Causal Stories and the Formation of Policy Agendas

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There is an old saw in political science that difficult conditions become problems only when people come to see them as amenable to human action. Until then, difficulties remain embedded in the realm of nature, accident, and fate—a realm where there is no choice about what happens to us. The conversion of difficulties into problems is said to be the *sine qua non* of political rebellion, legal disputes, interest-group mobilization, and of moving policy problems onto the public agenda.[1]

This article is about how situations come to be seen as caused by human actions and amenable to human intervention. Despite the acknowledged importance of this phenomenon as a precursor to political participation and to agenda setting, there is little systematic inquiry about it in the political science literature. For the most part, the question is dealt with under the rubric of agenda setting, even though the transformation of difficulties into problems takes place in something of a black box prior to agenda formation. Three strands of thinking in the agenda literature contribute indirectly to an understanding of this topic. One strand focuses on the identity and characteristics of political actors—leaders, interest groups, professionals, breaucrats. It looks at the actors' attitudes, resources, and opportunities

[1] On litigation, see William Felstiner, Richard Abel, and Austin Sarat, "The Emergence and Transformation of Disputes: Naming, Blaming, Claiming," *Law and Society Review* 15 (1980–81): 631–654; on interest groups, the locus classicus is David Truman, *The Governmental Process* (New York: Knopf, 1951); on agenda formation, see John Kingdon, *Agendas, Alternatives and Public Policies* (Boston: Little, Brown, 1984), 115–121.

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to account for the appearance of policy problems and their particular formulations at any given time.[2] A second strand focuses on the nature of the difficulties or harms themselves — for example, whether they are serious or mild, new or recurring, short-term or long-term, health effects or economic effects.[3] Finally, a third strand focuses on the deliberate use of language and of symbols in particular as a way of getting an issue onto the public agenda or, alternatively, keeping it off.[4]

While each of these approaches gives us some insight into the processes of problem definition and agenda setting, they miss what I think is the core substance of the transformation of difficulties into political problems: causal ideas. Problem definition is a process of image making, where the images have to do fundamentally with attributing cause, blame, and responsibility. Conditions, difficulties, or issues thus do not have inherent properties that make them more or less likely to be seen as problems or to be expanded. Rather, political actors *deliberately portray* them in ways calculated to gain support for their side. And political actors, in turn, do not simply accept causal models that are given from science or popular culture or any other source. They compose stories that describe harms and difficulties, attribute them to actions of other individuals or organizations, and thereby claim the right to invoke government power to stop the harm. Government action might include prohibition of an activity, regulation, taxation, economic redistribution, criminal sanctions, education campaigns, direct compensation of victims (through social insurance or special funds), and mandated compensation of victims (through litigation).

In thinking about how causal argument works in politics, I have borrowed from all three strands of the agenda-setting literature. I take a social constructionist view of policy problems. That is to say, I believe our understanding of real situations is always mediated by ideas; those ideas in turn are created, changed, and fought over in politics. I will show how political actors use narrative story lines and symbolic devices to manipulate so-called issue characteristics, all the while making it seem as though they are simply describing facts.[5] I have created a typology of causal stories, and I hope to demonstrate with a variety of examples that there is in fact a systematic process with fairly clear rules of the game by which political actors struggle to control interpretations and images of difficulties.

[2] I see this approach as the main thrust of Kingdon's *Agendas, Alternatives and Public Policies*, ibid., though he certainly incorporates the second and third approaches mentioned below.

[3] This strand is best exemplified by Roger Cobb and Charles Elder, *Participation in American Politics: The Dynamics of Agenda-Building* (Boston: Allyn and Bacon, 1972), chaps. 6 and 7. Cobb and Elder also pay attention to the nature of the participants and to symbolic language (see esp. chaps. 8 and 9), but I think their distinctive contribution is the argument that certain characteristics of a difficult situation determine whether it is likely to expand.

[4] The work of Murray Edelman dominates this tradition. See his *The Symbolic Uses of Politics* (Urbana: University of Illinois Press, 1964); *Politics as Symbolic Action* (Chicago: Markham Publishing Company, 1971); and *Constructing the Political Spectacle* (Chicago: University of Chicago Press, 1988).

[5] The best analysis I know of using this perspective is Joseph Gusfield, *The Culture of Public Problems* (Chicago: University of Chicago Press, 1981).

Causal stories have both an empirical and a moral dimension. On the empirical level, they purport to demonstrate the mechanism by which one set of people brings about harms to another set. On the normative level, they blame one set of people for causing the suffering of others. On both levels, causal stories move situations intellectually from the realm of fate to the realm of human agency. This intellectual step is the key trigger for moving a condition onto what Roger Cobb and Charles Elder call the "systemic agenda," the set of issues up for general discussion in a polity.[6] The great books that launched public issues, such as Ralph Nader's *Unsafe At Any Speed*, all performed this intellectual transformation, as I will show later. But the competition to control causal stories does not stop once an issue reaches either the systemic or the formal agenda. Causal stories continue to be important in the formulation and selection of alternative policy responses, because they locate the burdens of reform very differently.

In politics, causal theories are neither right nor wrong, nor are they mutually exclusive. They are ideas about causation, and policy politics involves strategically portraying issues so that they fit one causal idea or another. The different sides in an issue act as if they are trying to find the "true" cause, but they are always struggling to influence which idea is selected to guide policy. Political conflicts over causal stories are, therefore, more than empirical claims about sequences of events. They are fights about the possibility of control and the assignment of responsibility.

