## 2ac – indirect (0:20)

We meet

Cole et. al 80 (INCENTIVES TO STIMULATE SOLAR ENERGY USEA PROCEEDI~GS OF THE SECOND SEATTLE WORKSHOP September 2-5, 1980 Seattle, Washington R. J. Cole B. ~1. Cone l-I.J. Sheopard P. Sommers A. Marcus D. Lenerz June 1981 Prepared for the U.S. Department of Energy Pacific Northwest Laboratory http://www.osti.gov/bridge/servlets/purl/5536739-I7mijF/5536739.pdf)

The Solar Energy and Energy Conservation Bank was authorized by Title V, Subtitle A of the "Energy Security Act of 1980" (Public Law 96-294), signed into law by President Carter on June 30. The establishment of the Bank is considered to be the most significant Federal legislative action to stimulate the use of solar energy since the passage of the residential energy tax credit. The purpose of this paper is to provide an introductory description of the structure and powers of the Bank as it relates to solar energy. As appropriate, reference will be made to similarities and differences with prior Federal incentive programs that have been used to stimulate the production of nonrenewable energy sources.

Default to reasonability, only way to preserve aff flex

## 2ac at: framework (2:20)

CLAIMS ABOUT “SHOULD” ARE OVERDETERMINED. IT INDICATES A NEED FOR POLICY ACTION IN PROPOSITION. WE MEET THAT.

**Trapp & Hanson ‘5** Robert Trapp is a Professor of Rhetoric at Willamette University in Salem, Oregon, U.S.A. Christine Hanson is the Press Assistant for United States Senator Bill Nelson (Democrat of Florida) and is a lecturer at George Washington University, “Debating Comparative Propositions of Policy,” Volume 5, Issue 4 June 2005 - IDEA: International Debate Education ... http://www.idebate.org/magazine/files/Magazine436a366e4843f.pdf

Merely by convention, some teachers and writers have insisted that the word “should” is a necessary and a suﬃcient indicator of a policy proposition. This convention, however, is arbitrary and does not mirror ordinary language usage. The term “should” is one of many terms that can signal a logical requirement for a plan of action.

ERROR REPLICATION – dividing past counterfactual from the present crushes decisionmaking

**Johnson & Sherman ‘90** Marcia K. Johnson is a Sterling Professor of Psychology at Yale University. Steven J. Sherman is Chancellor's Professor of Psychological and Brain Sciences at Indiana University, Bloomington. “Constructing and Reconstructing the Past and the Future in the Present,” in E.T. Higgins & R.M. Sorrentino (Eds) HANDBOOK OF MOTIVATION AND COGNITATION, p. 510

Counterfactuals are thus important in determining affective reactions to actual events and to judgments of responsibility and causality. (Perhaps one reason why we are more angered by betrayals by people we trust than by people we do not trust is that we can so easily imagine trusted people as behaving otherwise.) More than this, counter factual generation is important because it affects the ways in which we think about the past and about the future. Without considering alternatives to reality, we must accept the past as having been inevitable and must believe that the future will be no different from the past. The generation of counterfactuals gives us flexibility in thinking about possible futures and prepares us better for those futures. Along these lines, Taylor and Schneider (1989) have proposed a theory of coping that focuses on the mental simulation of past, future, and hypothetical events. Such event simulation serves problem-solving and emotion-regulating functions for stressors by increasing the perceived validity of the imagined experiences, providing a framework for organizing experience, and providing a mechanism for mustering helpful emotions. In this way, counterfactual generation and the mental simulation of events can help in coping with ongoing, anticipated, or past stressful events.

It is thus clear that after-the-fact counterfactual reasoning affects feelings and judgments about the past, the present, and the future. Before-the-fact reasoning, in the form of expectancies, hopes, and wishes, likewise affects these feelings and judgments, as we have seen.

Limits cause lock-in – Historical analysis of solar energy policy must be able to CHALLENGE existing frameworks of policy formation and their presentist orientation – only direct contestation of existing frames avoids depoliticization

Laird 1

Solar Energy, technology policy and institutional values

Frank Laird Associate Professor and Director, MA in International Studies Education PhD, Massachusetts Institute of Technology BA, Middlebury College Profile Associate Professor of Technology and Public Policy and Director, MA Degree in International Studies, Josef Korbel School of International Studies, University of Denver; Interdisciplinary Programs in Health, Harvard School of Public Health (1985-1987); National Science Foundation research grants (1991-1992, 1998-2000, 2006-2008); Consultant, Center for Nanotechnology and Society, Arizona State University (2005-2008); Public Policy Committee, American Solar Energy Society (1999-2008), chair of committee (2002-2004); Board of Directors, American Solar Energy Society (2002-2004); Review Panel, Ethics and Values in Science Program, National Science Foundation (1993-1996); Contributing Editor, "Science, Technology & Human Values" (1993-1996); Faculty Affiliate, Center for Science and Technology Policy Research, University of Colorado (2001-present); Academic Advisory Board and Senior Faculty Associate, Center for Science, Policy and Outcomes, Arizona State University (1998-2003); American Association for the Advancement of Science, American Political Science Association, American Solar Energy Society, Association for Public Policy Analysis and Management. Research and Expertise Energy policy, especially with respect to renewable energy; environmental policy, especially with respect to climate change; science and technology policy; democracy and science policy. Programs, Centers and Institutes Center for Sustainable Development and International Peace

