**The question of the topic must begin with a question of phenomenology. Incentives for and restrictions on energy production beg the question of what it means to produce energy from nature in the first place. Modern technology puts to nature the unreasonable demand that it supply energy that can be extracted and stored up as such. This challenging-forth is indicative of the essence of modern technology.**

Condella 2k1(Craig A, “Overcoming the Destining Of Technological Being” http://www.fordham.edu/philosophy/fps/symposia/2001fall/condella.htm)

What, then, is the essence of technology? In searching for an answer to this all-important question, Heidegger (as he so often does) looks back to the ancient Greeks to locate techne as a form of poiesis, i.e. a bringing-forth. It is a way of bringing something forth from concealment to unconcealment. Technology, simply put, is a mode of revealing which brings something into presence. As a form of revealing or unconcealment, technology evinces itself fundamentally as a happening of truth – an occurrence referred to by the Greeks as aletheia. In sum, the essence of technology is a bringing-forth from concealment to unconcealment and, consequently, an occasioning of truth. Curiously enough, nothing overtly dangerous emerges from the essence of technology as identified by Heidegger, but then again why should it? After all, nothing about the ancient Greek notion of techne, which included the fine arts no less than the works of the craftsman, strikes us as straightaway threatening. For Heidegger, then, the Greek notion of techne allows us to grasp technology’s essence, but not the danger which we presently encounter. To find the latter, we must determine what it is exactly that makes the technology of modernity so unique.

According to Heidegger, “The revealing that rules in modern technology is a challenging, which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such.” Herein we encounter the essence of modern technology as a challenging-forth, along with its rendering of nature as standing-reserve. With modern technology, the bringing-forth of techne is fundamentally transformed into a challenging-forth. What modern technology challenges can be see as twofold. First, and perhaps more obvious, is its challenging of nature. Modern technology essentially transforms nature into an energy source which it manipulates and uses at its own discretion. Nature, at the hands of modern technology, is reduced to Bestand (standing-reserve). Beyond even this challenging, however, are the demands placed upon man who, put simply, is challenged-forth into the challenging of nature. Heidegger calls this challenging-forth of man to order nature as standing-reserve Ge-stell (enframing) and thus locates the essence of modern technology outside of human control.

Modern technology, as a revealing that orders, is thus no mere human doing. Therefore we must take the challenging that sets upon man to order the actual as standing-reserve in accordance with the way it shows itself. That challenging gathers man into ordering. This gathering concentrates man upon ordering the actual as standing-reserve.

In the end, modern technology as Ge-stell creates a situation in which man orders nature and thus posits himself as “lord of the earth” when, in all reality, he himself is being ordered in just the same way. Within such a situation, man becomes blind to all other modes of revealing outside of the technological. He sees nature as existing fundamentally for him while being driven by a power greater than himself, a power which not only distorts nature but obfuscates man’s understanding of his own self. With modern technology, man is hoodwinked into believing that he fulfills his true essence to the very extent that he dominates his surroundings. Whereas man prides himself on using technology to his own advantage, it is modern technology which, in all reality, uses man. Not until we see modern technology as something outside of our control can we even begin to overcome the danger harbored within its very essence.

*We do not endorse the gendered language in this card*

**Modern conceptions of energy production bring nature to serve, turning the world into a global gas station, eviscerating and erasing being. The ultimate result is nuclear annihilation and meaninglessness**

Callister 2007 (Paul, Associate Professor of Law and Director of the Leon E. Bloch Law Library, University of Missouri‑Kansas City School of Law. Law and Heidegger’s Question Concerning Technology: Prolegomenon to Future Law Librarianship Law Library Journal [Vol. 99:2)

