



Policy and Society 30 (2011) 53-62



Charles Lindblom is alive and well and living in punctuated equilibrium land

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Available online 15 January 2011

Abstract

Incrementalism enjoyed an almost uninterrupted 40 year run as the dominant model of policy change from the publication of Lindblom and Dahl's first mention of the subject in 1953. In the mid-1990s, however, the elements of a new orthodoxy of policy dynamics began to appear in the form of various models of 'punctuated equilibrium', most notably in the works of Peter Hall, Frank Baumgartner and Bryan Jones. It is important to note, that the new orthodoxy did not replace the old, but rather supplemented it through the addition of notions of 'atypical' or 'paradigmatic' change to the pattern of marginal or incremental change put forward by Lindblom and his colleagues in the 1950s and 1960s. Contemporary models thus owe a great debt to incrementalism, attempting to incorporate its strengths while overcoming its weaknesses. This article discusses this evolution in theories of policy dynamics and the research agenda currently found in this area of policy studies.

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1. Introduction: the meta-analysis of models of policy change¹

The task of addressing exactly how and why public policies change remains a difficult one for scholars of the subject as many of the underlying processes, sequences of events or outputs that reveal these changes are very difficult to discern, describe, and explain (Capano & Howlett, 2009). In order to help understand these phenomena, policy scientists – like other social scientists involved in explaining social change – have borrowed several concepts and theories from other academic areas ranging from psychology to paleontology. While helpful, this inter-disciplinary borrowing is not unproblematic and many studies of policy change show a remarkable blindness when it comes to understanding the epistemological and methodological premises of their borrowed concepts and models. One unfortunate result of this conceptual stretching has been a remarkable variety and proliferation of competing theories and frameworks. Such unwarranted theoretical diversity has often encouraged the compartmentalization of perspectives that fail to enrich each other, and too often resulted in the production of isolated, incompatible, and non-cumulative research results (Capano, 2009).

The contemporary study of policy dynamics thus owes a broad debt to two seminal studies of public policy decision-making which appeared 30 years apart and which have helped organize this Babel: Charles Lindblom's 1959 work on incrementalism and Hall's 1989 study of policy paradigms. Both authors utilized the early insights of other scholars into aspects of politico-administrative behaviour – in Lindblom's case the work of Charles Knight, who

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¹ Elements of this discussion have appeared in several articles written by the authors with other co-authors. Thanks are especially due to Giliberto Capano, Jeremy Rayner and Ben Cashore for discussions and ideas related to the contents of the argument presented here.

had been his advisor in the Department of Economics at the University of Chicago, and in Hall's case Kuhn's (1962) ideas about the significance of ideas and paradigms in the history of scientific advance – to propose and refine the notion that general patterns of policy development can not only be identified but predicted. The two works are related in that Hall's work served to break a long-term 'old' orthodoxy in studies of policy change dominated by Lindblominspired ideas about marginal adaptation or "incrementalism", which had been bent out of their originally more complex shape to argue that a single type of policy dynamics – marginal increments from the status quo – characterized all public policy change (Hayes, 1992; Howlett & Ramesh, 2003).² Lindblom did not design incrementalism as a grand theory, but rather as a middle range one and the notion that all types of policy change could be constrained to one unique model was never one that he supported or advocated. Nonetheless, by the 1970s and 1980s this notion had come to be associated with his work and ideas and formed the basis for many works in public budgeting and other areas which focused almost exclusively on this kind of change (for one of the best examples of this, see Wildavsky, 1964). However Hall's late 1980s identification in his comparative work on macro-economic policy in Europe of a second pattern of change – the broad 'paradigm' shift in which major, non-marginal, change occurs – broke with the incremental orthodoxy in policy dynamics and led scholars studying public policy dynamics to become involved in a 20-year process of attempting to reconcile the two patterns and their inter-relationships.