IMPORTANCE OF THE CASE The broad importance of energy to all aspects of life in industrial societies needs little discussion. Energy is part of every major technological activity, from agriculture and manufacturing to transportation and telecommunications. The roots of energy policy stem from the U.S. government's deep involvements in energy technologies, resources, and markets, an involvement that goes back over a century and shows no indication of disappearing.30 The government has been and continues to be involved in the research and planning for future energy resources. The Cold War powerfully influenced federal government R8cD priorities, and energy, especially nuclear energy, technologies figured prominently in those programs.31 The Cold War influence went beyond picking R&C.D priorities. As Stuart W. Leslie has argued, the military security orientation of such programs led technology and science policy in particular directions, emphasizing state-ofthe-art high performance often at the expense of technologies that could have important applications in the civilian economy.32 Such planning for the future seemed an immediate and pressing matter during most of the 1970s. It seems less so today, although there is no reason that it should. Planning for the future should not wait until a crisis strikes. Recent price increases remind us that the current low prices and ample supply of oil will not last indefinitely. A recent survey of studies of recoverable crude oil argues that world oil production is likely to peak somewhere between the years 2007 and 2014, and this conclusion does not assume any political events that will interrupt production.33 Energy could be a front-page issue again before long. Solar energy - or renewable energy, as such sources are usually called now - has the potential to be a major part of the world's energy sources as fossil fuels decline in production. As we will see, advocates have long depicted renewables as the resource that will enable the continuation of industrial civilization after the era of fossil fuels, and a recent spate of books and studies have updated and promoted that conclusion. Private analysts, solar and environmental advocates, government agencies such as the fomier Congressional Office of Technology Assessment, and some industry groups argue vigorously that renewable energy will be the cornerstone of future energy systems.34 Thus, understanding the history and dynamics of solar energy policy is important for understanding the possible changes in a technological system of great importance, now and in the future. Energy policy mostly focuses on existing sources of energy, their accompanying technological ensembles, and the conflicts of their associated regional economic and political interests. For example, the coal industry for years opposed increasing the quotas of imported residual fuel oil, typically used for home heating, into the United States, fearing that such imports would cut into their market share.35 In this type of conflict, well-established economic interests argue over policies that would affect their shares of wealth and income. The technologies and market structures involved are mature, the various interests have close, long-term relations to government agencies, and everyone acts as if they have a clear idea of which policies will advance their economic interests and which ones will not. In contrast, policy debates over solar energy are arguments over the shape of a large future technological system. Such policies necessarily confront immense uncertainties about interests and outcomes. This class of policies affects, in addition to energy, many of the most consequential technological systems of our time, including environmentally clean manufacturing, rapid changes in agriculture wrought by advances in biotechnology, and the linkages and developments in telecommunications and information technologies. Policies that governments adopt now will influence billions of dollars of investment in complex technological systems that will become constitutive parts of our society for years to come. The approach I take to this case thereby provides insights for analyzing some of these other issues. CRITIQUE OF THE POLICY-MAKING PROCESS Those who wish to challenge prevailing public policy must be able to challenge the sets of ideas that underlie the status quo. A democratic technology policy cannot content itself with giving citizens a set of cookie-cutter choices but must instead empower them to contest the underlying judgements and ideas that constitute those choices.36 Woodhouse and Collingridge stress that intelligent democratic processes must take into account the views of diverse partisans, lest unwise policies go unchallenged. Clearly, partisans who cannot challenge institutionalized ideas have very little scope for challenging policies in general. Hajer argues persuasively that substantial changes in policy require the dominance of new discourse coalitions, which entails institutionalizing new ideas.37 Langdon Winner addresses the problem that philosophical and other theoretical analyses seem to have little effect on the technologies that our societies produce, even when some actors in the system recognize that ethical and other normative issues will be greatly affected by the new technologies. Winner concludes that "the trouble is not that we lack good arguments and theories, but rather that modern politics simply does not provide appropriate roles and institutions in which the goal of defining the common good in technology policy is a legitimate project."38 This study takes Winner's critique seriously and asks why various technology policy processes, including those that provide channels through which advocates can participate, do not provide the deliberative institutions and roles that Winner calls for. In constructing technologies we do construct our future, and so our policies for the future, if they are to be democratic, require that citizens be able to challenge the institutionalized ideas that underlie the status quo.

