# 1NR

## Heidegger

### Overview

#### The 1NC Waddington evidence says that the resource utilization of the 1AC is a symptom of their ontological enframement. “challenging-forth changes the way we see the world—as Michael Zimmerman pointedly remarks, ‘To be capable of transforming a forest into packaging for cheeseburgers, man must see the forest not as a display of the miracle of life, but as raw material, pure and simple’ (1977, p. 79).Production in the mode of challenging-forth reveals objects that have the status of standing-reserve . Objects that have been made standing-reserve have been reduced to disposability”

#### This means the K outweighs the case: The affirmatives’ obsession with resource utilization is a symptom of their ontological enframement. This enframement will spiral out of control, turning everything into a resource, destroying the value to life.

#### The role of the ballot is to endorse the team with the best ontological relationship

#### Root cause: all of their impacts are symptoms of technological enframment and a failure to properly define a connected ontology

#### Self-fulfilling prophecy: the affirmative’s ontology creates a never-ending desire for resources that will inevitably lead to the nuclear annihilation they fear

#### K turns the case: there is no end to technological thought and rationale – it will continue to find more destructive ways to control life and death, eradicating all value to life and making their impacts inevitable

Beckman 2k [Tad: Emeritus Professor of Philosophy, Humanities and Social Sciences at Harvey Mudd College, “Martin Heidegger and Environmental Ethics,” http://www2.hmc.edu/~tbeckman/personal/Heidart.html].

The threat of nuclear annihilation is, currently, the most dramatic and ironic sign of technology's "success" and of its overwhelming power; mass itself has been grasped as a standing-reserve of enormous energy. On the one hand we consider ourselves, rightfully, the most advanced humans that have peopled the earth but, on the other hand, we can see, when we care to, that our way of life has also become the most profound threat to life that the earth has yet witnessed. [(14)](http://thuban.ac.hmc.edu/%7Etbeckman/personal/Heidart.html#N_14_) Medical science and technology have even begun to suggest that we may learn enough about disease and the processes of aging in the human body that we might extend individual human lives indefinitely. In this respect, we have not only usurped the gods' rights of creation and destruction of species, but we may even usurp the most sacred and terrifying of the gods' rights, the determination of mortality or immortality. The gods, it is true, have been set aside in our time; they are merely antiquated conceptions. The gods, it is true, have been set aside in our time; they are merely antiquated conceptions. The "withdrawal of the gods" is a sign of our pervasive power and our progressive "ego-centrism."**The human ego stands at the center of everything and, indeed, sees no other thing or object with which it must reckon on an equal footing. We have become alone in the universe in the most profound sense. Looking outward, we see only ourselves in so far as we see only objects standing-in-reserve for our dispositions.** It is no wonder that we have "ethical problems" with our environment because the whole concept of the environment has been profoundly transformed. **A major portion of the environment in which modern Westerners live, today, is the product of human fabrication and this makes it ever more difficult for us to discover a correct relationship with that portion of the environment that is still given to us. It is all there to be taken, to be manipulated, to be used and consumed,** it seems. But what in that conception limits us or hinders us from using it in any way that we wish? **There is nothing that we can see today that really hinders us from doing anything with the environment, including if we wish destroying it completely and for all time.** This, I take it is the challenge of environmental ethics, the challenge of finding a way to convince ourselves that there are limits of acceptable human action where the environment is involved. But where can we look for the concepts that we need to fabricate convincing arguments?

#### Alternative solves. By allowing being to disclose itself to us we open the multiplicity of being. This is the only way to prevent the impacts of challenging forth by preventing the concealing that is inherent in revealing. That’s Waddington.

#### We should read our possibilities as debaters ontologically and open ourselves up to the possibility of Being revealing itself to us non-technologiclly

Heidegger and Spiegel 66. “Heidegger, Der Spiegel Interview” Philosophy Today 20 (Whiter 1976): 267-284. Scanned from Gunther Neske & Emil Kettering (eds), Martin Heidegger and National Socialism, New York: Paragon House, 1990, pp. 41-66.