This period culminated in the emergence of a new 'post-incremental' orthodoxy as policy scholars have come to generally accept the idea – borrowed from paleo-biology (Eldredge & Gould, 1972), and first put forward in the context of policy dynamics by Baumgartner and Jones in 1991 – that periods of marginal adaptation and revolutionary transformation are typically linked together in a complex 'punctuated equilibrium' pattern which combines both periods of 'normal' marginal adaptation and more infrequent and atypical periods of 'non-linear' policy dynamics.³

As Cashore and Howlett (2007) have argued (see also Howlett & Cashore, 2009) research undertaken during this period has involved scholars in three related projects designed to better understand how incremental and paradigmatic patterns of policy change are related to each other. First, they have been interested in understanding exactly how longstanding policies which have tended to develop incrementally can become 'punctuated' and shift towards a new non-linear 'equilibrium' (Baumgartner & Jones, 1991, 1993, 2002), after which policy-making, though of a different content, settles back into a familiar incremental pattern. Second, they have been involved in investigating the manner in which enduring institutions structure policy dynamics, creating the "musts, mays, and must nots" of policy development (Clemens & Cook, 1999; Steinmo, Thelen, et al., 1992). Thirdly, and relatedly, they have focused on understanding how changes in policy subsystems (Hall, 1993; Sabatier, 1988) interact with institutional characteristics and serve to, respectively, constrain and facilitate overall patterns of policy development.

This article sets out both the old incremental and new punctuated equilibrium orthodoxies and assesses their strengths and weaknesses as general models of policy change. It concludes that, as Mark Twain once said, the rumours of the demise of incrementalism are greatly exaggerated and that, to paraphrase the title of a famous Broadway play, in fact, 'Charles Lindblom is alive and well' and living in the new punctuated equilibrium land.

2. Incrementalism: the first orthodoxy 1954-1994

The credit for developing the incremental model of public decision-making is commonly attributed to Yale University political scientist Charles Lindblom, although he often extended his analysis through cooperation with

² Incrementalism became a household notion in at least two other fields apart from decision-making: budgeting and management. Budgetary incrementalism looks at the process of integrating incremental steps into the difficult and contentious process of allocating financial resources (Schick, 1983; Wildavsky, 1964, 1988). It is based on the premise that "this year's budget is based on last year's budget, with special attention given to a narrow range of increases or decreases" (Davis, Dempster, & Wildavsky, 1966, p. 529). Falling in the field of management literature (Camillus, 1982), is Quinn's (1980) logical incrementalism. According to this model, there is a continuous process of integration between the formulation of a strategy and its implementation, and crises can be used as stepping-stones for change. By using a decentralized model of decision-making and by allowing for a broad framing of the strategy itself, logical incrementalism allows for a high degree of flexibility in implementation. This process, in Quinn's opinion is not 'muddling' but rather a logical strategy under complex conditions and the analytical task of the 1980s and 1990s become very much to undertake empirical research in order to specify the conditions under which incrementalism would occur and those in which it would not, and in this latter case, what other mode of decision-making was actually followed in practice.

³ On punctuated equilibrium processes of change generally, see Gersick (1991). On its origins in evolutionary biology, see Eldredge and Gould (1972, pp. 82–115) and Gould and Eldredge (1977). On its application to policy-making see True, Jones, and Baumgartner (1999), Jones, Baumgartner, and True (1998) and Jones, Sulkin, and Larsen (2003).

many colleagues, including most notably Robert Dahl at Yale University, as well as David Braybrooke at Dalhousie University (Braybrooke & Lindblom, 1963; Dahl & Lindblom, 1953; Lindblom, 1955, 1958b, 1959). In these works the 'division of labour' between the co-authors generally saw Lindblom take on the policy-making side of the project Dahl, for example, provided examples from American politics and Braybrooke, philosophical or conceptual insights. These scholars took to heart the ideas of bounded rationality and satisficing activity among decision-makers developed by Herbert Simon in his 1940s work on administrative behaviour and attempted to develop a more realistic model of policy-making than that put forward by an earlier generation of theorists.