A Typology of Causal Stories

We have two primary frameworks for interpreting the world—the natural and the social. In the natural world, we understand occurrences to be "undirected, unoriented, unanimated, unguided, 'purely physical'."[7] There may be natural determinants—the clash of a cold front and a warm front causes a storm. But there is no willful intention behind the occurrences, at least not without invoking a purposeful God. The natural world is the realm of fate and accident, and we believe we have an adequate understanding of causation when we can describe the sequence of events by which one thing leads to another. In the social world, we understand events to be the result of *will*, usually human but perhaps animal. The social world is the realm of control and intent. We usually think we have an adequate understanding of causation when we can identify the purposes or motives of a person or group and link those purposes to their actions. Because we understand causation in the social sphere as related to purpose, we believe that influence works. Coaxing, flattering, bribing, and threatening make sense as efforts to change the course of events; and it is possible to conceive of preventing things from happening in the first place. In the natural world, influence has no place. We laugh

[6] Cobb and Elder, *Participation*, 14.

[7] Erving Goffman, *Frame Analysis* (New York: Harper and Row, 1974), 22.

at those who would bring rain with their dances or sweet talk their computer into compliance. In the natural world the best we can do is to mitigate effects.

In everyday discourse, as Erving Goffman points out, we use the term "causality" to refer to both "the blind effect of nature and intended effect of man, the first seen as an infinitely extended chain of caused and causing effects and the second something that somehow begins with a mental decision."[8] Yet in politics, the distinction between actions that have purpose, will, or motivation and those that do not is crucial. So, too, is the distinction between effects that are intended and those that are not, since we know all too well that our purposeful actions may have unintended consequences.

These two distinctions—between action and consequences and between purpose and lack of purpose—can be used to create a framework for describing the causal stories used in politics. (See Table 1.) Each box contains a different kind of story about causality. The four types are rough categories with fuzzy boundaries, not clear dichotomies. The table is meant to serve as a map to show how political actors push an issue from one territory to another.

The most important feature of the table is that there are two relatively strong, pure positions—accident and intent—and two relatively weak, mixed positions—mechanical and inadvertent cause. In the struggle over problem definition, the sides will seek to stake out the strong positions but will often move into one of the weaker positions as a next-best option.

In the upper right box are accidental causes. These include natural disasters such as floods, earthquakes, droughts, and hurricanes. Here we might also put machines run amok—the car that careens out of control or the CAT scanner that crushes its captive patient. These phenomena are devoid of purpose, either in their actions or consequences. In fact, one cannot properly speak of actions here, but only of occurrences. This is the realm of accident and fate.

Since our cultural understanding of accidents defines them as events beyond human control, causal politics is centrally concerned with moving interpretations of a situation from the realm of accident to one of the three realms of control. This is not to say that government action is limited to the realm of human control; we often call upon government to mitigate the effects of natural disasters, for example, by providing famine relief or aid for flood and storm victims. Yet even for natural disasters, where there is probably the strongest cultural agreement that they are indeed accidents, there is sometimes a political struggle over even that consensus as victims call for government aid. For example, government-subsidized flood insurance has been opposed because it artificially lowers the true cost of residing or doing business in a flood plain; it thus gives people an incentive to do something that an informed rational calculus would prevent. Government, too, is often called upon to prevent accidents; but almost always the debate then turns on whether and how human action contributes to accident or exacerbates its effects.[9]

[8] Ibid., 23.

[9] See, for example, Anders Wijkman and Lloyd Timerlake, *Natural Disasters: Acts of God or Acts*

TABLE 1

Types of Causal Theories

Actions	Consequences: Intended	Consequences: Unintended
Unguided	**MECHANICAL CAUSE** intervening agent machines trained animals brainwashed people	**ACCIDENTAL CAUSE** nature weather earthquakes machines that run amok
Purposeful	**INTENTIONAL CAUSE** assault oppression conspiracies that work programs that work	**INADVERTENT CAUSE** intervening conditions unforeseen side effects neglect carelessness omission

In the lower left box are intentional causes, where an action was willfully taken by human beings in order to bring about the consequences that actually happened. When the consequences are perceived as good, this is the domain we know as rational action, apotheosized by the professional schools of public policy. When the consequences are perceived as bad, we have stories of oppressors and victims. In this box also belong conspiracy stories; here the argument is that problems are the result of deliberate but concealed human action. For example, the Johns Manville company knew about the dangers of asbestos exposure but concealed them from its employees.

In the lower right box are inadvertent causes, or the unintended consequences of willed human action. (Actions often have good side effects, but I will ignore these, since we are talking about problems here.) One type of story in this box is the tale of harmful side effects of well-intentioned policy. Here, the consequences are predictable but still unforeseen. Lester Thurow tells such a story about infla-

of Man? (Washington, D.C.: International Institute for Environment and Development, 1984), arguing that the event, if not the consequences, in most floods, droughts, famines, etc. can be prevented or mitigated by human action.

tion during the Nixon era. Richard Nixon imposed wage and price controls to stem inflation, but didn't realize that in the context of expansionary fiscal and monetary policies, the controls would only create even bigger price increases when they were lifted. Economic theory would predict exactly these results.[10]

Stories of inadvertent cause are common in social policy; problems such as poverty, malnutrition, and disease are "caused" when people do not understand the harmful consequences of their willful actions. The poor do not realize how important it is to get education or save money; the elderly do not understand how important it is to eat a balanced diet even if they are not hungry; the sick do not understand that overeating leads to diabetes and heart disease. Inadvertence here is ignorance; the consequences are predictable by experts but unappreciated by those taking the actions. These stories are soft (liberal) versions of blaming the victim: if the person with the problem only changed his or her behavior, the problem would not exist. The conservative version of blaming the victim is intentional causation: the victim actually chooses to have the problem. Thus, as President Ronald Reagan said about the homeless, there are those who sleep on grates by choice.[11]

Another type of inadvertence is carelessness or recklessness. Problems in occupational safety and health are often explained in this rubric, although carelessness is alternately attributed to labor or management. In management's version, workers understand the dangers of machines or chemicals; but they decline to use protective gear and safety devices because their tasks are easier, more comfortable, or faster without the precautions. In labor's version, management understands the hazards; but it does not monitor equipment conscientiously or provide safety gear, hoping it can keep productivity up without any undue mishaps. And in a more radical labor version, management knowingly stints on safety in the interests of profits, a conscious trade-off that pushes the problem into the sphere of intent.