SPIEGEL: You apparently see, so you have expressed it, a world movement that either brings about or has already brought about the absolute technological state? HEIDEGGER: Yes! But it is precisely the technological state that least corresponds to the world and society determined by the essence of technology. The technological state would be the most obsequious and blind servant in the face of the power of technology. SPIEGEL: Fine. But now the question of course poses itself: Can the individual still influence this network of inevitabilities at all, or can philosophy influence it, or can they both influence it together in that philosophy leads one individual or several individuals to a certain action? HEIDEGGER: Those questions bring us back to the beginning of our conversation. If I may answer quickly and perhaps somewhat vehemently, but from long reflection: Philosophy will not be able to bring about a direct change of the present state of the world. This is true not only of philosophy but of all merely human meditations and endeavors. Only a god can still save us. I think the only possibility of salvation left to us is to prepare readiness, through thinking and poetry, for the appearance of the god or for the absence of the god during the decline; so that we do not, simply put, die meaningless deaths, but that when we decline, we decline in the face of the absent god. SPIEGEL: Is there a connection between your thinking and the emergence of this god? Is there, as you see it, a causal connection? Do you think we can get this god to come by thinking? HEIDEGGER: We cannot get him to come by thinking. At best we can prepare the readiness of expectation. SPIEGEL: But can we help? HEIDEGGER: The preparation of readiness could be the first step. The world cannot be what and how it is through human beings, but neither can it be so without human beings. In my opinion that is connected to the fact that what I call “Being,” using a traditional, ambiguous, and now worn-out word, needs human beings. Being is not Being without humans being needed for its revelation, protection, and structuring. I see the essence of technology in what I call the con-struct. This name, on first hearing easily misunderstood, points, if it is properly considered, back into the innermost history of metaphysics, which still determines our existence [Dasein] today. The workings of the con-struct mean: Human beings are caught [gestellt], claimed, and challenged by a power that is revealed in the essence of technology. The experience that humans are structured [gestellt] by some-thing that they are not themselves and that they cannot control themselves is precisely the experience that may show them the possibility of the insight that humans are needed by Being. The possibility of experience, of being needed, and of being prepared for these new possibilities is concealed in what makes up what is most modern technology’s own. Thinking can do nothing more than to help humans to this insight, and philosophy is at an end. SPIEGEL: In earlier times – and not only in earlier times – it was thought that philosophy was indirectly very effective (seldom directly), that it helped new currents to emerge. Just thinking of Germans, great names like Kant, Hegel, up to Nietzsche, not to mention Marx

, it can be proved that philosophy has had, in roundabout ways, an enormous effect. Do you think this effectiveness of philosophy is at an end? And when you say philosophy is dead, that it no longer exists are you including the idea that the effectiveness of philosophy (if indeed it ever existed) today, at least, no longer exists? HEIDEGGER: I just said that an indirect, but not a direct, effect is possible through another kind of thinking. Thus thinking can, as it were, causally change the condition of the world. SPIEGEL: Please excuse us; we do not want to philosophize (we are not up to that), but here we have the link between politics and philosophy, so please forgive us for pushing you into such a conversation. You just said philosophy and the individual can do nothing except... HEIDEGGER: ... this preparation of readiness for keeping oneself open to the arrival or absence of the god. The experience of this absence is not nothing, but rather a liberation of human beings from what I called the “fallenness into beings” in Being and Time. A contemplation of what is today is a part of a preparation of the readiness we have been talking about. SPIEGEL: But then there really would have to be the famous impetus from outside, from a god or whomever. So thinking, of its own accord and self- sufficiently, can no longer be effective today? It was, in the opinion of people in the past, and even, I believe, in our opinion. HEIDEGGER: But not directly.

### A2: Owen

#### Their Owen argument is another link – by rejecting our “theory-driven” approach in favor of an action based framework they forclose ways of being to disclose itself to us and get trapped up in technological thought. They have no other way of viewing the world other than through something that must be acted upon.