1 Following World War II, the German philosopher Martin Heidegger offered one of the most potent criticisms of technology and modern life. His nightmare is a world whose essence has been reduced to the functional equivalent of “a giant gasoline station, an energy source for modern technology and industry. This relation of man to the world [is] in principle a technical one. . . . [It is] altogether alien to former ages and histories.”2 For Heidegger, the problem is not technology itself, but the technical mode of thinking that has accompanied it. Such a viewpoint of the world is a useful paradigm to consider humanity’s relationship to law in the current information environment, which is increasingly technical in Heidegger’s sense of the term. 2 Heidegger’s warning that a technical approach to thinking about the world obscures its true essence is directly applicable to the effects of the current (as well as former) information technologies that provide access to law. The thesis of this article is that Heidegger provides an escape, not only for libraries threatened by obsolescence by emerging technologies, but for the law itself, which is under the same risk of subjugation. This article explains the nature of Heidegger’s criticisms of technology and modern life, and explores the threat specifically identified by such criticism, including an illustration based upon systematic revision of law in Nazi Germany. It applies Heidegger’s criticisms to the current legal information environment and contrasts developing technologies and current attitudes and practices with earlier Anglo-American traditions. Finally, the article considers the implications for law librarianship in the current information environment. Heidegger’s Nightmare: Understanding the Beast Calculative Thinking and the Danger of Subjugation to a Single Will 3 The threat is not technology itself; it is rather a danger based in the essence of thinking, which Heidegger describes as “enframing”3 or “calculative thinking.”4 For Heidegger, the problem is that mankind misconstrues the nature of technology as simply “a means to an end.”5 4 Heidegger’s articulation of the common conception of technology as a “means” applies equally well to information technologies, including legal databases. True, it is hard to think of technology in any other way, but what Heidegger argues is that this failure to consider the essence of technology is a threat to humanity.6 5 He defines the threat in two ways. First, humans become incapable of seeing anything around them as but things to be brought into readiness to serve some end (a concept he refers to as “standing reserve”).7 They are thereby cut off from understanding the essence of things and, consequently, their surrounding world.8 Second, man is reduced to the role of “order-er” of things, specifically to some purpose or end, and, as a result, risks becoming something to be ordered as well.9 Heidegger illustrates these concerns as follows: The forester who, in the wood, measures the felled timber and to all appearances walks the same forest path in the same way as did his grandfather is today commanded by profitmaking in the lumber industry, whether he knows it or not. He is made subordinate to the orderability of cellulose, which for its part is challenged forth by the need for paper, which is then delivered to newspapers and illustrated magazines. The latter, in their turn, set public opinion to swallowing what is printed, so that a set configuration of opinion becomes available on demand.10 In other words, the trees, the wood, the paper, and even the forester (whose ancestors once understood the sanctity of the woods) are ultimately subordinated to the will to establish orderly public opinion. The forester, in proverbial fashion, “cannot see the forest for the trees.” Instead of appreciating the majesty and mystery of the living forest, he sees only fodder for the paper mill, which will pay for his next meal. 6 The same cynicism might be applied to legal publishing. Whole forests have given their lives to the publication of legal information in order to provide a stable basis for society—after all, the “law must be stable and yet it cannot stand still,”11 or as our comrades from Critical Legal Studies might put it, law is simply a tool “to perpetuate the existing socioeconomic status quo.”12 Cadres of West editors (commonly referred to in generic fashion as human resources, ironically making them all the less human)13 work feverishly to digest points of law and assign 55,000 cases into a taxonomy with more than 100,000 class distinctions,14 all for the sake of a predictable legal system and stable society. 7 For Heidegger, the threat is revealed in mankind’s perpetual quest to gain mastery over technology. “Everything depends on our manipulating technology in the proper manner as a means. We will, as we say, ‘get’ technology ‘spiritually in hand.’ We will master it. The will to mastery becomes all the more urgent the more technology threatens to slip from human control.”15 When Heidegger published these words (first in 1962, but based on lectures from 1949 and 1950),16 the implications of nuclear energy and atomic warfare occupied much academic discussion. Heidegger points out that the popular question of this period did not concern how to find sufficient energy resources, but “[i]n what way can we tame and direct the unimaginably vast amounts of atomic energies, and so secure mankind against the danger that these gigantic energies suddenly—even without military actions— break out somewhere, ‘run away’ and destroy everything?”17 The modern question is about our mastery over technology, not about sufficiency of resources. 8 Similar concerns are apparent with respect to information technologies, where the primary problem is not lack of access, but too much access: for example, illegal music file swapping,18 the anti-circumvention provisions of the Digital Millennium Copyright Act (DMCA),19 and trends to use licensing to control and preserve the economic value of information (and to prohibit otherwise lawfully competitive practices, such as reverse engineering).20 With respect to law and government, we see such examples as retraction of government documents,21 the Patriot Act,22 the furor over unpublished electronic precedent,23 and the recent frenzy of e-discovery.24 Some stakeholders seem to have liked things better when information resources were scarce.25 Universal access is destabilizing—hence, the considerable interest in getting a “handle” on technology through legal sanction and yet additional technological innovation (the so-called “access control” technologies). 26 9 Heidegger’s genius is in recognizing that all the fuss about mastering technologies, although close to the mark, concerns the wrong issue. The more insidious threat is not nuclear fallout or economic devaluation of intellectual property, but the worldview of “calculative” thinking that accompanies rapid technological change: “The world now appears as an object open to attacks of calculative thought, attacks that nothing is believed able any longer to resist.”27 For Heidegger, calculative thought is not limited to the manipulation of machine code or numbers. Rather, the concept is grounded in “Machiavellian scheming” and the pursuit of power. “Calculative thinking computes. It computes ever new, ever more promising and at the same time more economical possibilities. Calculative thinking races from one prospect to the next.”28 The threat Heidegger envisions to human thought is even more dangerous than nuclear warfare.29 10 Heidegger’s threat is based on the separation of man from his or her nature. By pursuing economic calculation, man is cut off from the transformative powers of his or her environment. In such a world, law does not have the capacity to educate or to provide the basis for social harmony;30 rather, like any resource, law must be employed to more economic ends. The implication is that calculative thinking mandates that everything (including law) be subjected to a single will. While Heidegger recognized the danger of subjecting everything to a single will, the issue of whether, and when, he equated the danger with Nazi totalitarianism, which he had originally supported, would require a line of historical inquiry far beyond the scope of this article.31 Regardless of Heidegger’s own political and moral journey, Nazism effectively illustrates Heidegger’s philosophical fear—that technological thinking risks the “ordering” of all the world, including humanity, as resources subject to a singular will.