In the upper left box are mechanical causes. It contains things that have no will of their own but are designed, programmed, or trained by humans to produce certain consequences. The idea of mechanical cause is that the effects of actions are intended, but the actions are guided only indirectly; someone's will is carried out through other people or through machines. There is an intervening agent. The notion of planned obsolescence is such a causal story: manufacturers design light bulbs, appliances, and tools to wear out so that consumers will have to buy new ones. The story asserts that a problem once thought to be unintended machine failure (accident) is really a case of intended machine failure (mechanism). In this category might also fit situations—common in tort law—where one person frightens another; the frightened person acts reflexively, almost mechanically, in a way that creates a harm. For example, a person frightened by one danger dashes into an oncoming car or drives his own car into someone else's.

[10] Lester Thurow, *Dangerous Currents*, 2nd ed. (New York: Vintage Books, 1984), 54–56.

[11] Reagan speech, 31 January 1984, cited in Herbert Block, *Through the Looking Glass* (New York: W.W. Norton, 1984), 123.

In mechanical cause, the exact nature of human guidance or control is at issue. Often a fight about the cause of a problem is a debate about whether certain people are acting out of their own will or carrying out the will of others. To return to the example of malnutrition, one liberal causal story rests on unintended consequences of purposeful action: malnourished people do not know how to eat a proper diet or, alternatively, unwittingly sacrifice good nutrition in trying to stretch their meager resources. A conservative story rests on intended consequences of purposeful action: malnourished people knowingly choose to spend their food money on beer and junk food. And a radical causal story rests on indirect control: food processors and advertisers, in their quest for profits, manipulate people into eating junk food and unbalanced diets.

If the nature of human control over other humans is problematic, so is human control over machines. Debates about nuclear power, chemical plants, airplane accidents, and toxic chemical spills usually center on this issue. After a chemical leak at the Union Carbide plant in Institute, West Virginia in 1985, company officials blamed a computer for their delay in notifying local authorities. The computer had erroneously predicted that the aldicarb oxime gas cloud would not leave the plant site. Officials told a story of accidental breakdown. Then the president of the company that had made the computer safety system said the computer had never been programmed to detect aldicarb oxime. "The computer worked exactly the way it was supposed to," he affirmed, changing the story to pure mechanism. He revealed that his company could have provided a more expensive safety system that would have detected the leak, predicted the flow of the cloud, and automatically notified local authorities; but Union Carbide had ordered only the "basic model."[12]

By the end of the week, the Union Carbide story had grown hopelessly complex. The injuries from the leak could be traced to a tank that wasn't designed to hold aldicarb oxime, faulty meters on another tank, defective safety valves, weak gaskets, pipes too small for the job, mistaken transmission of steam to the tank, failure of control room operators to notice pressure and temperature gauges, failure of the computer to detect the spreading gas cloud, failure of executives to purchase a program that could detect the chemical, and failure of government to regulate the chemical industry.[13]

The Union Carbide "accident" suggests a type of causal story far more complex than can be contained in the table. The ideas of accidental, mechanical, intentional, and inadvertent cause all conjure up images of a single actor, a single action, and a direct result. This underlying image remains even when the ideas are

[12] David Sanger, "Carbide Computer Could Not Track Gas That Escaped," *New York Times*, 14 August 1985.

[13] See, in addition to Sanger article, ibid., Stuart Diamond, "Carbide Blames A Faulty Design for Toxic Leak," *New York Times*, 13 August 1985; Stuart Diamond, "Chemical Pipe Size Called Key Safety Factor" *New York Times*, 14 August 1985; and Robert E. Taylor, "Carbide Tank Wasn't Designed to Hold Chemicals That Leaked," *Wall Street Journal*, 16 August 1985.

applied to corporations, agencies, and large groups—or to sequences of identifiable actions and results. Many policy problems—the toxic hazard problem notable among them—require a more complex model of cause to offer any satisfying explanation. There is a wide variety of such models, but let me paint three broad types.

One might be called "complex systems."[14] It holds that the social systems necessary to solve modern problems are inherently complex. Today's technological systems, such as chemical production, involve parts that serve multiple functions, juxtaposition of different environments (high and low temperatures), complicated feedback loops, and interactions between different parts of a system. In such complex interactive systems, it is impossible to anticipate all possible events and effects; so failure or accident is inevitable. Failures also involve so many components and people that it is impossible to attribute blame in any fashion consistent with our cultural norm that responsibility presupposes control.

A second type of complex cause might be called "institutional." It envisions a social problem as caused by a web of large, long-standing organizations with ingrained patterns of behavior. The problem of cost overruns and "gold-plating" in weapons acquisition—symbolized by $630 toilet seats—has been explained in these terms. The armed services operate with a basic drive to have the edge in operational performance over the other side. They believe that it pays to develop the best quality weapons during peacetime, because Congress will certainly authorize high quantity production during wars. The different service branches gain by colluding for overall increases in the defense budget rather than competing with each other for a fixed pie. The services also gain by colluding with industry contractors to push programs through Congress on the basis of low initial cost estimates and by coming back later for increases once costs have been sunk. As one analyst says, "the causes of gold plating in its broadest sense are rooted in the institutional interests and professional outlooks of the military."[15]

A third type of complex cause might be called "historical" or "structural." Quite similar to institutional explanations, this model holds that social patterns tend to reproduce themselves. People with power and resources to stop a problem (for example, mining accidents) benefit from the social organization that keeps them in power and maintain it through control over selection of elites and socialization of both elites and non-elites. People who are victimized by a problem do not seek political change because they do not see the problem as changeable, do not believe they could bring about change, and need the material resources for survival provided by the status quo. Causal explanations of poverty that blame economic inequality or capitalism would be examples of such a structural explanation.[16]

[14] For an excellent statement and exploration of this theory, see Charles Perrow, *Normal Accidents* (New York: Basic Books, 1984).