#### Conventional political theories that attempt to render the world calculable by inescapable simplification erase the possibility of truth and necessitate violence

Dillon 96 [Michael, professor Politics and International Relations at the University of Lancaster, *The Politics of Security*,pp. 75-76]

I recognise the danger that this movement of mine could be taken to excuse paying insufficiently close attention to Heidegger’s texts, or of failing to understand enough about what Heidegger has tried to say, and of similarly failing to do justice to these other complex and important thinkers. Such a danger will always exist, of course, especially when dealing with a thinker who is not only as difficult and subtle, not to say obscure, as Heidegger, but whose thought also evolved in important ways, exciting powerful responses from other eminent philosophers. Although I may very well fail on all these counts I do not intend, however, to take any liberties either with Heidegger or with the others. Rather, I am mindful, here, of Robert Bernasconi’s wise observation. Issued specifically in respect of Heidegger, it has a certain relevance to these other thinkers as well. ‘One cannot readily say what Heidegger says’, Robert Bernasconi notes, for the simple reason that Heidegger overcomes the ‘what’ of essentia by transforming the way of saying. Hence all writing about Heidegger should begin and end with a disclaimer. The disclaimer, in attempting to be faithful to what claimed [my emphasis] Heidegger, must at the same time disregard his warnings and lift the silence about silence.118 My object, then, is not to provide myself with excuses in advance but to explain instead both how I have tried to go about this work, and that—as I pursued what claimed my attention; specifically the aporia of obligatory freedom as it is simultaneously both disclosed and endangered through the preoccupation with security—the very path of my own thinking, as well as the content of it, began to change. ‘What happens’, Gerald Bruns asks, ‘when you try to follow Heidegger up or down one of his paths of thinking, studying him, trying out his moves, finding yourself caught up in him?’ His response seems to me to be an exemplary one. One of the things that happens, he says, ‘is that you begin to appreciate why people are careful to confine themselves to forms of mental activity that have no history’. By that he meant: purely analytical programs like formal logic, philosophy of language, linguistics, semiotics, most forms of literary criticism, perhaps most of what gets taught in school: programs you can get in and out of quickly and cleanly without the burden of having done anything more blameworthy than test, or apply, a certain method, skill, technique, or training.119 Precisely because it is so dangerous—and dangerous precisely because it is so intimately connected with history—there is often an almost desperate, and even violent, insistence that politics, too, both as a practice and as an object of study, be reduced in this way. In short, technologised. So-called political ‘realists’ and ‘idealists’ alike, for example, and for similar reasons, would reduce the political to the formulaic so as to settle its hash once and for all. I take their responses, however, to be symptomatic of a persistent and ancient desire to escape the sheer difficulty as well as the historically and singularity of the political.

### A2: Ontology Justified

#### They say they justify their ontology – our K is a reason why your ontology is bad. CA the link work from above.

### A2: Case Outweighs

#### They say that case outweighs because they’re a prereq to ontological being. They misunderstand the spiritual component to our being that is independent of our ability to exist. Also, their form of ontological being is bad in and of itself.

#### Eclipse of being is the biggest impact in the round--life has no meaning in a framework that sustains the standing reserve and denies us an authentic relationship with being

Zimmerman 94 [Michael: Professor of Philosophy at Tulane. Contesting the Earth’s Future, p.104].

Heidegger asserted that human self-assertion, combined with the eclipse of being, threatens the relation between being and human Dasein.53 Loss of this relation would be even more dangerous than a nuclear war that might "bring about the complete annihilation of humanity and the destruction of the earth."54 This controversial claim is comparable to the Christian teaching that it is better to forfeit the world than to lose one's soul by losing one's relation to God. Heidegger apparently thought along these lines: it is possible that after a nuclear war, life might once again emerge, but it is far less likely that there will ever again occur an ontological clearing through which such life could manifest itself. Further, since modernity's one-dimensional disclosure of entities virtually denies them any "being" at all, the loss of humanity's openness for being is already occurring.55 Modernity's background mood is horror in the face of nihilism, which is consistent with the aim of providing material "happiness" for everyone by reducing nature to pure energy.56 The unleashing of vast quantities of energy in nuclear war would be equivalent to modernity's slow-motion destruction of nature: unbounded destruction would equal limitless consumption. If humanity avoided nuclear war only to survive as contented clever animals, Heidegger believedwe would exist in a state of ontological damnation: hell on earth, masquerading as material paradise. Deep ecologists might agree that a world of material human comfort purchased at the price of everything wild would not be a world worth living in, for in killing wild nature, people would be as good as dead. But most of them could not agree that the loss of humanity's relation to being would be worse than nuclear omnicide, for it is wrong to suppose that the lives of millions of extinct and unknown species are somehow lessened because they were never "disclosed" by humanity.

