

THE
OXFORD
HANDBOOKS
OF
POLITICAL
SCIENCE

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≡ The Oxford Handbook of
PUBLIC POLICY

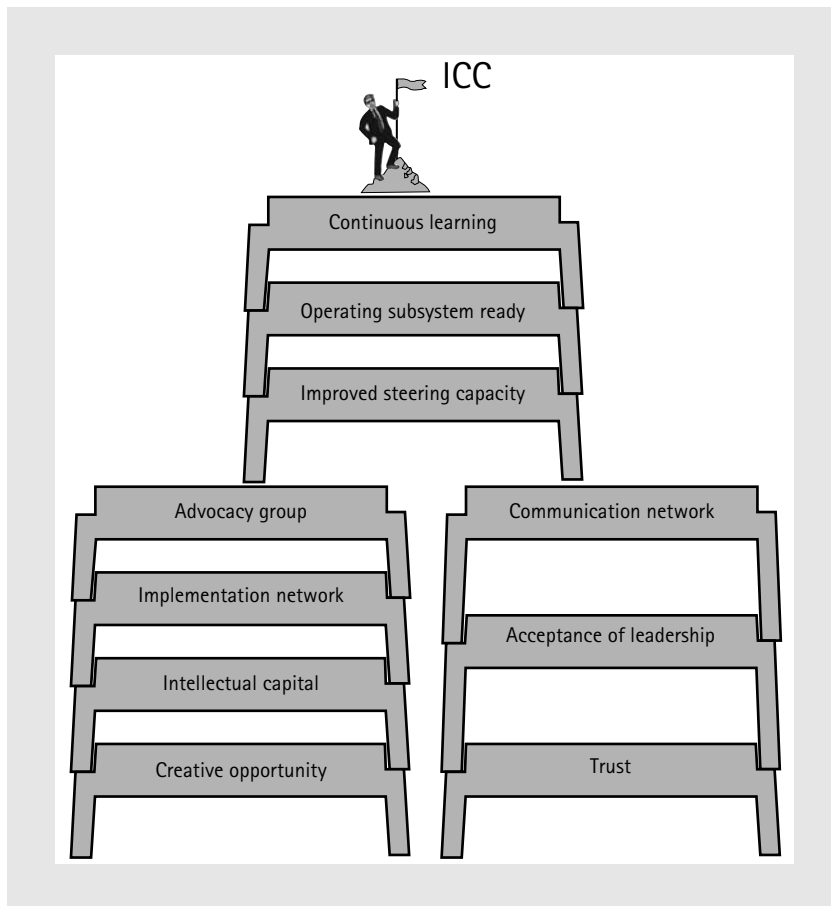


Fig. 16.2. Each new capacity a platform for the next

collaborative are moderately suspicious of one another. Thus, leadership will function best if a prior base of trust can be established.³³

5. DYNAMICS WITHOUT FEEDBACK LOOPS

Not all dynamics processes involve feedback loops. Some unfold in only one direction.³⁴

³³ There is more to the dynamics of ICC construction than platforming, I would note. Building momentum of various kinds is also significant (Bardach 1998, 276–92).

³⁴ Some systems dynamics theorists would question this possibility. They would say that nothing fails to produce feedback of some kind, however indirect. This is true. Nevertheless, as mentioned earlier, to

5.1 Selective Retention and Filtering

We discussed selective retention above, in the section on positive feedback, and offered the example of agenda setting. In the Kingdon model, agendas emerged from the agglutination of policies, politics, and problems as they intersected and survived a chancy competitive process. One could see the entire process as composed essentially of a selective retention subsystem and an agglutination subsystem. The agglutination subsystem is dominated by positive feedback loops and gives its character to the whole system. However, it is also possible to view selective retention as a process that works, in some circumstances, without the benefit of feedback loops at all.