[15] Robert J. Art, "Restructuring the Military-Industrial Complex: Arms Control in Institutional Perspective," *Public Policy* 22 (Fall 1974): 423–459.

[16] A well thought-out example of this type of argument is Joshua Cohen and Joel Rogers's explanation of how capitalist democracy reproduces itself, in their *On Democracy* (Harmondsworth, England: Penguin Books, 1983), chap. 3. On historicist causal theories, see also Arthur Stinchcomb, *Constructing Social Theories* (New York: Harcourt Brace, and World, 1968), 101–130.

Images of complex cause are in some sense analogous to accidental or natural cause. They postulate a kind of innocence, in that no identifiable actor can exert control over the whole system or web of interactions. Without overarching control, there can be no purpose and no responsibility. Complex causal explanations are not very useful in politics, precisely because they do not offer a single locus of control, a plausible candidate to take responsibility for a problem, or a point of leverage to fix a problem. Hence, one of the biggest tensions beween political science and real-world politics. The former tends to see complex causes of social problems, while the latter searches for immediate and simple causes.

Strategies of Causal Argument

There are many strategies for pushing responsibility onto someone else. For the side that believes it is the victim of harm, the strongest claim it can make is to accuse someone else of intentionally causing the problem. Short of being able to make that claim stick, the victim group will allege either mechanical causation or inadvertent causation. Mechanical causation is a somewhat stronger claim, because it implies intended consequences, even if only through indirect guidance such as management instructions to floor supervisors or explicit decisions to design a safety system for some contingencies but not others.

Books and studies that catalyze public issues have a common structure to their argument. They claim that a condition formerly interpreted as accident is actually the result of human will, either indirectly (mechanical or inadvertent cause) or directly (intentional cause); or they show that a condition formerly interpreted as indirectly caused is actually pure intent. Crystal Eastman's *Work Accidents and the Law*, usually deemed the trigger event for Workmen's Compensation, showed that workplace injuries were not primarily caused by worker carelessness (inadvertence) but by employer refusal to provide safe machines and working conditions (intent). Eastman's framing of the problem is illustrative of the political logic in all these arguments:

> If adequate investigation reveals that most work-accidents happen because workmen are fools, like Frank Koroshic, who reached into danger in spite of every precaution taken to protect him, then there is no warrant for direct interference by society in the hope of preventing them. If on the other hand, investigation reveals that a considerable proportion of accidents are due to insufficient concern for the safety of workmen on the part of their employers, . . . then social interference in some form is justified.[17]

Rachel Carson's *Silent Spring* argued that the deterioration of animal and plant life was not a natural phenomenon (accident) but the result of human pollution (inadvertence).[18] Ralph Nader's *Unsafe at any Speed* claimed that automobile crashes were not primarily due to unpredictable mechanical failures (accidents) or even to reckless drivers (inadvertence), but to car manufacturers' decisions to

[17] Crystal Eastman, *Work Accidents and the Law* (New York: Russell Sage, 1910), 5.
[18] Rachael Carson, *The Silent Spring* (New York: Fawcett, 1978).

stint on safety in design (intention).[19] Jonathan Schell's book on nuclear holocaust, *The Fate of the Earth*, is a twist on this genre of policy writing, because it has to begin by imagining, predicting, estimating, and portraying consequences of an event that has not yet occurred. Having done that, Schell argues that this new "knowledge" moves our actions into the sphere of intent, and we can no longer regard the effects of nuclear holocaust as accident.[20]

A common strategy in causal politics is to argue that the effects of an action were secretly the intended purpose of the actor. If people sleep on grates or work in dangerous jobs, they must have chosen to do so because they get more satisfaction out of those activities than anything else (to pick a conservative version of the argument). Or (to pick a liberal version), since the deficit incurred by the Reagan administration has united liberals and conservatives around reduced government spending, Reagan must have run up the deficit deliberately in order to force Democratic support for his program of government retrenchment.[21]

To assume that the effects of an action are its purposes is to commit the teleological fallacy. Purpose must always be demonstrated with evidence of the actor's wishes or motives, apart from the effects of his actions. Still, teleological reasoning is a good political ploy, because the person who turns out to have willed harm while concealing his malevolent intent is a doubly despicable character; the symbolism of the disguised malefactor is a potent rallying cry.

The concept of risk has become a key strategic weapon for pushing a problem out of the realm of accident into the realm of purpose. Risk serves this function in two ways. First, when the harms at issue are medical, as in food and drug regulation, occupational safety, consumer product safety, environmental pollution, or nuclear power, the probabilistic association of harmful outcomes with human actions is widely accepted as a demonstration of a cause-and-effect relationship.[22] If the harms associated with an action or policy are predictable, then business and regulatory decisions to pursue a course of action in the face of that knowledge appear or can be made to appear as a calculated risk. Similarly, business and regulatory decisions justified by risk/benefit analysis can be portrayed as the intentional causation of harms in the pursuit of benefits to oneself.[23]

Increasingly, courts are willing to hold companies liable for calculated risks. The Ford Pinto automobile case is especially notable because the court construed

[19] Ralph Nader, *Unsafe at Any Speed* (New York: Bantam Books, 1973).

[20] Jonathan Schell, *The Fate of the Earth* (New York: Avon Books, 1982).

[21] Daniel Moynihan, letter to the editor, *Wall Street Journal*, 15 August 1985.

[22] On the predominance of the probabilistic interpretation of causation in twentieth-century scientific culture, see Jacob Brownowski, *The Common Sense of Science* (London: William Heinemann, 1951). On the increasing acceptance of statistical and epidemiological evidence in American courts, see Richard E. Hoffman, "The Use of Epidemiological Data in the Courts," *American Journal of Epidemiology* 120 (1982): 190–202; and Berk Black and David Lilienfeld, "Epidemiological Proof in Toxic Tort Litigation," *Fordham Law Review* 52 (1984): 732–785.