#### Their calculatory framework is the root cause of their impacts, making all of their impacts inevitable in a world without the Alternative

Kinsella 7 Dr. William J. Kinsella 2007 (Heidegger and Being at the Hanford Reservation: Standing Reserve, Enframing, and Environmental Communication Theory; Environmental Communication Vol. 1, No. 2, November 2007, pp.194-217 Dr. William J. Kinsella is an associate professor at North Carolina State University. His work on nuclear energy communication has encompassed the areas of nuclear fusion, environmental cleanup across the US nuclear weapons complex, and commercial nuclear energy in US and global contexts.)

Projecting the enframing principle onto emerging geopolitical concerns, officials appropriated the nuclear system as a source of technological solutions to military and political problems posed first by Nazi Germany, then by imperial Japan, and then by the Soviet Union. In that context, nature, in its newly revealed aspect as a ‘‘calculable coherence of [nuclear] forces,’’ became a standing reserve of both material and political power. New Cold War disciplines such as operations research and game theory, enabled by emerging computer technologies, allowed policy-makers and social scientists to extend the calculability principle further into the domain of human affairs (Edwards, 1996; Kaplan, 1983). Initially developed to facilitate the calculations required for nuclear weapons design, electronic computers and numerical programming became tools for social-scientific modeling of international conflict scenarios and political decision-making. These tools also enabled further technological developments such as guided missiles, multiple warheads, and precision targeting, expanding the range of applications for nuclear weapons while fostering a totalizing cycle of perceived threats, calculated responses, and new perceived threats. Thus the partial, self-sustaining, calculable world picture became increasingly productive while, simultaneously, it increased the prospects for environmental and cultural destruction.

#### Dehumanization from treating all life as a standing reserve makes every impact possible

Berube in 1997

(David, Communications at South Carolina, “Nanotechnological Prolongevity: The Down Side,” Nanotechnology Magazine, http://www.cla.sc.edu/ENGL/faculty/berube/prolong.htm)

Assuming we are able to predict who or what are optimized humans, this entire resultant worldview smacks of eugenics and Nazi racial science. This would involve valuing people as means. Moreover, there would always be a superhuman more super than the current ones, humans would never be able to escape their treatment as means to an always further and distant end. This means-ends dispute is at the core of Montagu and Matson's treatise on the dehumanization of humanity. They warn: "its destructive toll is already greater than that of any war, plague, famine, or natural calamity on record -- and its potential danger to the quality of life and the fabric of civilized society is beyond calculation. For that reason this sickness of the soul might well be called the Fifth Horseman of the Apocalypse.... Behind the genocide of the holocaust lay a dehumanized thought; beneath the menticide of deviants and dissidents... in the cuckoo's next of America, lies a dehumanized image of man... (Montagu & Matson, 1983, p. xi-xii). While it may never be possible to quantify the impact dehumanizing ethics may have had on humanity, it is safe to conclude the foundations of humanness offer great opportunities which would be foregone. When we calculate the actual losses and the virtual benefits, we approach a nearly inestimable value greater than any tools which we can currently use to measure it. Dehumanization is nuclear war, environmental apocalypse, and international genocide. When people become things, they become dispensable. When people are dispensable, any and every atrocity can be justified. Once justified, they seem to be inevitable for every epoch has evil and dehumanization is evil's most powerful weapon.