Rigged debates – The framework constraints of 70s energy policy disguised the normative commitments of path choices. The artificial FRAMEWORK constraints empirically worked to RIG DEBATES

Laird 1

Solar Energy, technology policy and institutional values

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J U.S. energy policy makers held remarkably consistent normative and technical ideas (sometimes called values and beliefs) about energy technologies lor over three decades. Both types of ideas shaped the problem frame that officials used in thinking about energy policy. Policy elites ^who thought about the future and about new energy sources conceptualized their problems in terms of economic benefits and national secu' rity. Notions of economic benefits changed over time, from the idea that energy should be chcap to promote maximum economic growth to more refined notions that energy markets ought to be efficient to get optimal economic performance. Nonetheless, both notions point to getting energy at the lowest possible price. Discussions of national security emphasized importing oil from sources that would not be interrupted by political acts. Precisely how policy makers expressed their values and beliefs depended on the contingent circumstances iu which they found themselves, but both sets of dominant ideas made for a problem definition that greatly disadvantaged solar advocates. Because of its high market prices, solar was hardpressed to compete with fossil fuels, and because of its diffuse nature, it did not fit into the existing energy production system the way nuclear power promised to do. Although policy makers began to include an assortment of environmental protection values into their frames, that did little to alter the situation^ ' In addition, normative and technical ideas interacted in complex ways, and the boundary between them was ambiguous and contested.1 For example, consider the apparently empirical notion held by a White House aide about the infeasibility of solar energy as a major energy " source. As cited in the previous chapter, this aide took from a discussion k. with Congressman Mike McCormack what the aide called a "Solar fact" , that getting one percent of rhe country's total energy from solar would require converting ten percent of all houses to solar, and would cost S70-105 billion.2 The aide called this a "fact," the most solidly empirical of appellations. And yet. contained within this alleged fact were a number of normative and questionable empirical assumptions. It assumed empirically that the price of solar systems would not go down much. It also assumed normatively that the United States should remain a very high-consumption society, which in itself contains assumptions about the technological possibilities for energy efficiency and rhe normative desirability of ever-increasing material consumption. Changes m any of these underlying ideas would change rhis apparently simple "fact." At a more aggregate level of policy discussions, the normative and empirical ideas became just as enmeshed. As I showed in Chapter 5, Nixon administration officials regarded high levels of energy consumption as normatively desirable, as indicators of a good and progressive society.' The empirical fact of high energy consumption became a normative standard. Thus the official energy policy frame made sustaining and enlarging that consumption more than just preserving the empirical status quo; growing energy consumption was a valued social goal, nor just an empirical fact. This problem frame stacked the odds against solar energy in normative as well as empirical terms. By this normative standard. the sorts of technological changes rhar would most cnhance solar energy's prospects, particularly large improvements in energy efficiency, look normatively undesirable, whatever their technical feasibility. Conventional energy policy analysts held these intertwined empirical and normative goals deeply, as shown by their bitter attacks on Amory Lovins when he challenged that problem frame, as detailed in Chapter J l or thirty-five years solar advocates presented their technologies that used a variety of renewable energy sources as a way to exploit a vast, inexhaustible, but diffuse, resource. Most of them for most of the period did not think that creating a solar society entailed significant social or political change. Hoyt Hottel, Maria Telkes, Farrington Daniels, and rhc other early solar pioneers of the 1940s and 1950s all soughr to make solar affordable, largely with the assumption rhat it would plug into the existing energy systems, replacing fossil fuels, and enabling socicty and polity to continue functioning as before, with greater security and, perhaps, less pollution. Most of them saw no contradiction in promoting research and development in both solar and nuclcar power, or solar and synthetic fuels, and their only complaint was that nuclcar got an unfairly large portion of federal subsidies. A few of them, such as Daniels and Eugene Ayers, sometimes hinted that a substantial changc in such a major technological system would affect more than how one heated a room or lit a lamp. Bur for most of these advocates, solar energy technology offered just another way of securing tlie status quo against the end of fossil fuels. They sought a new technological system to prevent the social changes that would accompany scarcity. By the 1970s a new type of solar advocate emerged. These activists came to the technology from a part of the environmental movement that believed that the fundamental structures of society and politics - those concerned with industrial and agricultural production, housing, settlemenr patterns, and transportation - were, in some deep sense, flawed.4 These ecological advocates did not simply want any and all solar technologies. They sought technologies that would reinforce and be more compatible with a qualitatively different society and politics, one in which ecological sustainability and local community self-reliance would displace increasing ecological damage, bureaucratic centralization, and anomic. For them, making a drastic change in the energy technology system would l>c akin to making a legislative change for all of society.5 Whether the technologies they sought would have given them the society that they desired is not the point here. Rather, the point is that their social goals and ideas about technology as a social force led them to a very different framing of the energy problem and solar's role in it. Within their problem frame, solar was not only a feasible solution to the energy problem, it was the only desirable solution, rhe only energy technology ensemble that would encourage and strengthen the sorr of society thar they desired. In their frame, issues such as high initial costs and an immature industry were problems to be solved, not barriers to policy. This shared meaning of solar energy technologies bound together ecological advocates as a social group and drove their choices, leading them to champion smaller, more decentralized solar technologies and to reject schemes like the solar-powered satellites." The problem frame that came out of this meaning led them to regard problems like costs as secondary considerations, just the opposite of conventional frames. Top-level policy makers never shared thar framing of the problem or the normative values that went with it. Their public pronouncements and written internal debates show no hint that they ever even considered rhis alternative problem frame and set of values. The presidents and their top aides - in every administration - talked about energy almost exclusively in economic and national security terms, with occasional references to narrowly construed environmental values. Even in rhc Carter administration, no oiK' outside of the Council on