On the basis of their own observations of actual decision-making processes in governments, they rejected earlier notions of the possibility of rational, maximizing policy processes and outcomes put forward by economists and planners of the time such as Jan Tinbergen⁴ (Lindblom, 1958a, 1958b) and outlined what Lindblom suggested were the common elements of the 'strategies of decision' actually followed by decision-makers. In these strategies, Lindblom suggested, like many students of public administration of the time following Simon (1957), that human beings are bounded by the costs calculation imposes on decision-making and by their own cognitive and informational limits in predicting future events and their consequences (Lindblom, 1977; Jones, 2002; Knott, Miller, & Verkuilen, 2003). The essence of incrementalism, Lindblom argued, was to try to systematize decision-making processes around the recognition of the need for political agreement and learning by trial and error, rather than simply stumbling into what were in reality more or less random decisions made under the guise of 'comprehensive rational' analysis and planning (Lindblom & Cohen, 1979).⁵

However, incrementalism took a long period of time – from Dahl and Lindblom's first discussion of the subject in their 1953 "Politics, Economics and Welfare" through to Lindblom's "Still Muddling, Not Yet Through" 1979 article in Public Administration Review and later editions of his text "*The Policy-Making Process*" (1984 and Lindblom & Woodhouse, 1993) – to evolve into "mutually supporting set of simplifying and focusing stratagems" for public policy decision-making (Lindblom, 1979, p. 517).

The concept was progressively refined both in Lindblom's own works and in those of many other students of government decision-making. It went through several phases, most notably its association first with some and then with all instances of policy change (Lustick, 1980), this last form leading to 'Neoincrementalism' in the early 1990s which tried to relate the concept more closely to its origins in Lindblom's work rather than in those of his successors and followers (Woodhouse & Collingridge, 1993). In this 'final' form incrementalism was re-defined as a series of evaluative processes aiding decision-making by limiting analysis to familiar policies and to a subset of possible consequences, employing a trial-and-error approach, and tending towards problem remediation rather than positive goal attainment (Weiss & Woodhouse, 1992, p. 256).

Throughout his work Lindblom stressed that there was a very strong correlation between the complex and unpredictable nature of the policy field with which actors must deal and the adoption of incremental strategies human beings use to tackle this complex environment. According to Lindblom, there are two reasons why decisions

⁴ A later (1969) winner of the Nobel Prize in Economics but then best known for his work on post-war economic planning in Europe (see Tiphergen, 1958)

⁵ Lindblom also argued that earlier "rational models" of decision-making required a separation between ends and means in the calculus of decision-making which was unworkable in practice not only due to the time, information, and cognitive constraints identified by Simon and others, but also because it assumed policy-makers could both clearly separate means from ends in assessing policies and then agree upon each. Lindblom argued that in most policy areas, discussion of ends are inseparable from the means to achieve them, since which goals are pursued often depends on whether or not viable means are available to accomplish them.

⁶ It should be noted that Neoincrementalists had at the heart of their agenda the project of going back to the original goals of incrementalism and partisan mutual adjustment: finding a method to effectively deal with uncertainty and disagreement in policy-making processes (Weiss & Woodhouse, 1992; Woodhouse & Collingridge, 1993). Neoincrementalists argued that various steps could be taken to achieve this result. First, precautions could be built into the policy if potentially unacceptable risks were one of the possible outcomes of a situation. Second, flexibility ought to be built into policies if resistance to change is likely to create problems. Third, barriers to learning can be abated by utilizing more resources to favor learning from experience (Woodhouse & Collingridge, 1993, p. 146). Woodhouse and Collingridge (1993, p. 146) note how "First, since we do not want to step over a cliff while learning from experience, it makes sense to protect against unacceptable risks where feasible. Second, since learning usually takes awhile under the best of circumstances, it makes sense to arrange policy so that it can be changed fairly readily when negative feedback is perceived to warrant. Third, because people and organizations do not automatically learn to do better – indeed, we often have great difficulty at learning – it makes sense to prepare deliberately for learning". While ultimately the mistaken habit of short-handing incrementalism for small-steps change is still very common and therefore Neoincrementalism cannot be said to have rescued the term from what was considered to be its 'muddied' or debased state (Woodhouse & Collingridge, 1993, p. 131).