#### Calculation renders life meaningless

Dillon ‘99

[Political Theory, Another Justice – April 164-165]

Quite the reverse. The subject was never a firm foundation for justice, much less a hospitable vehicle for the reception of the call of another Justice. It was never in possession of that self-possession which was supposed to secure the certainty of itself, of a self-possession that would enable it ultimately to adjudicate everything. The very indexicality required of sovereign subjectivity gave rise rather to a commensurability much more amenable to the expendability required of the political and material economies of mass societies than it did to the singular, invaluable, and uncanny uniqueness of the self. The value of the subject became the standard unit of currency for the political arithmetic of States and the political economies of capitalism.34 They trade in it still to devastating global effect. The technologisation of the political has become manifest and global. Economies of evaluation necessarily require calculability.35 Thus no valuation without mensuration and no mensuration without indexation. Once rendered calculable, however, units of account are necessarily submissible not only to valuation but also, of course, to devaluation. Devaluation, logically, can extend to the point of counting as nothing. Hence, no mensuration without demensuration either. There is nothing abstract about this: the declension of economies of value leads to the zero point of holocaust. However liberating and emancipating systems of value—rights—may claim to be, for example, they run the risk of counting out the invaluable. Counted out, the invaluable may then lose its purchase on life. Here with, then, the necessity of championing the invaluable itself. For we must never forget that, “we are dealing always with whatever exceeds measure.”36 But how does that necessity present itself? Another Justice answers: as the surplus of the duty to answer to the claim of Justice over rights. That duty, as with the advent of another Justice, is integral to the lack constitutive of the human way of being. The event of this lack is not a negative experience. Rather, it is an encounter with a reserve charged with possibility. As possibility, it is that which enables life to be lived in excess without the overdose of actuality.37 What this also means is that the human is not decided. It is precisely undecidable. Undecidability means being in a position of having to decide without having already been fully determined and without being capable of bringing an end to the requirement for decision.

### A2: Utopian Fiat Bad

#### We’re not utopian fiat. We simply step back from the SQUO standing reserve mentality that characterizes the 1AC. We contextualize our impacts in the round and seek the remedy the mentality of the round itself.

### A2: Calculations Good

#### Link debate here Economic incentives contribute to the system of calculation, wherein all human beings are reduced to objects on a playing board

#### Their environmentalism claims are just false perpetuations of the failed, worn-out political environmental movement. Heidegger says that rethinking our relationship with nature is the only way to truly solve

#### Energy policy characterizes nature as calculable resources intended to serve human ends and nothing more, transposing a system of certainty that locks away ulterior methods of viewing the world

#### Turns life into a standing reserve: ego-driven affirmation of utility denies value in participation in the general economy and denies value to life,

#### CA – Dillon from above.

#### Their suppression of volatility makes their impacts inevitable. Must embrace the complex chaos of the world by privileging ontological analysis to make a difference.

Taleb and Blyth in 2011

(Nassim Nicholas, Distinguished Professor of Risk Engineering at New York University's Polytechnic Institute, and Mark, Professor of International Political Economy at Brown University, “The Black Swan of Cairo”, Foreign Affairs, May/June 2011, Vol. 90, Issue 3, rcheek)