Environmental Quality (CEQ) gave any sign that they even thought about some of the more radical alternatives, and they never committed them to paper, suggesting thar such ideas were nor welcome in policy deliberations. These facts suggest a new inrcrprctarion of solar energy policy, particularly its rapid rise and fall in the 1970s. The conventional explanations for energy policy and solar's failure to establish itself within ir do not explain all of the events recounted here. It was not enough that solar was expensive and its future costs were uncertain. That could bosaid of all future energy technologies, including nuclcar energy. And it f. was not enough that the Reagan administration was ideologically hostile to solar energy. Solar advocates began losing their battles for support while President Carter was still 111 officc, and the ideological explanation „ begs the question of why Reagan and his people evinced such hostility to solar energy. The association of solar energy with the ecological wing of the solar movement was a phenomenon of the 1970s, not what one mighr have predicted in the 1950s or 1960s. Perhaps most importantly, the events analyzed here require us to reexamine the pluralist account of solar energy policy. Pluralism must, to explain events adequately, incorporate the importance of ideas, normative and empirical, being institutionalized into official problem framesy SOLAR ADVOCATES' LIMITED INFLUENCE ON POLICY ("Standard notions of American pluralism claim that any organized interest group can influence public policy by mobilizing rhe appropriate polit- / ical resources, such as votes, money, public opinion, and the like. From ^ this perspective one can evaluate a group's influence or effectiveness by ^ the extent to which it gets those policy outcomes that it desires. By thar measure, rhe solar movement, particularly the ecological wing of it, ^ appeared very powerful and effective for a brief period in the late 1970s. '' The question is why it both rose and then fell with such speed. The advocates pushing solar energy did not suddenly lose public support or their ability to argue their case.\* Instead, the values that ecological advocates / asstxiatcd with solar energy and the solar movement were in stark contrast to the conceptualization of the energy policy problem by top-level , decision makers. The official problem frame, and the values thar drove it, did not change, despite the considerable efforts of the solar movement to argue for an alternative. Thus the history of solar energy policy presents anomalies to pluralism. Prior to rhc energy crisis, prominent scientists, engineers, and businessmen advocated for solar energy, beginning after World War II and continuing for over twenty years. Wcll-placcd wirhin the rcchnical, government, and business community, these advocates should have been influential among important policy analysts and makers. On numerous occasions they were able to make their case to legislative and executivebranch officials, including some cabinet secretaries, members of the House and Senate, and, in a few instances, ro the president via his top aides. Many of the advocates spoke with the authority of impeccable technical credentials, exemplified by Farrington Daniels, a veteran of the Manhattan Project, member of the National Academy of Sciences, and president of the American Chemical Society. By the middle 1950s such advocacy became formalized with the creation of the Association for Applied Solar Energy (later becoming the International Solar Energy Society and the American Solar Energy Society), broadening solar's constituency to include business people, bankers, and so on. So why were these groups not more successful? Part of the explanation certainly lies in unfortunate contingent circumstances, such as President Truman's firing Interior Secretary Julius Krug only weeks after Krug had decided to launch a very large solar energy research program. Part of the explanation lies in unpropitious structural circumstances, such as the steady drclinc in energy prices in rhe 1950s and 1960s. And parr of the explanation lies in traditional interest group analysis. Solar energy did not have the same level of business, scientific, military, or congressional support that nuclear power enjoyed. But these factors do not constitute an adequate explanation. To develop a better one 1 have focused on recent policy literature that argues for the importance of ideas, both empirical and normative, in shaping and changing public policy. The case study itself - the history of solar energy policy - demonstrates the importance of ideas, particularly the importance of institutionalizing new problem frames and rhc technical and normative ideas that go with them. Absent institutionalizing new ideas, substantial, sustained changes in policy remain unlikely. Prior to the energy crisis, most energy policy concerned disputes between diffcrcnr fuels and rhc different regions of rhc country thar produced and consumed them. With policy makers accepting a problem frame based in such disputes, solar energy had little to offer cxccpr as a possible alternative in the distant future. However, since analysts and policy makers expected future energy demand to be immense, it seemed that future alternatives needed to produce large quantities of bulk energy, a task for which most people considered nuclear power to be better equipped. Policy advisors did frequently note that the governmenr underfunded solar R&D, especially compared to nuclear power, bur, absent a pressing crisis, nuclear s better fir wirh existing problem frames, along with its greater political resources, kept the subsidies flowing, while solar only got research targeted to auxiliary goals, such as NASA's funding for the development of photovoltaics for use on its satellites. The beginnings of the energy crisis in 1970-1971 coincided with the rise of institutionalized environmental protection values in the form of new legislation and the Environmental Protection Agency to implement that legislation. Those ideas had some effect on energy policy, but not enough to put solar energy at ccntcr stage. Nonetheless, Presidents Nixon and l ord began pouring money into all alternative forms of energy. including solar, quickly increasing solar R&I) budgets, sometimes as a response to Congressional initiatives. That said, the definition of the energy problem, the way it was framed, as discussed at length in earlier chapters, changed little, merely acquiring a sense of urgency from the energy crisis. Solar energy policy in the Carter administration shows the difference between successfully pressuring for a policy and successfully institutionalizing a new set of beliefs and values associated with some technology. Those years marked the time when the solar movement was the closest it ever came to being a mainstream movement, claiming to provide a feasible solution to an urgent problem. At rhc very time that solar technologies were commanding increasing resources, the ecological wing ol the solar movement became increasingly influential in policy circles. The Solar Lobby and related groups began to form a very effective pressure group for solar energy, and they clearly got most of what rhev wanted out of Carter's solar Domestic Policy Review process. But ir is equally clear that high-level policy makers never took the advocates' values or framing of the problem seriously. The advocates' political and social issues were never part of official discourse or debate. Even advocates' particular conceptions of environmental concerns never penetrated discussions in the White House. Policy makers simply never accepted, at least not in writing or in policy, the notion that the environmental problems related to energy suggested a deeper critique of existing energy, social, and political systems.