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**In the era of modern technology, crises take place faster than we can account for, or correct them, but the reactive belief in our ability to technologically manage the world creates cycles of paralyzing anxiety and reactive desires to take action that only recreates the crisis**

**Peat, 08 –** theoretical physicist, Ph.D., founder of the Pari Centre for New Learning (F. David, “Gentle Action: Surviving Chaos and Change”, http://www.gentleaction.org/library/paper2.php)

Many rapid changes that are taking place around us. These include globalization, developments in technology; fears of terrorism, the instability of the Third World; the rise of the Pacific Rim and a United Europe; the breakdown of inner cities; economics that appear to be out of control with the consequent challenges of inflation, recession and unemployment; spiraling health costs; revolutions in communication technology and information processing; the demands of consumers and special interest groups; threatened species and ecologies; the dangers of global warming and ozone depletion; increasing rates of teenage suicide and drugs use; the transformation of management and the breakdown of conventional institutions. Governments, institutions, organizations and individuals experience considerable anxiety in the face of such rapid change and **feel powerless to ameliorate the problems** that surround them. Indeed, it sometimes appears as if their plans and policies, as well as the traditional structures of their institutions, **are themselves part of the problem**. In so many cases policies, plans, interventions and other actions, all taken in good faith, **have not only failed to resolve an existing situation but in many cases have acted to magnify and render the problem even more intractable.** In other cases, the attempt to impose a solution in one location or context **has had the effect of creating an even larger problem elsewhere**. Organizations and individuals feel control slipping from their grasp and their natural reaction is to become even more intransigent in their attempt to clamp down on events and exert ever more control. **The result is a spiral of control that has literally gone out of control!** The realization that plans and policies are ineffective leads to a sense of depression and hopelessness. Faced with the insecurities and flux of the modern world many institutions fall into a state that, where it to be detected in an individual, would be diagnosed as manic-depression! How did this cycle of anxiety, hopelessness, panic and the desire for ever more control arise? I would argue that it is a paradigm of thought and behavior that originates in our particular view of reality, a view, moreover, that modern science had now demonstrated to be fundamentally erroneous. Thus, when our perception of the world around us is astigmatic, the actions we take become increasingly inappropriate and incongruous. **It is only by entering into new modes of perception and** acknowledging a new paradigm of reality that more appropriate forms of action can be taken. The Myth of Control One of the great themes of Western civilization, a theme of virtually mythic proportions, involves the way in which nature has been tamed and controlled over the course of the last few thousand years. Other cultures and civilizations have, for example, developed the techniques of farming but it appears that only the civilizations that expanded from their Neolithic birthplace in Northern Europe and the Fertile Crescent of the near East possessed the hubris necessary to impose themselves to such a marked extent upon the landscape. Thus, even in prehistoric times, European forests were cleared, marshes drained, vast tracts of land converted to farming, and tracks and walkways established as human beings sought to recreate the landscape according to their own needs. And, as ever more powerful technologies and social control became available, this path of domination continued. Within our own time, social critics have pointed out that this desire to exert control has led to our distancing ourselves from the natural world. The effect has been for us to place an **increasing faith in human reason, science, technology and the effectiveness of plans**, directives **and policies** while, at the same time, to decrease our sensitivity for the complex and subtle nature of the world around us. In short, **we tend to stand outside the world**, like observers, **indulging in constant analysis,** **making predictions and exerting corrective control** when situations do not move in the direction we desire. When human society and its associated technology were relatively simple and localized, and the resources that it called upon were unlimited, then this pattern of control was relatively successful. But as societies attempt to deal with ever more complicated issues, their boundaries became more open, their resources are found