typically do not stray far from the status quo. First, since bargaining requires distributing limited resources among various participants, it is easier to continue the existing pattern of distribution rather than try to negotiate the redistribution that would almost certainly arise under radically new proposals. Since the benefits and costs of present arrangements are known to the policy actors, unlike the uncertainties surrounding new arrangements, agreement on major changes is more difficult. The result is typically either continuation of the status quo or agreement to make only small changes to it. Second, the standard operating procedures of bureaucracies also tend to promote the continuation of existing practices. The methods by which bureaucrats identify options and the procedures and criteria for choice are often laid out in advance, inhibiting innovation and perpetuating existing arrangements (Gortner, Mahler & Nicholson, 1987, p. 257).

While a general description of incrementalism has already been provided in the other articles in this issue, here we wish to highlight three factors of the model that have carried through the initial period to the punctuated equilibrium phase of the study of policy dynamics: a focus on uniqueness, unpredictability and complexity in policy-making; the idea that incremental change can build up over time into major changes; and finally the need to pay careful attention to agency and to adopt a multi-variable approach to understanding policy making behaviour.

3. The new orthodoxy: punctuated equilibrium models 1994-present

Throughout its 40 year run as the dominant model of public policy decision-making, incrementalism was not without its challengers and detractors (see for example, Dror, 1964; Etzioni, 1967; Lustick, 1980). However, unlike the situation after 1980, in the 1950–1970 period the main criticism came from a normative or theoretical opposition to its tenets, based on a critique of what was considered to be its overly political nature and a belief that following incremental tenets would result in sub-optimal decisions which merely reinforced the status quo. Supporters of more 'rationalistic' models argued that synoptic reasoning is possible, that rational actors practice it (Arrow, 1951; Downs, 1957) and that it is theoretically possible to master the complexity of multiple interrelated variables by undertaking complete analysis and planning so that optimal solutions can be reached. Adherents of incrementalism and rational decisions in this period thus differed mainly in the faith they placed in the capacities of the human mind and human organizations to design and implement successful solutions to complex problems.

A problem of interpretation thus characterized the first half of this period of incremental orthodoxy. Generally, this resulted in a theoretical compromise in which the incremental model was presented as descriptive of the practices actually followed by decision-makers in many day-to-day circumstances (Smith & May, 1980), while the synoptic one was seen as prescriptive of how these practices should be reformed in order to produce better results (Schulman, 1975). While most authors argued that decision-makers should blend these two elements (Etzioni, 1967), it is by no means certain that such methodological syntheses were either possible or feasible. As Smith and May (1980) pointed out in arguing against such synthetic treatments, the frequency with which scholars criticized current practices and asked for changes led them to conclude that there was little relationship between descriptive and prescriptive assumptions, as Lindblom had argued would be the case.

By the late 1970s it was clear to most observers that neither model was able to explain both what *is* and what *ought* to be. If incremental models do not provide us with very convincing prescriptive guidelines to policy-making behaviour and practices, synoptic ones are not so persuasive when trying to explain how people actually behave. And by the early 1980s, it had become apparent to many observers that this continuous running debate between the advocates of rationalism and those of incrementalism was interfering with empirical work and the further theoretical development of the subject. As Smith and May (1980, p. 156) argued:

A debate about the relative merits of rationalistic as opposed to incrementalist models of decision-making has featured for some years now and although the terms of this debate are relatively well known it has had comparatively little impact upon empirical research in the areas of either policy or administrative studies.

⁷ It should be noted that Schulman (1975) did not argue that a wholesale return to complete synoptic analysis was possible. Rather he advocated that some specific types of polices, like space exploration for example, do not seem to fit well with incremental strategies and trial-and-error approaches.