COUNTERFACTUALS ARE INEVITABLE AND INCREASE NEG GROUND – policy, economics and the law requires counterfactuals and there’s historical and empirical data on our aff

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Based on the temporal frame of these hypothetical resolutions, affirmative and negatives burdens change. For the Vietnam resolution, the affirmative would be bounded by the historical policies followed by the Kennedy, Johnson, and Nixon administrations. Claims could be empirical or probabilistic. Empirical claims would be verifiable in terms of historical data. Probabilistic claims would be speculative in nature. Negative claims could point to "actual" disadvantages stemming from the affirmative policy. Additional negative claims could speculate on policy alternatives. For example, the affirmative could argue the "domino theory" that all countries in southeast Asia would have fallen to the communists if not for US intervention. This claim is an example of a counterfactual conditional. This proposition takes the generic form "If it had been the case that C (or not C), it would have been the case that E (or not E)" (Fearon, 1991, p. 169). Debating historical propositions would entail extensive use of counterfactual logic. Historical analysis inherently involves a level of counterfactual reasoning. Murphy (1969) argues that "counterfactuals were an essential method of historians; these were by their nature (are) unverifiable propositions" (p. 15). The fact that they are unverifiable has led to criticism of counterfactuals as a form of logic. Thus, standards need to be applied in the assessment of counterfactual scenarios. Standards for Debating Historical Propositions? It should be noted that counterfactuals are a common model of logic. Their use transcends both specialized and general argumentative fields. Counterfactuals are commonly used in a variety of scholarly disciplines. Fearon (1991) states that "scholars in comparative politics and international relations routinely evaluate causal hypotheses by discussing or simply referring to counterfactual cases in which a hypothesized causal factor is supposed to have been absent" (p. 169). Conterfactual reasoning is common in legal argumentation. Counterfactual thinking is related to plaintiff compensation. In this context, "jurors are presented alternative event scenarios by the opposing parties" (Bothwell & Duhon, 1994, p. 705). Research indicates that there was a significant relationship between counterfactual thinking and plaintiff compensation (Miller & McFarland, 1986; Bothwell & Duhon, 1994). Counterfactuals are common to the study of economics. Murphy (1969) argues: that we cannot judge any economic policy without counterfactuals, we cannot estimate consumer surplus, we cannot calculate the effects of a tax or a subsidy, the removal of international trade barriers, indeed we cannot judge any recommendation to change the status-quo unless we consider the alternative state of affairs. (p. 18) Counterfactuals are also common in generalized fields of argumentation. Landman and Manis (1992) found "that personally relevant counterfactual thought is commonly engaged in by people outside the laboratory" (p. 476). Roese (1994) argues that "the ability to imagine alternative, or counterfactual, versions of actual events appears to be a pervasive, perhaps even essential, feature of human consciousness" (p. 805). Given the widespread use of counterfactuals, evaluation of counterfactuals can be extrapolated from existing standards. Meyer and Conrad (1957) argue that even though "counterfactuals cannot be directly tested, it is possible to consider the statement within a valid deductive system, independently of the acknowledged falsity of the conditional clause" (p. 540). Such a derivation is clearly an intuitive one and is not a matter of formal logic (Murphy, 1969).