to be finite, the environment fragile, and technologies and world economics become increasingly complex then these conventional approaches simply fail. Ultimately, by virtue of its early success, the desire to dominate grew to the point where **it began to subvert itself and**, in the process, **endangered the whole planet**. And increasingly actions taken in one sphere **have unintended consequences in another**. Engaging complexity Over the last decades, however, there have been indications of a remarkable transformation within this traditional vision; a revolution in the perception of ourselves, our culture and the nature of reality that is truly Copernican in its implications. Just as in the 16th century astronomical observations were to dethrone the human race from a central place in the universe, so too in our own century relativity, quantum theory, chaos theory and systems theory, along with new insights in psychology, ecology and economics, have demonstrated the fundamental fallacy of our belief in definitive control. At the same time they are affirming our basic connectedness to the whole of creation. These scientific insights happen to have come at a time when the world has been experiencing rapid revolutionary change. States have risen and fallen. The notion of government is being transformed. Institutions are questioning their effectiveness. Businesses are desperately searching for new ways of operating. Technologies have developed so rapidly that people are unable to keep up with their implications. The overall effect has been to create **a profound sense of anxiety**, a fear that things are out of control, that the future is increasingly uncertain and that we have been left with nothing to hang on to. Yet what if this anxiety actually **points to an essential truth about the world**, that ultimately control and definitive prediction are strictly limited and that we must discover new ways of being and acting? Our current economic, social, ecological, environmental and institutional systems are now enormously complex to the extent that **we may never have complete knowledge** **about the inner dynamics of** such **systems**, nor the ability to predict exactly or exert total control. In this we can draw on metaphors from the new sciences of quantum theory, chaos theory, systems theory, and so on which also indicate essential limits to prediction, description and control. It is for such reason that so many of our plans and policies have been unable to meet the complexities of the modern world and why some supposed "solutions" have created even deeper problems and more intractable situations. The myth of eternal progress and control that has lain behind Western civilization can no longer sustain itself. The island of order and certainty on which we have been living has turned out to be not solid land but a rapidly melting iceberg, and **we have no alternative but to plunge into the boiling sea of flux, uncertainty and change that surrounds us**. The Dilemma of Action These are the dilemmas that many organizations find themselves in today, dilemmas that translate into the anxieties and uncertainties faced by many individuals. Programmed by their goals and mission statements, as well as by their very structures, many organizations inevitably seek ways of exerting control and believe that they must always take positive action in the face of uncertainty. Yet increasingly they discover that these actions are inappropriate. And so organizations, institutions, governments, groups and individuals retrench, break apart or in some other way get trapped into a spiral of ineffective decision making, paralysis and anxiety. These organizations, governments and institutions have been created according to our traditional image of reality; that is, of **a world that is external to us, predictable, relatively mechanical, and whose dynamics can be controlled** by the application of directed force. As a result, organizations are themselves relatively rigid in their nature, operating from fixed plans, policies and mission statements. Their internal structures are often hierarchical in nature, their lines of communication are limited rather than being flexible and dynamic, and their response to challenge and change is often predictable. In other words, most organizations are far less subtle and complex than the very systems they are attempting to address.

**At every point we are inundated with the familiar question, ‘what ought we to do?’ but instead we suggest that you first ask the question ‘how ought we to think?’**

**Therefore, we affirm the topic as a scattering point for technological thought and a starting point for ontological questioning. Debates about the way that we exist are a prior condition to considerations of concrete action; we are powerless as long as we seek solutions as our first step. Changing the way that we interact with the world allows for the possibility of real change in the future**

