrade judgment. Chapter 3 tests a multitude of meliorist hypotheses--most of which bite the dust. Who experts were--professional background, status, and so on--made scarcely an iota of difference to accuracy. Nor did what experts thought--whether they were liberals or conservatives, realists or institutionalists, optimists or pessimists. But the search bore fruit. How experts thought--their style of reasoning--did matter. Chapter 3 demonstrates the usefulness of classifying experts along a rough cognitive-style continuum anchored at one end by Isaiah Berlin's prototypical hedgehog and at the other by his prototypical fox.37 The intellectually aggressive hedgehogs knew one big thing and sought, under the banner of parsimony, to expand the explanatory power of that big thing to "cover" new cases; the more eclectic foxes knew many little things and were content to improvise ad hoc solutions to keep pace with a rapidly changing world. Treating the regional forecasting studies as a decathlon between rival strategies of making sense of the world, the foxes consistently edge out the hedgehogs but enjoy their most decisive victories in long-term exercises inside their domains of expertise. Analysis of explanations for their predictions sheds light on how foxes pulled off this cognitive-stylistic coup. The foxes' self-critical, point-counterpoint style of thinking prevented them from building up the sorts of excessive enthusiasm for their predictions that hedgehogs, especially well-informed ones, displayed for theirs. Foxes were more sensitive to how contradictory forces can yield stable equilibria and, as a result, "overpredicted" fewer departures, good or bad, from the status quo. But foxes did not mindlessly predict the past. They recognized the precariousness of many equilibria and hedged their bets by rarely ruling out anything as "impossible." These results favor meliorism over skepticism--and they favor the pro-complexity branch of meliorism, which proclaims the adaptive superiority of the tentative, balanced modes of thinking favored by foxes,38 over the pro-simplicity branch, which proclaims the superiority of the confident, decisive modes of thinking favored by hedgehogs.39 These results also domesticate radical skepticism, with its wild-eyed implication that experts have nothing useful to tell us about the future beyond what we could have learned from tossing coins or inspecting goat entrails. This tamer brand of skepticism--skeptical meliorism--still warns of the dangers of hubris, but it allows for how a self-critical, dialectical style of reasoning can spare experts the big mistakes that hammer down the accuracy of their more intellectually exuberant colleagues.