## 2ac – without material quals

#### We meet – their definition is out of context, without material qualification means between completely and not at all

Becker 85

Steven R. Becker, District Court Judge, 2/18/84, Kansas V. Rose, P. Westlaw

As these cases illustrate, [HN6] the qualifying term "substantially," as used in K.S.A. 8-1749a, has a well-recognized and understood meaning. It is defined in Black's Law Dictionary 1281 (5th ed. 1979), as"[e]ssentially; without material qualification; in the main; in substance; materially; in a substantial manner. About, actually, competently, and essentially." "Substantial" is defined in the same dictionary at 1280 as "actually existing; real; not seeming or imaginary; not illusive; solid; true; veritable . . . . Synonymous with material." Webster's New Collegiate Dictionary 1153 (1981) defines "substantial" in part as "being largely but not [\*\*\*14]wholly that which is specified." By definition the term is relative and must be considered within the context of the particular fact situation; in essence it means less than totally or the whole, but more than imaginary**.** As such, the standard proscribed by the use of "substantially" in 8-1749a establishes with reasonable certainty what conduct is violative of the statute and subject to punishment. The use of "substantially" in 8-1749a is similar to the use of "material deviation" in K.S.A. 21-3405, which we held in State v. Randol was not unconstitutionally vague and indefinite when the standard proscribed therein is measured against the parameters of ordinary negligence on the one hand and gross and wanton negligence on the other. 226 Kan. at 355. "Substantially" is a word of general usage, commonly known and understood by the public, which provides a reasonably definite objective standard by which one reading the statute can understand and contemplate what conduct it is that the act proscribes. The statute prohibits motor vehicles from being equipped with one-way glass or other substances applied to the windows forward of or adjacent to the driver's seat, which prohibits [\*\*\*15] or substantially impairs the ability to see into the motor vehicle from the outside. The gravamen of the offense is clearly the impairment of visibility into the motor vehicle from the outside. Operators and [\*1050] owners of vehicles are clearly and sufficiently warned they cannot install one-way glass or apply other substances to the windshield and side windows of a car or other vehicle which prevents or impairs the ability to view the inside of the vehicle from the outside.

The trial court relied upon State v. Lackey, 232 Kan. 478, wherein the word "appreciable," as used in a statute regulating the disposal of salt water produced in conjunction with the drilling of oil or gas, was recognized by the court as [\*\*1017] having been defined in various ways. It was capable of meaning either considerable or slight, which are adjectives of opposite meanings, and by its very nature was vague, and therefore unconstitutional. Such is not true with the term "substantially" as used in K.S.A. 8-1749a. It defines a standard between the extremes of total and completeimpairmentand slightimpairment,similar to the use of the phrase "material deviation" discussed in[\*\*\*16] State v. Randol, which was held not to be unconstitutionally vague

#### And they’re arbitrary – substantially is subjective

Hopkins 9

Starting and Managing a Nonprofit Organization: A Legal Guide, p. google books

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(Cass, Clay, Jackson & Platte Cos.)

The\* true\* measure of substantiality remains elusive. In reports accompanying tax legislation over the years, the Senate Finance Committee has characterized the state of affairs well. In 1969, the Committee wrote that the "standards as to the permissible level of (legislative) activities under the present law are so vague as to encourage subjective application of the sanction." Liter, in iy7t>, the Finance Committee portrayed the dilemma Litis way: "Many believe that tine standards as to the permissible level of (legislative] activities under present law are too vague and thereby tend to encourage subjective and selective enforcement."

## 2ac Kritik (1:00)

#### Recognizing contradictory ideas in the context of technological determinism improves communication and discussion to break down technoscience

Rosales 2009

Janna Metcalfe, thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy Department and Centre for the Study of Religion University of Toronto, “WHEN THE “TWILIGHT OF JUSTICE” MEETS THE “DAWN OF NANOTECHNOLOGY”: A CRITIQUE OF TRANSHUMANISM AND THE TECHNOLOGICAL IMPERATIVE IN THE LIGHT OF GEORGE GRANT’S MORAL PHILOSOPHY,” https://exams.library.utoronto.ca/bitstream/1807/17824/6/Rosales\_Janna\_M\_200906\_PhD\_thesis.pdf

For those who cannot give up that transcendental framework, the contradiction between the good and the triumph of the will lives itself out in the kinds of visceral “nerveracking situations of justice” (Grant, 1984/1998, pp. 440-441) from which we make sense of being, whether that entails taking a stance on reproductive ethics, euthanasia, nuclear energy, cybernetics, eugenics, germ-line genetic engineering, or molecular manufacturing. While one may be tempted to seek definitive resolutions to ethical dilemmas or to gloss over evidence of contradictions when deliberating over the issues, the efforts of both Grant and Simone Weil demonstrate that trying to pay due credit to contradictory ideas is not necessarily “evidence of a discreditable intellectual weakness” (Forbes, 2007, p. 201). Sometimes reality shows us incompatible truths that no amount of intellectual refinement or methodical reasoning can dispel; in this case the point is not to skim over or hide the inconsistencies, but rather, in the true spirit of a dialectical approach, to identify both complementarity and irreducible differences between ideas. To recognize contradictory ideas, as Weil (1956) insists, is to “experience the fact that we are not All” (p. 411). This too is an experience with otherness, one that is better apprehended through love rather than a logic that simply seeks consistency. As I stated in chapter 1, Grant considered the dialectical method to be grounded in eros, in that to know a thing is also to love it. I think nanoethics can benefit from this interpretation of the dialectical approach because currently the terms of engagement are set up more as a struggle between opponents, where there are debates to be won and lost, whether between Drexler and Smalley, Kurzweil and Joy, Hughes and Kass, transhumanists and bioconservatives. Too much emphasis on out-arguing one’s opponent and refuting contradictions closes down on channels of communication and excludes more constructive ways to frame the discussion. As a case in point, Langdon Winner (1986) observes that our debates about technology, society, and the environment often take a narrow view of what constitutes an acceptable discussion, usually drawing on concepts of efficiency and risk to define the parameters (p. x). What Grant does is bring challenging concepts to the table as a way to lift us out of an exclusively technoscientific mindset.