Why is surprise the permanent condition of the U.S. political and economic elite? In 2007-8, when the global financial system imploded, the cry that no one could have seen this coming was heard everywhere, despite the existence of numerous analyses showing that a crisis was unavoidable. It is no surprise that one hears precisely the same response today regarding the current turmoil in the Middle East. The critical issue in both cases is the artificial suppression of volatility--the ups and downs of life--in the name of stability. It is both misguided and dangerous to push unobserved risks further into the statistical tails of the probability distribution of outcomes and allow these high-impact, low-probability "tail risks" to disappear from policymakers' fields of observation. What the world is witnessing in Tunisia, Egypt, and Libya is simply what happens when highly constrained systems explode. Complex systems that have artificially suppressed volatility tend to become extremely fragile, while at the same time exhibiting no visible risks. In fact, they tend to be too calm and exhibit minimal variability as silent risks accumulate beneath the surface. Although the stated intention of political leaders and economic policymakers is to stabilize the system by inhibiting fluctuations, the result tends to be the opposite. These artificially constrained systems become prone to "Black Swans"--that is, they become extremely vulnerable to large-scale events that lie far from the statistical norm and were largely unpredictable to a given set of observers. Such environments eventually experience massive blowups, catching everyone off-guard and undoing years of stability or, in some cases, ending up far worse than they were in their initial volatile state. Indeed, the longer it takes for the blowup to occur, the worse the resulting harm in both economic and political systems. Seeking to restrict variability seems to be good policy (who does not prefer stability to chaos?), so it is with very good intentions that policymakers unwittingly increase the risk of major blowups. And it is the same misperception of the properties of natural systems that led to both the economic crisis of 2007-8 and the current turmoil in the Arab world. The policy implications are identical: to make systems robust, all risks must be visible and out in the open--fluctuat nec mergitur (it fluctuates but does not sink) goes the Latin saying. Just as a robust economic system is one that encourages early failures (the concepts of "fail small" and "fail fast"), the U.S. government should stop supporting dictatorial regimes for the sake of pseudostability and instead allow political noise to rise to the surface. Making an economy robust in the face of business swings requires allowing risk to be visible; the same is true in politics. SEDUCED BY STABILITY Both the recent financial crisis and the current political crisis in the Middle East are grounded in the rise of complexity, interdependence, and unpredictability. Policymakers in the United Kingdom and the United States have long promoted policies aimed at eliminating fluctuation--no more booms and busts in the economy, no more "Iranian surprises" in foreign policy. These policies have almost always produced undesirable outcomes. For example, the U.S. banking system became very fragile following a succession of progressively larger bailouts and government interventions, particularly after the 1983 rescue of major banks (ironically, by the same Reagan administration that trumpeted free markets). In the United States, promoting these bad policies has been a bipartisan effort throughout. Republicans have been good at fragilizing large corporations through bailouts, and Democrats have been good at fragilizing the government. At the same time, the financial system as a whole exhibited little volatility; it kept getting weaker while providing policymakers with the illusion of stability, illustrated most notably when Ben Bernanke, who was then a member of the Board of Governors of the U.S. Federal Reserve, declared the era of "the great moderation" in 2004. Putatively independent central bankers fell into the same trap. During the 1990s, U.S. Federal Reserve Chair Alan Greenspan wanted to iron out the economic cycle's booms and busts, and he sought to control economic swings with interest-rate reductions at the slightest sign of a downward tick in the economic data. Furthermore, he adapted his economic policy to guarantee bank rescues, with implicit promises of a backstop--the now infamous "Greenspan put." These policies proved to have grave delayed side effects. Washington stabilized the market with bailouts and by allowing certain companies to grow "too big to fail." Because policymakers believed it was better to do something than to do nothing, they felt obligated to heal the economy rather than wait and see if it healed on its own. The foreign policy equivalent is to support the incumbent no matter what. And just as banks took wild risks thanks to Greenspans implicit insurance policy, client governments such as Hosni Mubarak's in Egypt for years engaged in overt plunder thanks to similarly reliable U.S. support. Those who seek to prevent volatility on the grounds that any and all bumps in the road must be avoided paradoxically increase the probability that a tail risk will cause a major explosion. Consider as a thought experiment a man placed in an artificially sterilized environment for a decade and then invited to take a ride on a crowded subway; he would be expected to die quickly. Likewise, preventing small forest fires can cause larger forest