[23] See Richard Bogen, "Quantitative Risk-Benefit Analysis in Regulatory Decision-Making," *Journal of Health Politics Policy and Law* 8 (1983): 120–143.

Ford's business decision to trade off safety for cost as "conscious disregard of the *probability* that [its] conduct will result in injury to others," and, therefore, as "malicious intent."[24] Calculated risk is also the crux of the plaintiffs' argument in the asbestos and Agent Orange litigation. In short, predictable stochastic outcomes have been transformed by reformers into conscious intent. The idea of calculated risk is a way of pushing a problem from inadvertence to intent.

A second way that risk serves to push harms into the realm of purpose is in the area of civil rights. Statistical evidence is now the primary tool to prove discrimination in employment, jury selection, schools, voting districts, housing, and other government service programs.[25] Until the 1970s the only way minorities could win discrimination suits was to show evidence of intent to discriminate on the part of an employer, a prosecutor, a school superintendent, and so forth. In cases where a policy or rule did not explicitly mention race or gender as a criterion, this requirement usually meant adducing evidence of a person's motives and intentions (evil-motive analysis), showing that a seemingly neutral rule was really a pretext for discrimination or showing that a rule was administered in an obviously discriminatory fashion.

In 1971, the U.S. Supreme Court for the first time allowed statistical evidence of a rule's "disproportionate impact" on a minority group to stand as proof of discrimination without a showing of purpose.[26] Since then, plaintiffs can sometimes succeed in discrimination suits if they can show that the result of a selection process (for jobs, juries, school assignment, public housing) could not have occurred by chance. If the risk of not being selected is higher for a minority group than for another group or higher than it would be with random selection from a pool of both groups, then a court may find discrimination, assuming some other tests are also met.[27]

The significance of this change in legal doctrine is that it broadens the concept of discrimination to encompass systematic effects without a direct link to human intent and motivation. Civil rights advocates have long argued that contemporary economic and occupational differences between blacks and whites or women and men, though not attributable to contemporary bias or intended discrimination,

[24] *Grimshaw v. Ford Motor Co.*, 119 Cal. App. 3d 757, 174 Cal. Rptr. 348 (1981), citing language from *Dawes v. Superior Court*, 111 Cal. App. 3d. 82 (1980). (Emphasis added.)

[25] Caroline Peters Egli, "Judicial Refinement of Statistical Evidence in Title VII Cases," *Connecticut Law Review* 13 (1981): 515–548; and Julia Lamber, Barbara Reskin, and Terry Dworkin, "The Relevance of Statistics to Prove Discrimination: A Typology," *Hastings Law Journal* 34 (January 1983): 553–598.

[26] *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971). Duke Power Company required either a high school diploma or a minimum score on an intelligence test as a condition for internal transfer. The Court found that neither requirement was related to ability to learn or perform jobs. Far fewer blacks than whites (proportionately) could satisfy either of these requirements, and so blacks fared poorly in job advancement.

[27] An employer can maintain a rule that has a discriminatory impact if he can show that its criteria are job-related or necessary for the business. Even after Griggs, statistical arguments do not always win the day, but it is fair to say that they are increasingly victorious in discrimination cases.

are attributable to differences created by past intentionally discriminatory treatment. In effect, they have successfully pushed the problem of institutional discrimination from the realm of accident to the realm of inadvertence. The acceptance of statistical evidence by courts as proof of discrimination converts discriminary impact into the moral and political equivalent of calculated risk.

As one side in a political battle seeks to push a problem into the realm of human purpose, the other side seeks to push it away from intent toward the realm of nature or to show that the problem was intentionally caused by someone else. The side accused of causing the problem is best off if it can show the problem was accidentally caused. Hence, after the leak at its West Virginia plant, Union Carbide began with a story about failed safety valves and a malfunctioning computer. Second best is to show that the problem was caused by someone else. This strategy is only second best, because anyone else accused of causing the problem will fight back and resist the interpretation, whereas the accidental causal story does not generate a live opponent.

The weakest defense is to show inadvertence, especially of the unforeseen consequences variety. Carelessness and neglect do not look very good, but they are probably better defenses than planned or designed failures. For example, Union Carbide chose to program its computer to detect only ten of the hundreds of chemicals it produces and had purchased programs for only three of the ten at the time of the leak. Aldicarb oxime wasn't even on the list of ten. In the aftermath, management talked of faulty pipes and valves but not of its decision not to purchase a warning system for the chemical that leaked.

The struggle between interpretations of accidental cause and controllable cause frequently takes the form of a debate about heredity versus environment. This debate has long been prominent with respect to intelligence and its supposed correlates of academic, economic, and political success.[28] More recently, the propensity to commit crime has also been debated in this framework.[29] Accepting heredity as a determinant of a social problem usually means adopting a policy of laissez faire, while finding environmental determinants, such as education or income, means investment of social resources to equalize the benefits or burdens of a problem.

Complex cause is sometimes used as a strategy to avoid blame and the burdens of reform. When a company comes under fire and appears to be losing in the struggle to prove itself innocent—Manville and asbestos litigation, for example—it may argue that the problem is really due to a complex structural cause and can only be "solved" by larger institutions. By insisting that the federal government deal with compensating asbestos victims, Manville attempted to spread out the costs onto society at large. The widespread adoption of Workers' Compensation in the early twentieth century can be seen as a successful move by employers, who

[28] See Stephen J. Gould, *Mismeasure of Man* (New York: W.W. Norton, 1981).