## 2ac – at: cap (1:30)

Energy paths can’t be explained by pure economics

Laird 1

Solar Energy, technology policy and institutional values

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In light of the conferences, technical and popular publications, the creation of new institutions outside of government, and the intermittent /4 / interest of senior government officials, why was there so little official action on solar energy before the 1970s? The customary explanations of if »M 0,; Hf' short­term policies or markets do not hold up to closer scrutiny. Clearly, I due to the relatively high cost of solar energy from the 1940s through the 1960s and the declining prices of fossil fuels during the same period, the research, development, and diffusion of solar technologies would have required the support of some institution Willing and able to take a very View of the future needs for energy resources. While one often hears the glib complaint that governments never take long­term perspectives on policy issues, in fact such institutions and leadership were very much in existence in the decades after World War II. These long» term investments showed up in Republican and Democratic administra tions alike, such as Eisenhower’s initiative on the Interstate Highway System, Kennedy’s support of a greatly expanded space program, and ]ohns0n’s Great Society programs.1 Although always constrained by budgets, all of these administrations invested in future-oriented projects, ones that required a certain amount of vision and commitment to the nation’s development. Solar technologies could have been, but were not, included among them.

Another standard reason given to explain the failure of solar energy to develop in these years focuses on the lack of any pressing short-term need for it. Although conditions Changed at the end of the johnson administration, abundance and decreasing prices in most parts of the energy market characterized the postwar period to 1968. This situation, framed by conventional thinking of the day, left solar without a problem to solve and made solar technologies too expensive in comparison to conventional technologies. The economics of solar Certainly made it very difñcult to develop a consumer market composed mainly of individuals putting solar devices on their homes, or of industrial markets in transportation or manufacturing.2

But this explanation fails to account for two historical realities. First, at least since the 1880s, U.S. energy markets have been in part political markets. Besides the traditional set of atomized small buyers and sellers Who constitute the microeconomists’ conception of a market, the production and supply systems that deliver energy to consumers have included governments at the national and state levels, large utility monopolies, large supply companies, and a variety of financial institutions. All of these institutions and their interests influence the prices that consumers see and the energy choices from which they may pick. Second, and perhaps more importantly, energy technologies could also be developed quite independent of consumer demand. Public policy makers in fact made immense investments in energy technologies in the United States and elsewhere and developed them extensively, all Without any real short-term economic incentives. In the most striking case, nuclear technology’s advocates succeeded in politically constructing it as the technology of the future.3

As discussed in Chapter 1, in the 1940s energy specialists had generally equated nuclear and solar energy as long-terrn alternatives to fossil fuels, regarding each as expensive but promising future energy technologies and calling for research and development in them. It Was in the Eisenhower administration that nuclear energy jumped into the foreground of energy policy, leaving solar behind. Advocates of nuclear energy managed to lay claim to the proximate future and billions of R&D dollars, While policy makers continued to relegate solar energy to the distant future, if they considered it at all. The rise of nuclear power is a complex story that involves scientists in and out of government promoting it, along with a special congressional committee, some officials of the fledgling Atomic Energy Commission (AEC), and a host of popular Writers.4 Even though some top officials remained skeptical of the need for a large government nuclear energy program, it continued growing in size. The “Atoms for Peace” speech did not turn around nuclear policy in one stroke, hut it did articulate publicly a policy frame in which nuclear power could play a significant role. In this speech civilian nuclear power became not merely the positive side to a troubling technology but rather part of an international process of spreading prosperity in a Way that would lessen the chances of another World War.5 EisenhoWer’s speech gave the idea of civilian uses of nuclear energy an enormous boost, and coverage of peaceful nuclear technology expanded into the popular media dramatically with almost entirely positive assessments.6

The rapid development and expansion of policies for nuclear technology, with its many technical and economic uncertainties, had nothing to do with solving short-term problems of energy supply. Indeed, solar energy had the support of some of the same people who supported nuclear energy development. For instance, Representative Craig Hosmer (R-California), who had introduced the earliest bills to support solar developments in the 1957~196O period, strongly supported Project Plowshare in the 1960s, a proposal to use nuclear explosives to dig canals, harbors, and the like.7 Yet solar research never received anything approaching the resources given to nuclear. Why Was nuclear so Successful and solar not? The failure of solar energy to attract more substantial policy support must lie beyond any scientific or objective assessment of its potential. Instead, the contrasting histories of nuclear and solar energy in the 1950s and 1960s demonstrate the symbolic and valuative components of policy making, as well as their interaction With public and private institutions that led in the nuclear case to massive investment in a technology. Despite a small constituency, interested bureaucrats, and a few sympathetic representatives and senators, the advocates of solar energy never made the pluralist penetration of policy making. As the Truman through the Johnson administrations tried to solve energy problems, three particular features of the energy problem definition contributed to the inability of solar advocates to make much headway in getting government support for solar energy. These were the emphasis on economic growth and free-market mechanisms, energy’s low priority for high-level policy makers, and the belief in the need for exponentially increasing supplies of bulk energy. In addition, solar energy suffered from the fragmentation of energy policy, which, coupled with the reigning problem definition, made it difficult for solar energy advocates to find an institutional champion Within government