**Seckinelgin** lecturer int’l social policy @ LSE **2k6** (Hakan, The Environment and International Politics Page 111)

In this discussion I am doing two things at the same time. First, I am giving a summary of Heideggerian thinking through the formulation of Dasein and its relationality.29 Second, I am constantly alluding to an ecological understanding. It is important to realise that the ecological aspect of Heideggerian thinking can only be exposed if the understanding of Dasein is demonstrated in its in-built constitutive relationality; it is the ecological aspect. The relationship between Dasein’s structure and ecological context is interwoven. Therefore, Twill distil the ecological discussion towards the end of this chapter after the structure of Dasein is clarified. In his reversal of being an autonomous human, Heidegger constitutes his understanding on a level which may seem very distant from the political concerns that are expressed in this volume. None the less, it is the pre-ontological importance of this reconstitution of distinctive human being which allows me to conclude by politicising nature and thinking the political in terms of ecological ethics.   
The homeless and ever-forgetful being is at the heart of Heideggerian thought. The being (i.e. humankind defined and totalised by the modem age) is no doubt considered to be the final point in the long evolution of being. This standpoint is questioned by Heidegger as missing the real essence of being, which cannot be historicised. It is an attempt to find out the essence of being, which is hidden, concealed and cannot be reduced to an understanding of an epoch, from the modem human being in the age of technology.36 One of the important components of this problematisation is a call for thinking which is different from the thinking that is eventually geared to control and managing things:   
That thinking is concerned unceasingly with one single happening: In the history of Western thinking, indeed continually from the beginning, what is, is thought in reference to Being; yet the truth of being remains unthought, and not only is that truth denied to thinking as a possible experience, but Western thinking itself, and indeed in the form of metaphysics, expressly, but nevertheless unknowingly, veils the happening of that denial.   
(Heidegger 1977b: 57)   
The potential implication of this new proposal for the established concept of thinking is profound. It suggests that thinking is an experience, **and in order to reach a truth through thinking it must be experienced**. Therefore, it is not ‘thinking of something’ any more but ‘thinking through’ something, as in living through, being involved with. It is a call to understand being by turning to it, getting into it, rather than objectifiing, distancing it.3’ Surely, here, a process is implied in which the other sides involved in the process have to ‘be’ as well. As argued by Ladelle McWhorter, Heidegger sees this thinking as one which ‘disciplines itself to allow things to show themselves on their own terms’ (1992: 2). The question of self- disciplined thought indeed sounds rather frustrating, as compared to modern ‘free thinking’ 32 This frustration is actually the challenge and eventually the threat of Heidegger to Western metaphysics and the modern man created therein. Moreover, it implies an ethic which is different insofar as it cares about the others in their being.   
Within this process of thinking about the possibility of self-disciplined thought lies the path to a new understanding of being and belonging. What is to be overcome is that the ‘new epoch of the withdrawal is one in which being adapts itself to the objectness of objects, but which, in its essence as being, thereby withdraws. This epoch characterises the innermost essence of the age we call modernity’ (Heidegger 1996: 55). The withdrawal refers to the condition of the modern ‘I’ which completed its abstraction through Descartes and finally with Kant, by arriving at an extra-natural stand as the ultimate truth. In order to dislocate this extreme anthropocentrism, Heidegger shows that ‘something that man himself is, and yet which exceeds him and extends beyond him, in each case comes into play for the purpose of determining entities as such as a whole’ (cited in Haar l993b: xxiii).34 Heidegger attempts to understand the essence and conditions of being human, and so turns to the beginning of the Western tradition and tries to understand the origins of the essence of being in Greek philosophy, where man is understood as being that pertains to something from within that is common to all beings in their connectedness and which binds it with the whole.   
In the following section the essence of being as articulated by Heidegger is examined. Frustration and disbelief are the two dominant senses as one goes deeper into Heidegger because he seems to suggest powerfully, and passionately, **that nothing can be done in the face of problems**. One can only watch what is happening within a social time frame in which one is located.   
None the less, behind this façade is the suggestion of a possibility for action that comes from the deep potential of human being. **This potential has its grounds in belonging to Being**. The existential condition of being opens up a new ethics! relationality with nature, within nature. The thinking process is not only about allowing things to reveal themselves, but also about human beings realising their own existential condition within nature. Therefore, it is a possibility of action presenting itself through the consciousness of human being.35 The action is the process of the realisation of self and its location in the greater existence which is supposed to result in the realisation of tension between the time-based existence of being and its ahistorical attribute of belonging to a specific time and place. Here the obvious dichotomy and existential condition of being are revealed.