Rather than continue with this relatively sterile debate, the authors suggested that:

We require more than one account to describe the several facets of organizational life. The problem is not to reconcile the differences between contrasting rational and incremental models, nor to construct some third alternative which combines the strongest features of each. The problem is to relate the two in the sense of spelling out the relationship between the social realities with which each is concerned. (Smith & May, 1980, p. 156)

This awareness of the limitations of both the rational and incremental models of decision-making led policy scholars throughout the 1980s to look for alternatives. These came in many forms. Despite Smith and May's admonition, some analysts continued to attempt to synthesize the two models (Etzioni, 1986). Others embraced the elements of unpredictability and capriciousness opened by the fall of incrementalism as the main alternative to the rational model to develop models premised on more or less random interactions of floating groups of policy-makers, such as the 'garbage can' model developed by Cohen, March, and Olsen (1972, 1979).

While neither of these theoretical directions proved particularly fruitful, a third effort to empirically clarify the exact nature of alternative decision-making modes or styles, and the likely conditions under which they would be employed, generated more lasting value and continues to inform present-day work on the subject. Baumgartner and Jones' many works on the subject of public budgeting and agenda-setting, in particular, provided the empirical backing required to support the idea that incremental policy making, while common and dominant, was in fact only one of two modes of decision-making, with periods of incrementalism routinely punctuated by short-lived periods of more dramatic change or 'policy punctuations' (Baumgartner & Jones, 1993).⁸

Hall's (1993) effort is undoubtedly the clearest single statement of the current orthodox position on policy dynamics, however, and is the model and classification of policy change most often cited in the literature and applied in empirical studies. Hall's work appropriately challenged the dominant view in existing scholarship that tended to conflate all the elements of a "policy" into a single dependent variable and argue that all change was incremental in nature (Heclo, 1976; Rose, 1976). Drawing on divergent cases of economic policy development in Great Britain and France, Hall argued that distinguishing between the means and ends of policymaking and between abstract and concrete policy decisions was necessary to gain new insights into processes of policy stability and development.

Such an approach, for Hall, revealed three principal elements or components of a policy that, he argued, could change at different rates (small scale, typical, incremental and larger-scale, rarer, paradigmatic form) with different consequences for overall policy dynamics. "First order" changes occurred when the calibrations of policy instruments, such as increasing the passenger safety or automobile emissions requirements manufacturers must follow, changed within existing institutional and instrument confines. "Second order" changes involved alterations to dominant types of policy instruments utilized within an existing policy regime, such as switching from an administered emission standard to an emissions tax. "Third order" changes involved shifts in overall abstract policy goals such as, in the pollution example, the 1990s shift in many countries from a focus upon ex post end-of-pipe regulation to ex ante preventative production process design.

More significantly, Hall linked each change process to a different specific cause agent and to a specific overall pattern of what Kuhn had termed a process of 'paradigm shift' and which Baumgartner and Jones had linked to 'punctuated equilibrium' models of policy dynamics borrowed from earlier studies in paleontology. In this view first-and second-order changes were typically incremental and usually the result of activities endogenous to a policy subsystem while third-order changes were 'paradigmatic' and occurred as anomalies arose between expected and actual results of policy implementation. The events triggering anomalies and the response to them on the part of policy-makers (such as contestation within a policy community on the best course of action to pursue, or the development of new ideas about policy problems and/or solution) were typically linked to exogenous events, especially societal policy learning (Sabatier, 1988).

Four important methodological, epistemological, and causal elements emerged from this direction in empirical research over the last two decades and have formed the basis for the emergence of a new post-incrementalist 'punctuated-equilibrium' orthodoxy in policy dynamics:

⁸ Their focus on budgetary policy was not matched by the development of a generalizable taxonomy for measuring policy dynamics in other spheres (see John, 2003; Mortensen, 2005).