**Energy scenario planning assimilates resistance to dominant neoliberal models**

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In an early portion of my research on oil industry funded aid interventions in Nigeria, a Shell staff member down-played the significance of futures projections for determining its public affairs policy. When I sought, but was unable to obtain, access to the company’s London archives I was told: ‘We are future oriented’. Expressed in the existence of Shell’s Scenarios division, future modeling is highly salient to the company’s strategy. The approach was influenced by the work of the Manhattan Project in the 1940s. Here Herman Kahn, later known for his work in military modeling with the Rand Corporation (Nikiforuk, 2008), was an important figure. The Club of Rome’s use of scenario planning in The Limits to Growth (1972), an influential document in the debates on environmental security and violence (Xiang and Clark, 2003) indicated the interconnection between scenario modeling and (a Malthusian-inflected) environmental determinism. Shell developed its first global scenarios in 1972 as well (Shell International, 2008b, p. 87) and was largely the ‘inventor’ of scenario planning in the business world. Today scenario-modelling is used widely in business and policy processes, and is influential in both international development practice and sustainability planning ( [deGrassi, 2007], [Ghanadan and Koomey, 2005] and [Xiang and Clark, 2003]). In the ExplorersGuide Shell provides the following partial list of audiences for their scenarios, exemplifying their high level reach: “External directors ... of an international institution in Washington DC. Representatives from NGOs, businesses and governments during Scenario Day of the World Summit on Sustainable Development in Johannesburg. Trustees and top management team of an international NGO. Local managers ... of a major Northern European national bank; the ministry of defence of a South-East Asian country. Energy industry leaders and senior politicians at an industry annual executive conference” (Shell International, 2008b, p. 83). The early underpinnings of Shell’s scenario work are documented in two 1985 articles in the Harvard Business Review. There Pierre Wack of Shell’s Planning division describes how the company’s initial scenarios predicted the oil shocks following the creation of OPEC. Through Shell’s Scenarios division and former staff in business consultancy, Shell promoted the diffusion of the scenario-planning methodology which sees ‘uncertainty as key to producing profit in a turbulent environment’.8 The process imagines a series of possible outcomes for which industrial management must be prepared ( [Wack, 1985a] and [Wack, 1985b]). As suggested by their prediction of OPEC’s emergence, in retrospect some of Shell’s work has appeared prophetic. According to the guidelines used by the Scenario-makers, accuracy is a central criteria for evaluation of their worth. As Wack explains, a set of scenarios can be evaluated on two measures: (1) what did they leave out? (i.e. did they accurately predict possible future outcomes) and (2) did they lead to action?. If the scenarios only suggested ‘responses that past experience would indicate’, then scenario modeling would be no more than ‘interesting speculation’ and thus no great advance on conventional planning strategy” ( [Wack, 1985a] and [Wack, 1985b]).9 “An English professor, who was co-author of a mid-1990s Shell scenario publication, describes how the scenario process teaches Shell managers to think mythologically and causally, to see every major local or world event as potentially located in a story, and to make on-the-spot business and policy decisions based on what they know about where that story would lead if allowed to play itself out. Thus these scenarios play an integral role in Shell’s futures planning (Davis-Floyd, 1998). As suggested by a range of literature on trans-national elites, scenario planning shapes possible economic outcomes by delineating a set of ‘mythical’ futures while foreclosing others ( [Sklair, 2001], [Van der Pijl, 2004] and [Van der Pijl, 1998]). The relations created among those who participate in scenario planning are also influential. As argued by Bond with reference to scenario-modeling around South Africa’s post-apartheid social contract, the scenario planning process among business and social leaders was equally important as its published outcome: Through scenario making and its discursive projections, potentially resistant social actors are incorporated into the construction of corporate mythology (Bond, 2000). Since the early 1990s (1992, 1995, 1998), Shell’s scenarios group has been imagining neo-liberal outcomes. At the beginning of that decade Shell’s publications explored two competing world scenarios – one ‘market-centric’, the other ‘alternative’ giving more room to social and community aspirations. Thus, the 1990s Scenarios employed the TINA concept – Margaret Thatcher’s ThereisNoAlternative (TINA) – to describe “increasing globalisation, the onrush of new technology and market scenarios” (Shell, 2004). Their 2001 Scenarios provided two options “Business Class” and “Prism” and explored the question “How will people and societies shape liberalisation, globalisation and technology in a more connected world?” (9) and continued to endorse ‘TINA.’ To be sure, in the face of growing international critique of neo-liberalism, the slogan ‘There is No Alternative’ emblazoned the cover of Shell’s pamphlet for the World Conference on Sustainable Development in 2002.