Consider, for instance, the evolution of the common law rules of property, torts, and contracts, which, if not “policy” in a traditional sense, are the functional equivalent of “policy” in their own sphere, which often overlaps with that of policy. One of the most impressive developments in the social sciences in the last quarter-century has been the field of law and economics. And one of its most impressive conclusions is that the rules of the common law evolve in a welfare-maximizing fashion.³⁵ Briefly, the argument turns on the assumption that relatively inefficient³⁶ laws will be litigated at a higher rate than efficient laws. This occurs because inefficient laws fail to sustain the wealth-increasing social arrangements that efficient laws do, and a party that loses wealth under an inefficient legal rule loses more than a party who loses under an efficient rule. Facing a larger incentive, more of the first kind of losers sue, and spend more on trying to win, than do losers of the second kind. So long as judges are not biased *against* efficiency in their decisions, this process selects against inefficiency (Cooter and Ulen 1997, 375–6). This is surely a dynamic process, but it is one without feedback.³⁷

This process involves not merely passive variation and selective retention. There is also a propulsive element, i.e. the motives behind litigation. It is a special kind of evolutionary process, therefore, a filtering process. Many potential common law rules pass through the filter of judicial consideration, attached, as it were, to litigants’ claims; but the filter retains (in the long run) only the more efficient of these, while the rest wash into history. Another such filtering dynamic is the well-known Peter Principle, whereby people “rise to the level of their incompetence.” The dynamic involves promotion in a hierarchy based on demonstrated competence in a particular position. Once one demonstrates incompetence in a position, advancement ends and the incumbent just sits there, being incompetent. (Of course, if promotion depends on expected rather than demonstrated competence, the Peter Principle does not

draw the boundaries around a particular system or process is ultimately an analytical, not an ontological decision. There is no analytical barrier to defining a dynamic process as single directional.

³⁵ Such claims are not generally made about statutory law, however, nor should they be.

³⁶ “Inefficient” in the technical economic sense of the term.

³⁷ In fact there is an element of positive feedback, since common law rules do not get transformed overnight. They get eroded and refashioned, at both the extensive and the intensive margin; and each instance of eroding and refashioning feeds into the legal culture to facilitate further change. However, we focus here only on the filtering subsystem.

apply.) A special case of a filtering process is stranding, e.g. the progressive concentration of less motivated, and perhaps less apt students in certain public schools as the wealthier and more education-oriented families in the catchment area move away or opt for private schools.

5.2 Event Cascades

What I shall call “event cascades” are another significant class of one-way dynamic processes. These are sequences of events that have a built-in, or structural dynamic, like the stones in a rockslide that come from above and dislodge stones below, or the workings of a Rube Goldberg machine. Discrete events trigger subsequent discrete, and substantially irreversible events through the medium of a structure that links them. Here is an example in political life from Winston Churchill, describing changes in British naval technology before the First World War (quoted in Jervis 1997, 129, though he does not call this an event cascade): “From the original desire to enlarge the gun we were led on step by step to the Fast Division, and in order to get the Fast Division we were forced to rely for vital units of the Fleet upon fuel oil. This led to the general adoption of oil fuel and to all the provisions which were needed to build up a great oil reserve. This led to enormous expense and to tremendous opposition on the Naval Estimates. . . . Finally we found our way to the Anglo-Persian Oil agreement and contract which . . . has led to the acquisition by the Government of a controlling share in oil properties and interests.”

No doubt it is a lot easier to describe such an event cascade once it has occurred than to model the process that produces it and to use the model to predict the result beforehand. One could conceptualize the process as the actualization of one chain of events out of a host of potential events probabilistically linked in a Markov matrix. The empirical challenge would entail defining the universe of potential events contained in the Markov matrix and then stipulating each of their contingent probabilities. Most event chains through such a matrix would have close to no probability of being actualized. A few would probably stand out as very likely candidates; and a very few would be intriguing long shots. The event chain from the British decision to enlarge a warship’s guns to a transformation of British Middle East policy might not have been apparent to decision makers *ex ante*; but in Churchill’s account, it seems *ex post* to have been a near certainty.

6. FUTURE RESEARCH

I conclude with suggestions for future research. If the study of policy dynamics were “a field,” these thoughts would be cast as a proposed research agenda. But the

phenomena that ought to be studied through a “dynamics” lens are varied and do not congeal as one field. Nor, with the important exception of computer simulation, is there or ought there to be a widely utilized methodology.³⁸ At the conceptual level, our understanding is so rudimentary that it makes sense to let dozens of flowers bloom—agent-based models, systems dynamics models, chaos models, cascade models, punctuated equilibrium models, and path dependency models, to mention only the principal models already discussed. All are promising in their own way, and one can only urge work on all of them.