**Energy production does not exist for us to discover—a certain frame, that affects and changes the implementation of policy actions, always precedes it—this consideration is prior because faulty assumptions create faulty policies**

**Ardau 10** (Claudia, lecturer International Studies in the Department of Politics and International Studies at The Open University, “Security That Matters: Critical Infrastructure and Objects of Protection” Security Dialogue 2010 41: 491)

The Times Digital Archive is suggestive for the ‘ongoing historicity’ of matter. Infrastructures are not simply named as such, but they materialize in particular ways in intra-action and relation with other practices: military, developmental, modernizing. What is missing is, however, a consideration of how the materiality of infrastructure is a ‘form of doing, a congealing of agency’ (Barad, 2003: 821–822) in these intra-actions. A series of debates in the UK House of Commons about the definition of European Critical Infrastructure as part of the European Programme for Critical Infrastructure Protection (EPCIP) hint at this different materiality of infrastructure. There are not less than 40 reports by the European Scrutiny Committee that respond to the question of identifying critical infrastructures as either ‘national’ or ‘European’ (House of Commons, 2007). At first sight, it appears as if naming of infrastructure as ‘critical’ and ‘national’ or ‘European’ were the result of authoritative speech acts and political interests. A proposal for an EU Council directive on setting up a critical infrastructure information warning network (CIWIN) labels as critical infrastructure any infrastructure whose destruction would affect two or more member-states. Identifying what counts as European and what counts as national infrastructure is a more complex and contested question. The government is concerned that ‘only infrastructures that are truly European and critical are designated’. Tony McNulty, the minister for policing, security and community safety, repeatedly emphasizes that only ‘truly European’ and ‘truly critical’ infrastructure should be designated for the purposes of the Directive and EU programmes for critical infrastructure protection. Thus, though apparently about the performative naming of infrastructure as either European or national and also critical, the debates point to the need to relate the ‘true’ character of infrastructure with the materiality of critical infrastructure. This ‘true’ character is not scientifically derived but is the result of the material characteristics of the infrastructure. Designations of critical infrastructure as ‘national’ or ‘European’ cannot emerge in the absence of intra-actions between material-discursive practices. In the House of Commons debates, interdependency is at the heart of questions about which infrastructure is national and which is European: The loss of critical infrastructure in one country has the potential to have severe effects in another. The loss of power supply can hinder emergency services or transport, for example, and these knock-on effects are able to continue across borders. Following human error, an overload of the electricity transmission system in Germany in November 2006 resulted in some 50 million EU citizens losing power in Germany, Austria, France, Belgium, Italy, Spain and Portugal. (House of Commons, 2007: Column 1518) The identification and designation of critical infrastructures as either national or European is entwined with legal and political practices. At the same time, the securitization of critical infrastructure is the result of intra-actions between material-discursive practices. Thus, one member of parliament attempts to draw a ‘pragmatic’ differentiation between types of infrastructure: Nuclear power stations pose a serious risk to life, and disruption of energy supply might pose a serious risk to an economy, at least for a period. When the toilets do not work in a locality, however, that is not a serious risk. (House of Commons, 2007: Column 1523) Rather than trivial, the given example is indicative of the materialization of critical infrastructure through intra-action between matter and meaning. Infrastructure is not simply a list, a collection of sectors and areas, but is intraactively constructed through material-discursive practices. Nuclear power stations, energy supply and sewage systems intra-act in different ways. The materiality of infrastructure is not given, but comes to matter in particular ways. In the European and UK debates on critical infrastructure protection, critical infrastructure is materialized as an assemblage of ‘hard technologies embedded stably in place, which is characterized by perfect order, completeness, immanence and internal homogeneity rather than leaky, partial and heterogeneous entities’ (Graham & Thrift, 2007: 10). **Infrastructures become materialized through their capacity for being disrupted and their effects upon the smooth functioning of society. This erases the materiality of infrastructure as itself generated and generative.