fires to become devastating. This property is shared by all complex systems. In the realm of economics, price controls are designed to constrain volatility on the grounds that stable prices are a good thing. But although these controls might work in some rare situations, the long-term effect of any such system is an eventual and extremely costly blowup whose cleanup costs can far exceed the benefits accrued. The risks of a dictatorship, no matter how seemingly stable, are no different, in the long run, from those of an artificially controlled price. Such attempts to institutionally engineer the world come in two types: those that conform to the world as it is and those that attempt to reform the world. The nature of humans, quite reasonably, is to intervene in an effort to alter their world and the outcomes it produces. But government interventions are laden with unintended--and unforeseen--consequences, particularly in complex systems, so humans must work with nature by tolerating systems that absorb human imperfections rather than seek to change them. Take, for example, the recent celebrated documentary on the financial crisis, Inside Job, which blames the crisis on the malfeasance and dishonesty of bankers and the incompetence of regulators. Although it is morally satisfying, the film naively overlooks the tact that humans have always been dishonest and regulators have always been behind the curve. The only difference this time around was the unprecedented magnitude of the hidden risks and a misunderstanding of the statistical properties of the system. What is needed is a system that can prevent the harm done to citizens by the dishonesty of business elites; the limited competence of forecasters, economists, and statisticians; and the imperfections of regulation, not one that aims to eliminate these flaws. Humans must try to resist the illusion of control: just as foreign policy should be intelligence-proof (it should minimize its reliance on the competence of information-gathering organizations and the predictions of "experts" in what are inherently unpredictable domains), the economy should be regulator-proof, given that some regulations simply make the system itself more fragile. Due to the complexity of markets, intricate regulations simply serve to generate fees for lawyers and profits for sophisticated derivatives traders who can build complicated financial products that skirt those regulations. DON'T BE A TURKEY The life of a turkey before Thanksgiving is illustrative: the turkey is fed for 1,000 days and every day seems to confirm that the farmer cares for it--until the last day, when confidence is maximal. The "turkey problem" occurs when a naive analysis of stability is derived from the absence of past variations. Likewise, confidence in stability was maximal at the onset of the financial crisis in 2007. The turkey problem for humans is the result of mistaking one environment for another. Humans simultaneously inhabit two systems: the linear and the complex. The linear domain is characterized by its predictability and the low degree of interaction among its components, which allows the use of mathematical methods that make forecasts reliable. In complex systems, there is an absence of visible causal links between the elements, masking a high degree of interdependence and extremely low predictability. Nonlinear elements are also present, such as those commonly known, and generally misunderstood, as "tipping points." Imagine someone who keeps adding sand to a sand pile without any visible consequence, until suddenly the entire pile crumbles. It would be foolish to blame the collapse on the last grain of sand rather than the structure of the pile, but that is what people do consistently, and that is the policy error. U.S. President Barack Obama may blame an intelligence failure for the government's not foreseeing the revolution in Egypt (just as former U.S. President Jimmy Carter blamed an intelligence failure for his administration's not foreseeing the 1979 Islamic Revolution in Iran), but it is the suppressed risk in the statistical tails that matters--not the failure to see the last grain of sand. As a result of complicated interdependence and contagion effects, in all man-made complex systems, a small number of possible events dominate, namely, Black Swans. Engineering, architecture, astronomy, most of physics, and much of common science are linear domains. The complex domain is the realm of the social world, epidemics, and economics. Crucially, the linear domain delivers mild variations without large shocks, whereas the complex domain delivers massive jumps and gaps. Complex systems are misunderstood, mostly because humans' sophistication, obtained over the history of human knowledge in the linear domain, does not transfer properly to the complex domain. Humans can predict a solar eclipse and the trajectory of a space vessel, but not the stock market or Egyptian political events. All man-made complex systems have commonalities and even universalities. Sadly, deceptive calm (followed by Black Swan surprises) seems to be one of those properties. THE ERROR OF PREDICTION As with a crumbling sand pile, it would be foolish to attribute the collapse of a fragile bridge to the last truck that crossed it, and even more foolish to try to predict in advance which truck might bring it down. The system is responsible, not the components. But after the financial crisis of 2007-8, many people thought that predicting the subprime meltdown would have helped. It would not have, since it was a symptom of the crisis, not its underlying cause. Likewise, Obama's