⁹ While there has been some debate in the literature about the empirical accuracy of some of Hall's analysis, it is the more abstract, conceptual, aspects of his argument, which concern us here (see Lindvall, 2009; Oliver & Pemberton, 2004).

- First, there is widespread acceptance that any analysis of policy development must be historical in nature and cover periods of years or even decades or more (Sabatier, 1993). 10
- Second, it has generally been agreed that political institutions and their embedded policy subsystems act as the primary mechanisms of policy reproduction, both during incremental periods and during punctuations (Botcheva & Martin, 2001; Clemens & Cook, 1999; Howlett & Ramesh, 2003).
- Third, "paradigmatic" change, a process in which there is a fundamental realignment of most aspects of policy development, is argued to exist and is generally understood to occur only when the policy institutions themselves are transformed. In the absence of such processes policy changes are hypothesized to follow "incremental" patterns (Deeg, 2001; Genschel, 1997).
- Fourth, many scholars studying policy dynamics agree that paradigmatic transformations or 'punctuations' usually result from the effects of "external perturbations" that cause widespread disruptions in existing policy subsystem ideas, beliefs, actors, institutions and practices (Sabatier & Jenkins-Smith, 1993; Smith, 2000; Thelen, 2003, 2004).

Taken together, these elements provide the basis for the current 'orthodox' view of policy dynamics: that is, (1) an expectation of a typical set of stability processes (path dependent institutionalization) in ongoing policy deliberations; (2) the expectation of a typical pattern of policy change ('punctuated equilibrium') resulting from the break-down of an institutionalized 'policy monopoly' in which incremental or marginal change patterns predominate; and (3) a typical explanation for why this occurs (alteration in subsystem beliefs and membership usually owing to some type of societal 'perturbation') (Cashore & Howlett, 2007).

This model of change, which captures the current punctuated equilibrium orthodoxy, is a variant of what cybernetic theorists refer to as a 'homeostatic' one; that is, one in which positive and negative feedback mechanisms allow a new equilibrium to be reached after stable system parameters have been altered by outside forces (Steinbruner, 1974). This change process involves a system which, like a spinning top, is constantly undergoing some kinds of (incremental) changes as it spins, but remains in one place (equilibrium) until an outside force (a foot, for example, in the case of the spinning top analogy) moves it to a new location where, after this "punctuation," a new equilibrium is established (Mertha & Lowry, 2006; Steinbruner, 1974). Without exogenous shocks, in Hall's model, it would be expected that existing policy elements would tend to arrange themselves in a self-perpetuating or equilibrating order, allowing (unspecified but incremental) changes in settings and instruments to occur but without altering policy goals. The new orthodoxy moves in the right direction, backed up with an impressive range of cross-sectoral and cross-national comparative data (Baumgartner et al., 2009) and relinquishing the incremental vs. rationalistic opposition characteristic of earlier debates. But it still shows issues that need to be addressed if it is to continue to progress as a general model of policy change.

These include, for example, several important empirical and conceptual questions such as:

- 1. What is it exactly about institutions and subsystems which allow them to hold policy-making in equilibrium?
- 2. What factors lead to the overloading of an equilibrium and promote paradigmatic change or 'policy punctuations' and how context dependent are these?
- 3. Do punctuations always occur rapidly, as is suggested by the 'avalanche' metaphor often used to describe them or can they also occur over long periods of time through consecutive incremental changes? and
- 4. What exactly is it that is being held in equilibrium or changing, e.g. policy goals, policy ideas, or various types of policy specifications, or all of these together?

4. Incrementalism at 75 – a future agenda for policy research

What about the future? In what direction(s) is the literature on policy change moving and how does incrementalism and Lindblom's work fit into these movements?