[29] See James Q. Wilson and Richard J. Herrenstein, *Crime and Human Nature* (New York: Simon and Schuster, 1985).

were increasingly losing liability suits, to define the problem of industrial accidents as the "natural" result of modern technology and to socialize the costs through insurance.[30]

The Limits of Causal Argument

Causal stories need to be fought for, defended, and sustained. There is always someone to tell a competing story, and getting a causal story believed is not an easy task. American automobile and steel producers, for example, blame their declining market share on unfair Japanese competition. They try to sustain their claims by lobbying Congress for import tariffs and domestic content legislation, petitioning the International Trade Commission for restrictions on Japanese imports, and advertising about their market difficulties. Meanwhile, others (including the Japanese) are trying to define the problem as caused by failure of steel companies to innovate; failure of car manufacturers to offer small, fuel-efficient cars; overly generous union contracts; and poor management. Auto and steel producers, for all their apparent political strength, have not succeeded in making their story stick, however. In a recent poll, 53 percent of American respondents thought the United States makes Japan a scapegoat for its trade problems, and only 30 percent thought Japan engaged in unfair trading practice.[31]

Most citizens have and can articulate explanations of national problems such as poverty, unemployment, or terrorism. But recent research suggests that causal beliefs are quite sensitive to the way television news coverage portrays problems. For example, when people watch news stories about poverty that show a homeless family, they are much more likely to think of individual explanations of poverty, such as lack of motivation or lack of skills. When they see news stories that portray a high rate of unemployment or reductions in federal social spending, they are more apt to give societal or governmental explanations of poverty.[32]

If problem definition is a great tug of war between political actors asserting competing causal theories, one wants to know what makes one side stronger than another. What accounts for the success of some causal assertions but not others? What are the political conditions that make one causal theory seem to resonate more than others?

Many of the constraints that have been identified for agenda setting hold for causal argument in problem definition as well.[33] Assertions of a causal theory are

[30] Lawrence Friedman and Jack Ladinsky, "Social Change and the Law of Industrial Accidents," *Columbia Law Review* 67 (1967): 50–82; and James Weinstein, *The Corporate Ideal and the Liberal State: 1900–1918* (Boston: Beacon Press, 1968), chap. 2.

[31] Susan Chira, "Poll Blames U.S. on Japan Trade," *New York Times*, 13 August 1985.

[32] Shanto Iyengar, "Television News and Citizens' Explanations of National Affairs," *American Political Science Review* 81 (September 1987): 815–831.

[33] See Kingdon, *Agendas*, 138–46; and Roger Cobb and Charles Elder, "Communications and Public Policy" in Dan Nimmo and Keith Sanders, eds., *Handbook of Political Communications* (Beverly Hills, Calif.: Sage, 1981).

more likely to be successful—that is, become the dominant belief and guiding assumption for policy makers—if the proponents have visibility, access to media, and prominent positions; if the theory accords with widespread and deeply held cultural values; if it somehow captures or responds to a "national mood;"[34] and if its implicit prescription entails no radical redistribution of power or wealth. One major causal story—that the capitalist economic and political system is the cause of innumerable social ills—is consistently shut out.[35]

The political success of causal theories is also constrained by two powerful social institutions for determining cause and legitimating claims about harms: law and science. Law is a whole branch of government devoted to hearing claims, examining evidence, pronouncing verdicts, and enforcing them. Science is an intellectual enterprise with its own vast social and economic organization devoted to determining cause-and-effect relationships. And if law carries greater formal authority by virtue of its status as part of government, science commands enormous cultural authority as the arbiter of empirical questions. Not all battles over causal stories will be resolved in the court of law or science, but most significant ones will find their way into one or both of these forums.

Tort law (sometimes called accident or personal injury law) is the branch of law concerned with injurious behavior that is not regulated via criminal law or formal contracts. It has to do with the informal standard of care for one another that a community expects of its members. Since there is no formal set of rules, only case-by-case decision making, tort law is fuzzy and constantly evolving. Tort law arbitrates issues of causation, because it is concerned with deciding what harmful consequences of people's actions the people should be expected to control. It therefore defines the political boundaries between the realm of fate (what harmful effects are considered natural or plain bad luck) and the realm of human control (what harmful effects will trigger the attribution of responsibility).

The tort suit is a primary vehicle in the United States for asserting a causal theory about harm and demanding a remedy. It has been used for all manner of harms—dangerous consumer products, drug side effects, radiation exposure, incompetent professional services, occupational hazards, and emotional distress. Discrimination and affirmative action suits under constitutional and statutory laws are another legal vehicle for asserting and defining socially-caused harms. Large class action suits make the law a forum for group warfare, not merely individual disputes. The Agent Orange cases, for example, in addition to being individual claims, are an organized protest by Vietnam veterans against their treatment during and after the war.[36]

All of this is to say that the rules of the game in law are crucial determinants of the political success of causal theories, even theories with the stamp of approval

[34] Kingdon, *Agendas*, 153–57.

[35] For both the story and an analysis of the reasons why it is shut out, see Cohen and Rogers, *On Democracy*.

[36] See Peter Schuck, *Agent Orange on Trial* (Cambridge, Mass.: Harvard University Press, 1986).

of science. Although epidemiological studies had shown a link between asbestos and cancer by the late 1940s, it was not until 1973 that the courts first allowed a verdict against an asbestos manufacturer. The scientific evidence for the cigarette-cancer link is even stronger, and yet it was first in 1988 that a cigarette manufacturer was held liable for smokers' lung cancer.[37]

Science serves as an arbiter of causal theories for an even broader array of issues than law. Proponents of causal theories—whether about disease or poverty, crime or inflation, car accidents or homelessness—appeal to scientific studies and the canons of scientific inquiry in their quest for political support. Often academics and scientists are the chief proponents of a theory. But to say the enterprise of science exercises some kind of constraint on the successful assertion of causal theories is not to say that its judgments are any more consistent, any less confusing, and any less political than those of law. We can only say that having some science on your side may help; it will not guarantee that a causal theory will become the guiding assumption of public policy.

An extended analysis of the role of law and science in problem definition is beyond the scope of this article. Here I only want to make the point that a theory of how problems come to be defined in politics must include a more extended analysis of how these two social institutions support and constrain causal argument.