I am, however, ready to urge particular attention to two phenomena that I take to be of unusual substantive significance and which require a dynamic approach: (1) understanding a process Aaron Wildavsky once labeled “policy as its own cause,” and (2) bringing more rigor to the study of what scholars loosely call “stages” or “phases” in various processes, particularly that of legislative coalition building.

6.1 Policy as its Own Cause

Aaron Wildavsky in 1979 wrote of “the growing autonomy of the policy environment” (Wildavsky 1979, 62), because policy “solutions create their own effects, which gradually displace the original difficulty,” and “big problems usually generate solutions so large that they become the dominant cause of the consequences with which public policy must contend.” His prime example was Medicare and Medicaid, which succeeded in expanding access for the poor and elderly but at the same time made access more difficult for others and increased costs for everyone. The whole system started to behave unpredictably:

For each additional program that interacts with every other, an exponential increase in consequence follows. These consequences, moreover, affect a broader range of different programs, which in turn, affect others, so that the connection between original cause and later effect is attenuated. One program affects so many others that prediction becomes more important and its prospects more perilous, because effects spread to entire realms of policy.

Social policy. A quarter-century ago, Wildavsky was writing about the *social* effects of policies, and sounding very much like Jay Forrester and his students in his concern over the sheer complexity of things. Today there is a second, if not third generation of problems that arise from the complexity of interactions, and these are the problems of making policy adjustments in an environment already dense with interconnected policies. In social policy, for instance, eligibility for one program is sometimes

³⁸ One of several reasons why our understanding of dynamic processes is not far advanced is that their internal behavior is too hard to grasp with language, pictures, or mathematics. Computer simulation is the solution to this problem, as work in the agent based models and the Forrester type “systems dynamics” traditions attests. To be sure, there are uncertainties over how to validate computer models, but computer simulation is a powerful tool that deserves to be wielded more extensively by scholars interested in dynamics.

conditioned on eligibility for another, so that reasonable cutbacks (or expansions) in the latter have unexpected and undesirable effects in the former. As these interdependencies multiply, it becomes more difficult for responsible policy makers to consider adjustments of any kind. The gridlock is worsened when low-level adjustments are also delayed pending higher-level and more comprehensive reforms that policy makers signal are “imminent.” This is not just a locked-in or locked-out effect, but a locked-up effect.

The important questions for study here concern just how prevalent these phenomena are and what mechanisms are at work. Of interest also is the question of what exactly happens should one of these cascades actually be set in motion. Do negative feedback loops kick in at some point to dampen the disequilibrating consequences?

Regulatory policy. In the regulatory sphere, J. B. Ruhl and James Salzman have written of “the accretion effect” on emerging bodies of regulatory rules (Ruhl and Salzman 2003). Various mechanisms cause rules to accumulate but only rarely to diminish. Ruhl and Salzman claim, with some evidence, that this accretion has a negative effect on compliance, vastly increases the compliance burden on companies (in the environmental area), and diminishes the legitimacy of the regulatory regime. They present a further claim which is more interesting and more speculative. It concerns what they call “the properties of dynamic conflicting constraints” (2003, 811), which cause improved compliance with one rule to decrease the likelihood of compliance with another. They appeal to the theory of complex dynamic systems to explain why this should happen. Despite a few examples, however, they do not provide evidence of a widespread problem. This is a tantalizing theoretical as well as practical issue, and more systematic research would be welcome.

6.2 “Phases” and “Stages”

There is no shortage of the word “dynamics” in the titles of works about one or another aspect of the policy process.³⁹ Usually, the implications are that important developments happen in “stages” or “phases,” that earlier stages somehow condition later ones, and that later stages have been conditioned by earlier ones. For instance, in conventional accounts of “the dynamics of the legislative process,” successive majorities must be sought in subcommittees, committees, and full chambers; and a compromise at one stage may reduce or enhance a bill’s prospects at a later stage. In the course of interagency collaboration, to take another example, Barbara Gray has written that there are three phases: problem setting, direction setting, and structuring (Gray 1985, 916–17). A paper on the development of buyer–seller relationships posits

³⁹ “Dynamics” is often a virtual synonym for complex phenomena that are slightly mysterious and that may or may not actually be “dynamic” once properly understood.