** Infrastructure is not a stable ‘hardware’, but its materiality comes to matter in this particular way at the expense of other materializations. For instance, concrete and steel, often the materials of choice for much of the urban infrastructure, are materialized through slow processes of corrosion. In 1992, a report on corrosion in the USA considered that nearly 42% of the nation’s bridges were unable to handle traffic demand or structurally deficient (Fasullo, 1992: 8). Corrosion raises the issue of repair of bridges, roads, water systems, sewers and public buildings, which can fall by the side of securitized critical infrastructure. Twenty years ago, ‘infrastructure’ was defined primarily in debates about the adequacy of the nation’s public works – which were viewed by many as deteriorating, obsolete and of insufficient capacity (Moteff & Parfomak, 2004). Subsequent definitions of infrastructure, particularly ‘critical’ or ‘vital’ infrastructure, have shifted the ‘public works’ definition of infrastructure towards private infrastructure and, more recently, cyber-infrastructure. The materialization of infrastructure as stable and sturdy, able to be ‘retrofitted’ to security concerns or planned with the aim of ‘designing out crime and designing in community safety’ (Office of the Deputy Prime Minister, 2004: 45) effaces the materiality of infrastructure as corrosive, decaying, slowly disintegrating. The different ways in which infrastructure comes to matter and how different objects are materialized are erased in operational guidelines that the CPNI offers in the UK. Thus, protective measures start with the delimitation of a site: ‘State the location and purpose of the site or building and any background comments on its priority or importance. State the boundaries of the site or building under consideration. This is to ensure that it is clear what land around buildings can be used for security measures’ (Centre for the Protection of National Infrastructure, 2010a: 6). Creating boundaries and protecting perimeters around critical infrastructure is a series of measures that rematerialize public spaces: demarcation of boundary; deter entry into the area; protect against attempts to climb over; protect against attempts to cut through; outer and inner fence with sterile zone to support Perimeter Intruder Detection Systems; concealment of guards and/or activity (Centre for the Protection of National Infrastructure, 2010a). As boundaries are drawn, critical infrastructure is materialized as interconnected: gas flows, the flow of energy supplies, oil flows, transport flows, and so on. Integrated circulatory processes appear indeed to be at the heart of the securitization of critical infrastructure, as many security scholars have noted in the wake of Foucault’s analysis of biopolitics. This materialization of infrastructure as interconnected, circulating flows that need to move unimpeded but can be stopped by ‘bad circulation’ (for example, a ‘hostile vehicle’, as in the study from the CPNI) obliterates the materialities of production. The materialization of secure perimeter and boundary demarcation excludes materialities of reverse circulation – from inside out – as much as it obscures the materialization of infrastructure as corroding, decaying or in need of repair. Similarly, the materialization of critical infrastructures as interconnected and circulatory effaces the materialities of productions. Discussions of electricity in relation to critical infrastructure protection, for example, efface the materialities of energy production, particularly the relation between generation and use (Graham & Thrift, 2007). The materialization of energy as simply flow effaces the material connections that exist in the generation of energy, the nodes and lines contained in the grid, their physical properties and connections: Electricity is nonstorable in large amounts, so an instantaneous balance between power production and power consumption plus transmission losses is needed. Various operational limits (voltage modules and angles, line flows, etc.) define the feasible region of a power system and must be enforced. Power flow paths depend on various physical system parameters (resistance, inductance, conductance and capacitance) that impose limits on flow when transferring power to and from different locations (Bompard, Napoli & Xue, 2009: 6).