The Political Functions of Causal Theories

Causal theories, if they are successful, do more than convincingly demonstrate the possibility of human control over bad conditions. First, they can either challenge or protect an existing social order. Second, by identifying causal agents, they can assign responsibility to particular political actors so that someone will have to stop an activity, do it differently, compensate its victims, or possibly face punishment. Third, they can legitimate and empower particular actors as "fixers" of the problem. And fourth, they can create new political alliances among people who are shown to stand in the same victim relationship to the causal agent.

Bringing a condition under human control often poses a challenge to old hierarchies of wealth, privilege, or status. In the nineteenth and early twentieth century, many poor rural whites in the South were afflicted with a chronic sickness later discovered to be caused by the hookworm parasite. People with the disease were listless and eventually became slow-witted. Popular belief held that the condition reflected the laziness and lax moral character of the victims. When Charles Stiles demonstrated in 1902 that hookworm was the cause and that the disease could easily be cured with a cheap medicine, he was widely ridiculed in the press for claiming to have discovered the "germ of laziness." The discovery was resisted because it meant that southern elites had to stop blaming "poor white trash" for their laziness and stupidity and stop congratulating themselves for their superior

[37] *Cipollone v. Liggett Group, Inc.*, 683 F. Supp. 1487 (DNS 1988).

ability to work hard and think fast—a supposed superiority that served to justify political hierarchy.[38]

The abortion issue is a more recent example of political resistance to the extension of human control into an area formerly deemed natural. Much of the rhetoric against abortion is couched in terms of "interference with nature" and the "sanctity of life." Religious beliefs aside, the control over childbearing made possible by abortion threatens the social order in which a woman's status and social protection is determined by her role in the family, at the same time as it enables a social order in which her status is determined by her role in the workforce. And in fact, women who actively oppose permissive abortion policies tend to be those who do not work and whose social identity is tied to motherhood, while those who actively support abortion tend to be career women whose identity depends on work outside the home.[39]

Causal theories are also used as an instrument of social control to maintain existing patterns of dominance. For example, the theory that poor, pregnant women "cause" premature and unhealthy babies through their dietary deficiencies justifies official monitoring of their shopping and dietary habits as a condition of social aid. The theory of maternal deprivation (that children whose mothers work suffer developmental deficits and delays) arose just as middle-class women entered the workforce in large numbers. The maternal deprivation theory, consciously or unconsciously, served as a brake on disintegration of the standard middle-class pattern in which the man is breadwinner and the woman is childbearer. Struggles over causal definitions of problems, then, can be seen as contests over basic structures of social organization.[40]

Any bad situation offers multiple candidates for the role of "cause." In the old nursery rhyme, the fall of a kingdom can be traced back through a lost battle, a fallen soldier, an injured horse, a loose horseshoe all the way to a missing nail and a careless blacksmith. In the real world, problems rarely come with such neat lineage, but, like the leak at Union Carbide, always are replete with possible causes.

In the world of policy there is always choice about which causal factors in the lineage to address, and different choices locate the responsibility and burden of reform differently. In the issue of deaths and injuries resulting from drunk driving, both our laws and cultural beliefs place responsibility with the drunk driver. There are certainly alternative ways of viewing the problem: we could blame vehicle design (for materials and structure more likely to injure or kill in a crash); highway design (for curves likely to cause accidents); lack of fast ambulance service or nearby hospitals; lax enforcement of drunk driving penalties by police; or even availability

[38] Deborah A. Stone, *The Disabled State* (Philadelphia: Temple University Press, 1984), 93–94. The history of medicine is full of stories of resistance to discoveries that would make disease controllable. See, for example, Charles Rosenberg, *The Cholera Years* (Chicago: University of Chicago Press, 1962).

[39] Kristin Luker, *The Politics of Motherhood* (Berkeley: University of California Press, 1984).

[40] I borrow these illustrations from Mary Douglas, *Risk Acceptability According to the Social Sciences* (New York: Russell Sage, 1985), 53–60.

of alcoholic beverages.[41] Grassroots organizations of victims (such as Mothers Against Drunk Driving) have successfully moved the issue beyond moral exhortation by looking for targets of responsibility other than the driver. They have sued the people who served drinks to the driver—restaurants, taverns, private hosts, and even governments; pressured legislatures to pass laws making hosts and servers liable for damages caused by drunk drivers; and lobbied to ban "happy hours" in bars.[42]

Even when there is a strong statistical and logical link between a substance and a problem—such as between alcohol and car accidents, handguns and homicides, tobacco and cancer deaths, or cocaine and overdose deaths—there is still a range of places to locate control and impose sanctions. Each of these problems has a virtually identical chain of causation: substance-user-seller-manufacturer-raw materials supplier. In the case of alcohol, we have traditionally seen drinkers as the cause and limited sanctions to them, though sellers have more recently been made to bear the costs. In lung cancer deaths, we have blamed the smoker primarily; but to the extent people have sought to place the blame elsewhere, they have gone after cigaratte manufacturers, not sellers or tobacco growers. With handgun homicides, we have limited blame to the users of guns rather than imposing sanctions on either the sellers or manufacturers. And with cocaine, we cast the widest net with attacks against users, sellers, (importers, street peddlers, pharmacies, physicians), and growers. Finding the true or ultimate cause of harms in these policy areas is not what is at issue. Rather, the fight is about locating moral responsibility and real economic costs on a chain of possible causes. The location is dictated more by the political strength of different groups (tobacco growers, the gun lobby) than by any statistical proof or causal logic.

Just as different causal stories place the burden of reform on some people rather than others, they also empower people who have the tools or skills or resources to solve the problem in the particular causal framework. People choose causal stories not only to shift the blame but to enable themselves to appear to be able to remedy the problem.