blaming "bad intelligence" for his administration's failure to predict the crisis in Egypt is symptomatic of both the misunderstanding of complex systems and the bad policies involved. Obama's mistake illustrates the illusion of local causal chains--that is, confusing catalysts for causes and assuming that one can know which catalyst will produce which effect. The final episode of the upheaval in Egypt was unpredictable for all observers, especially those involved. As such, blaming the CIA is as foolish as funding it to forecast such events. Governments are wasting billions of dollars on attempting to predict events that are produced by interdependent systems and are therefore not statistically understandable at the individual level. As Mark Abdollahian of Sentia Group, one of the contractors who sell predictive analytics to the U.S. government, noted regarding Egypt, policymakers should "think of this like Las Vegas. In blackjack, if you can do four percent better than the average, you're making real money." But the analogy is spurious. There is no "four percent better" on Egypt. This is not just money wasted but the construction of a false confidence based on an erroneous focus. It is telling that the intelligence analysts made the same mistake as the risk-management systems that failed to predict the economic crisis--and offered the exact same excuses when they failed. Political and economic "tail events" arc unpredictable, and their probabilities are not scientifically measurable. No matter how many dollars are spent on research, predicting revolutions is not the same as counting cards; humans will never be able to turn politics into the tractable randomness of blackjack. Most explanations being offered for the current turmoil in the Middle East follow the "catalysts as causes" confusion. The riots in Tunisia and Egypt were initially attributed to rising commodity prices, not to stifling and unpopular dictatorships. But Bahrain and Libya are countries with high GDPS that can afford to import grain and other commodities. Again, the focus is wrong even if the logic is comforting. It is the system and its fragility, not events, that must be studied--what physicists call "percolation theory," in which the properties of the terrain are studied rather than those of a single element of the terrain. When dealing with a system that is inherently unpredictable, what should be done? Differentiating between two types of countries is useful. In the first, changes in government do not lead to meaningful differences in political outcomes (since political tensions are out in the open). In the second type, changes in government lead to both drastic and deeply unpredictable changes. Consider that Italy, with its much-maligned "cabinet instability," is economically and politically stable despite having had more than 60 governments since World War II (indeed, one may say Italy's stability is because of these switches of government). Similarly, in spite of consistently bad press, Lebanon is a relatively safe bet in terms of how far governments can jump from equilibrium; in spite of all the noise, shifting alliances, and street protests, changes in government there tend to be comparatively mild. For example, a shift in the ruling coalition from Christian parties to Hezbollah is not such a consequential jump in terms of the country's economic and political stability. Switching equilibrium, with control of the government changing from one party to another, in such systems acts as a shock absorber. Since a single party cannot have total and more than temporary control, the possibility of a large jump in the regime type is constrained. In contrast, consider Iran and Iraq. Mohammad Reza Shah Pahlavi and Saddam Hussein both constrained volatility by any means necessary. In Iran, when the shah was toppled, the shift of power to Ayatollah Ruhollah Khomeini was a huge, unforeseeable jump. After the fact, analysts could construct convincing accounts about how killing Iranian Communists, driving the left into exile, demobilizing the democratic opposition, and driving all dissent into the mosque had made Khomeini's rise inevitable. In Iraq, the United States removed the lid and was actually surprised to find that the regime did not jump from hyperconstraint to something like France. But this was impossible to predict ahead of time due to the nature of the system itself. What can be said, however, is that the more constrained the volatility, the bigger the regime jump is likely to be. From the French Revolution to the triumph of the Bolsheviks, history is replete with such examples, and yet somehow humans remain unable to process what they mean. THE FEAR OF RANDOMNESS Humans fear randomness--a healthy ancestral trait inherited from a different environment. Whereas in the past, which was a more linear world, this trait enhanced fitness and increased chances of survival, it can have the reverse effect in today's complex world, making volatility take the shape of nasty Black Swans hiding behind deceptive periods of "great moderation." This is not to say that any and all volatility should be embraced. Insurance should not be banned, for example. But alongside the "catalysts as causes" confusion sit two mental biases: the illusion of control and the action bias (the illusion that doing something is always better than doing nothing). This leads to the desire to impose man-made solutions. Greenspans actions were harmful, but it would have been hard to justify inaction in a democracy where the incentive is to always promise a better outcome than the other guy, regardless of the actual, delayed cost.