that they “evolve through five general phases identified as (1) awareness, (2) exploration, (3) expansion, (4) commitment, and (5) dissolution . . . Each phase represents a major transition in how parties regard one another” (Dwyer, Schurr, and Oh 1987, 15). A controversy swirls over whether the idea of “stages of the policy process” is or is not analytically useful (deLeon 1999). The most recent list of candidate stages is: initiation, estimation, selection, implementation, evaluation, and termination (deLeon 1999, 21).⁴⁰

I acknowledge that any such list of phases or stages is bound to be at least in part a product of the observer’s theoretical notions, for developments of this sort are in no way “natural kinds.” Nevertheless, these developmental categories do not seem to me well enough grounded empirically. The developments in question ought to be expressions of *endogenous* systems processes, and it is not clear to what system these processes might belong. Is it possible to conceptualize developmental phases of this sort that will prove analytically useful?

What is analytically useful? By social scientific standards a conceptual scheme is analytically useful to the extent that it permits one to generate propositions about the world that are insightful, interconnected, explanatory, and realistic. In the case of trying to conceptualize endogenously connected developmental phases, it is hard to know how to apply this standard because the idea of offering a satisfying “explanation” is elusive—a point I shall not elaborate upon here. A satisfactory alternative, however, is to use a practical standard that is in all respects but the demand for explanatory power like the social scientific standard. In place of explanatory power, the practically based standard asks whether the conceptual scheme could produce an *intertemporal map of the foreseeable risks and opportunities that might emerge*, for with such a map anticipatory strategies can be canvassed.

I made an unsophisticated effort to model the endogenous emergence of such risks and opportunities in *The Skill Factor in Politics* (Bardach 1972, 241–60). The generic model tracked “Support” (a continuous variable) through time in a legislative contest over a reformist policy proposal. The time path of Support rose and fell as a function of: (1) mobilization on the part of an advocacy coalition, (2) lagged resistance on the part of opponents, (3) differential adherence by a small pool of neutrals, (4) concessions and sweeteners that alter the evolving shape of the legislative proposal, (5) the emergence of intracoalition tensions and resultant defections in response to the changing shape of the proposal, (6) the uncertainties, and struggles over various arena and scheduling parameters, and (7) the intersection of the current contest, in its endgame phase, with a variety of unrelated issue agendas, actors, and influence patterns. The model was intended to map foreseeable risks and opportunities that a hypothetical entrepreneur would try to anticipate and prepare for.

⁴⁰ DeLeon credits Garry Brewer with this list. Brewer derived it from Harold Lasswell’s seven stages: intelligence, promotion, prescription, invocation, application, termination, and appraisal.

So far as I am aware, neither this model nor any model aiming to accomplish the same objectives has found a place in the literature on legislative dynamics. I do not hold a particular brief for my own effort. But I do think the objective would be scientifically useful as well as of practical worth to a would-be legislative entrepreneur, and that others should try their hand at the problem.

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CHAPTER 17

LEARNING IN PUBLIC POLICY

RICHARD FREEMAN

1. INTRODUCTION

We do little that we have not learned. As we learn to breathe, to eat, to walk and talk, learning seems essential to living. But what, in fact, is learning? The irony is that the importance and ubiquity of what we might think of as learning in turn makes it difficult to define. What does it mean to learn, and how do we do it?

Our commonsense assumptions about learning are those we have from school. It seems to have something to do with teaching, with lessons, with doing well or badly. And then, on reflection, we seem to learn as much by informal as by formal processes: we learn from experience (which is sometimes gained by experiment), and from others, including our parents and peers. Often, the two are mutually reinforcing: we learn from others' experience, and it is our parents and peers who help us make sense of our own.

These processes have their corollaries in public policy, both as a practical activity and a field of study. Policy makers compare current problems to previous ones, networking with others both in their own and in other jurisdictions. By the same token, we might think of the collective process of agenda setting as one in which a polity learns as much as decides what it wants, and implementation as the process by which agencies and employees learn how to deliver it.

* This chapter is a product of some of the processes it describes. I have been lucky to be included in a community of scholars working in this and related fields, and am particularly grateful to the editors of this volume and to Elizabeth Bomberg for comments on a preliminary draft. The errors and omissions which remain testify only to my own failure to learn.