Lloyd Ethridge tells a wonderful story about the problem of unreturned cafeteria trays when he was president of his high school student council. The student council, not wanting to get involved in policing other students but still needing to oblige the principal's request for help, chose to adopt the theory that offending students were ignorant of the consequences of their actions (inadvertent cause). That way the student council could offer to run an awareness campaign without accepting any form of coercion. The principal, believing in the school as a training ground for life and having at his disposal a host of teacher-employees and disciplinary powers, adopted instead an intentional cause theory. He asserted that students left trays on tables because "it wasn't worth it" to them to walk the trays

[41] The drunk driving issue is the topic of Gusfield's *The Culture of Public Problems*.

[42] Jilian Mincer, "Victims of Drunken Driving Press Suits on Drivers' Hosts," *New York Times*, 9 August 1985.

back to the kitchen. Not surprisingly, he instituted a system of teacher monitors, moralistic lectures, and "the familiar repertoire of high school discipline."[43]

Like the famous six characters in search of an author, people with pet solutions often march around looking for problems that need their solutions. Causal stories then become mechanisms for linking a desired program to a problem that happens to be high on the policy agenda. Health Maintenance Organizations (HMOs) were sold as reforms to increase health care for the poor during the liberal 1960s on the theory that limited access of poor people to health care was caused by the inefficient solo-practice system of delivery. The same advocates of HMOs then pushed them to the Nixon administration as answers to the cost-containment problem on the theory that high health care costs were caused by fee-for-service payment.[44] Urban mass transit was billed as the answer to traffic congestion during the urban-growth-conscious 1950s and early 1960s; to pollution during the environmental-conscious late 1960s and early 1970s; and to conservation during the energy-conscious late 1970s.[45] Causal theories serve as devices for building alliances between groups who have problems and groups who have solutions.

Shifting the location of responsibility on a causal chain can restructure alliances. Under the old view of drunk driving, where the driver bore sole responsibility for accidents, the drunk driver was pitted against everybody else. In the new view the driver becomes a victim (of the server's negligence) along with the people he injured, and the server is cast outside this alliance. The relationship between taverns and their customers is altered, because all customers—indeed especially the best customers—are now a potential liability. Tavern owners may seek new alliances with other anti-regulation groups. One can also imagine alcoholic beverage manufacturers facing a difficult political choice whether to ally themselves with the taverns (their most important customers) or with the injured victim and the driver (in the hopes that victims won't go after manufacturers next).

Causal theories predicated on statistical association can create alliances by mobilizing people who share a risk factor but otherwise have no natural communication or association. In the DES cases, organizations of mothers and their daughters exposed to DES some twenty or more years ago sprang up out of nowhere as soon as the initial publicity about the DES-cancer link occurred. The trigger for Vietnam veterans' mobilization around the Agent Orange issue was a benefits counselor in the Chicago Veterans Administration (VA) office who thought she saw a pattern of illnesses and exposure to Agent Orange. She collected her own statistics, publicized them on television in 1978, and soon Agent Orange-based

[43] Lloyd S. Etheredge, *The Case of the Unreturned Cafeteria Trays* (Washington, D.C. : American Political Science Association, 1976).

[44] Paul Starr "The Undelivered Health System," *The Public Interest* 42 (Winter 1976): 66–85.

[45] This example comes from Kingdon, *Agendas*, 181. Kingdon calls the phenomenon of hooking problems to causes "coupling." It has also been called "A Garbage Can Model of Organizational Choice" by Michael Cohen, James March, and Johan Olsen in *Administration Science Quarterly* 17 (March 1972): 1–25.

disability claims began rolling in to the VA.[46] Irving Selikoff's early studies of cancer in asbestos workers stimulated unions to sponsor more studies, organize their members for research and litigation, and ally with other unions on issues of occupational safety.[47] Causal theories, thus, can be both a stimulus to political organization and a resource for political leaders seeking to create alliances.

Conclusion

It is only recently that political scientists have produced a literature on the question of how problems move onto policy agendas. The question of how difficult conditions become defined as problems in the first place has received very little attention in the public policy literature. In this article I have tried to develop a theory of problem definition, starting from the conventional social science wisdom that a bad condition does not become a problem until people see it as amenable to human control.

First, causal argument is at the heart of political problem definition. Problem definition is centrally concerned with attributing bad conditions to human behavior instead of to accident, fate, or nature.

Second, the process of problem definition cannot be explained by looking solely at political actors, the nature of bad conditions, or the characteristics of issues. Problem definition is the active manipulation of *images* of conditions by competing political actors. Conditions come to be defined as problems through the strategic portrayal of causal stories.

Third, these portrayals can be categorized as four causal theories: intent (direct control); mechanistic cause (indirect control exercised through an intervening agent); inadvertent cause (control mediated by intervening conditions); and accident (total absence of human control).

Fourth, actors seeking to define a problem attempt to push the interpretation of a bad condition out of the realm of accident and into the realm of human control. The three causal stories of human control all assign responsibility for the condition to someone else and so create a burden of reform. People blamed for a problem and saddled with the burden of reform will resist the new causal theory (assuming they benefit from the status quo) by portraying the condition as accidental, as caused by someone else, or as one of the indirect forms of causation.

Fifth, political actors have increasingly used probabilistic notions of causation in addition to mechanistic concepts, and arguments based on probabilistic cause are increasingly successful. (The world of policy seems to parallel the world of science with about a fifty year lag.)

Sixth, the competition over causal theories in problem definition is bounded not only by the usual political conditions that constrain agenda setting, but also

[46] Schuck, *Agent Orange on Trial*, 23.

[47] Paul Brodeur, *Expendable Americans* (New York: Viking, 1974).

by law and science, two social institutions that are each in their own fashion charged with arbitrating disputes about causal theories.

Finally, causal theories have important consequences for politics beyond the mere demonstration of human control. They have a strong normative component that links suffering with an identifiable agent, and so they can be critical of existing social conditions and relationships. They implicitly call for a redistribution of power by demanding that causal agents cease producing harm and by suggesting the types of people who should be entrusted with reform. And they can restructure political alliances by creating common categories of victims.*

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