**The affirmative is the first step towards harmony with nature and the creation of a system that is as subtle and intelligent as the situations it faces. Of course there will be alarm bells and flashing lights, but remaining steadfast allows a new paradigm to be created from the breakdown of fixed patterns**

**Peat, 08 –** theoretical physicist, Ph.D., founder of the Pari Centre for New Learning (F. David, “Gentle Action: Surviving Chaos and Change”, http://www.gentleaction.org/library/paper2.php)

**The basic problem** facing our modern world **is: How can society respond to the flux and challenge of the modern world** when all its institutions are inflexible and over-simplistic? When **situations move more rapidly than an organization is capable of responding, policies and programs are outdated even before they are put into operation.** Rather than acting to render organizations and policies more flexible, the apparatus of modern technology tends to **rigidify and entrench the problems** and rigidities that already exist within an organization. Organizations are composed of individuals and here too the conditioning of our society tends to inhibit natural creativity and abilities. Just as organizations have areas of rigidity, limitations also apply to the psychology of the individual. The issue becomes, therefore, one of freeing and fostering the natural intelligence and creativity of individuals and allowing them to operate fully within society, governments and institutions. In other words, how can organizations and individuals transform themselves so that they can become as subtle, sensitive, intelligent and fast-responding as the world around them? How can institutions heal their separation from society; society from the individual; and the individual from the natural world? Creative Suspension Paradoxically it is the very effort to change that establishes an internal resistance and rigidity that sustains the blocks that are to be removed. **The first step towards transformation lies in an act of "creative suspension" and "alert watchfulness".** This is an action that has the effect of relevating and making manifest the internal dynamics, rigidities, fixed positions, unexamined paradigms, interconnections and lines and levels of communication within the organization and the individual. A form of "creative suspension" is taught to paramedics and rescue workers who have to deal with serious accidents. While a layperson may wish to rush in an "help", a professional will suspend immediate response in order to make a careful assessment of the whole situation and determine how to use resources most effectively. Likewise doctors and paramedics made a visual examination of the wounded before carefully touching and then determining what medical action should be taken. The nature of this creative suspension is related to other approaches and techniques whereby unexamined assumptions and rigidities are brought into conscious awareness. For example, Sigmund Freud's notion of "non-judgmental listening" as well as various meditative practices. Artists, composers, scientists and other creative people often describe how their work unfolds from a form of creative "listening". These acts of listening and watchfulness have the effect of dissolving rigidities and rendering a system more flexible. **Of course the lights will begin to flash and the alarm bells ring. Like Pavlov's dog an organization is conditioned to react and respond.** But what if it does nothing--but it a very watchful way, and this applies not only to organizations but to individuals as well? **The first stage will be one of panic and chaos, a flow of commands and information. All of this is not being generated by any external threat but through the internal structure of the organization itself.** By remaining sensitive to what it going on it may be possible to become aware of the whole nature of the organization, of its values, the way its information flows, its internal relationships, dynamics and, in particular, its fixed and inflexible responses-- the organizational neuroses and psychoses if you like. Arthur Koestler suggested that a scientific revolution is born out of the chaos as a paradigm breaks down. It is possible that something new and more flexible could be born out of the break-down of fixed patterns in an organization, policy group or individual. Through a very active watchfulness it may be possible to detect its unexamined presuppositions, fixed values and conditioned responses and in this way allow them to dissolve by no longer giving energy to support them. The idea would be to permit the full human potential for creativity within each individual to flower, it would enable people to relate together in a more harmonious way and human needs and values to be acknowledged. In this fashion the organization or group dies and is reborn. In its new form it becomes at least as flexible and sensitive as the situation it faces. Now, using science, human creativity and the art of working with complex systems it may be possible to perceive a complex system correctly and model it within the organization. **This new understanding would be the basis for a novel sort of action, one that harmonizes with nature and society,** that does not desire to dominate and control and but **seeks balance and good** order **and is based on respect for nature and society**. Gentle Action explores images of new organizations and institutions that would be able to sustain this watchfulness. In place of relatively mechanical, hierarchical and rule-bound organizations there would exist something more organic in nature. By way of illustrate one could draw upon ideas and concepts in systems theory, Prigogine's dissipative structures, cooperative and coherent structures in biology, neural networks, quantum interconnectedness and non-locality. In such a way organizations will be able to reach a condition in which they are as sensitive, subtle and as intelligent as the systems and situations that surround them. New Organizations, New Dynamics With this increased flexibility, **organizations will now be able to internalize and model the complex dynamics of the systems that surround them. Rather than seeking to predict and control, they will now be able to enter the flux of change and engage in those actions that are appropriate to each new situation.**

**The question of ontology is inescapable**

**Dillon, 99** (Prof of Politics, University of Lancaster), 99 (Moral Spaces, p. 97-98).

Heirs to all this, we find ourselves in the turbulent and now globalized wake of its confluence. As Heidegger-himself an especially revealing figure of the deep and mutual implication of the philosophical and the political4-never tired of pointing out, the relevance of ontology to all other kinds of thinking is fundamental and inescapable. For one cannot say anything about any-thing that is, without always already having made assumptions about the is as such. Any mode of thought, in short, always already carries an ontology sequestered within it. What this ontological turn does to other-regional-modes of thought is to challenge the ontology within which they operate. The implications of that review reverberate through-out the entire mode of thought, demanding a reappraisal as fundamental as the reappraisal ontology has demanded of philosophy. With ontology at issue, the entire foundations or underpinnings of any mode of thought are rendered problematic. This applies as much to any modern discipline of thought as it does to the question of moder-nity as such, with the exception, it seems, of science, which, having long ago given up the ontological questioning of when it called itself natural philosophy, appears now, in its industrialized and corporatized form, to be invulnerable to ontological perturbation. With its foundations at issue, the very authority of a mode of thought and the ways in which it characterizes the critical issues of freedom and judgment (of what kind of universe human beings inhabit, how they inhabit it, and what counts as reliable knowledge for them in it) is also put in question. The very ways in which Nietzsche, Heidegger, and other continental philosophers challenged Western ontology, simultaneously, therefore reposed the fundamental and inescapable difficulty, or aporia, for human being of decision and judgment. In other words, whatever ontology you subscribe to, knowingly or unknowingly, as a human being you still have to act. Whether or not you know or acknowledge it, the ontology you subscribe to will construe the problem of action for you in one way rather than another. You may think ontology is some arcane question of philosophy, but Nietz-sche and Heidegger showed that it intimately shapes not only a way of thinking, but a way of being, a form of life. Decision, a fortiori political decision, in short, is no mere technique. It is instead a way of being that bears an understanding of Being, and of the fundaments of the human way of being within it. This applies, indeed applies most, to those mock innocent political slaves who claim only to be technocrats of decision making.