First, it should be noted that incrementalism has certainly not gone away at all, but continues to exist as one of two modes of policy-making incorporated into new 'punctuated equilibrium' models of policy dynamics. And, while it

¹⁰ This observation is explicitly raised by Baumgartner and Jones and in Paul Sabatier and Hank Jenkins-Smith's work on "advocacy coalitions," as well as being implicit in the broad field of historical institutionalism (Lindner & Rittberger, 2003; Mahoney, 2000; Sabatier, 1988, 1993; Sabatier & Jenkins-Smith, 1993).

may be the less important of the two in terms of accounting for the magnitude of policy changes, it remains the most important in terms of its frequency of appearance in non-punctuation periods of policy making characterized by marginal adjustment to the status quo.

Secondly, with respect to the direction in which research on policy change is headed, it should be noted that two problems with the current orthodoxy have arisen which suggest that the reformulation of at least two of the four basic building blocks noted above upon which the current orthodoxy is constructed may be in order. Despite Hall's careful delimitation of different levels or orders or elements of policies and policy-making, many existing taxonomies and studies designed to measure policy change continue to conflate very different aspects of policy. And the classifications of the types of policy change processes that different policies can, and do, undergo remain underdeveloped.

The first problem with the current orthodoxy which must be rectified the continued concerns failure of many studies to use Hall's widely accepted model of policy (de)composition in order to assess historical patterns of policy development. This is the 'dependent variable problem' uncovered by research into social and welfare policy change (Green-Pedersen, 2004; Knill, 2001; Kuhner, 2007). As Green-Pedersen (2004) put it in his work on the subject:

It is clear that the dependent variable problem is crucial for the entire debate and that disagreement about the dependent variable is a major obstacle for cumulative knowledge about welfare state retrenchment [...] To put it bluntly, the debate about explanations of variations [...] cannot move beyond the stage of hypotheses before the dependent variable problem has been addressed [...] Addressing the dependent variable problem should have high priority within the [...] literature (p. 4).

Similarly, Pierson (2001) has argued that "it is difficult to exaggerate" the obstacle the continued dissensus over the definition, operationalization and measurement of policy change creates for comparative research and theory construction on policy dynamics.

One result of this failure to operationalize and measure the dependent variable consistently in studies of policy dynamics have been that many scholars have inadvertently conflated several distinct change processes present in specific elements of policy. Just as was the case with the old incremental orthodoxy in the 1970s, uncovering these "hidden" and more complex patterns of policy development challenges the rather blunt binary characterizations of changes as either "paradigmatic" or "incremental" that permeates much of the current literature (Howlett & Ramesh, 2002; Howlett, 2009; Lindner, 2003; Lindner & Rittberger, 2003). Advancing the study of policy dynamics beyond the current orthodoxy requires better taxonomies of policy change processes which take both the additional number of policy elements and the criteria of directionality seriously in re-aggregating shifts in those elements: much as Lindblom did in his later work discussing variations existing between the 'synoptic', incremental and 'blundering' approaches to policy-making. Models such as that proposed by Streeck and Thelen (2005) show promise in expanding the menu of possible change processes beyond the two found in typical punctuated equilibrium descriptions (see Table 1).

Similarly, the homeostatic model of externally driven paradigmatic change processes is also only one possible causative pattern of policy change (Howlett, 2009; Mortensen, 2005). Other arrangements of system elements and change drivers should not be ruled out *a priori* as inappropriate templates for the forms of policy dynamics found in specific sectors or issue areas. For example, one obvious alternative to an exogenously driven change process would be one where changes in goals are driven endogenously, rather than exogenously, in a process of paradigmatic change

Table 1 Types of policy change.

		Result of change	
		Continuity	Discontinuity
Process of change	Incremental Abrupt	Reproduction by adaptation Survival and return	Gradual transformation Breakdown and replacement

Source: Streeck and Thelen (2005, p. 9).

linked to policy learning. ¹¹ Empirical evidence for this "neo-homeostatic" model can be found in Coleman, Skogstad, and Atkinson (1996) work on agricultural policy change and also in Capano's 2003 study of Italian administrative reform. In both cases small-scale changes in policy settings – in the agriculture case through the alteration of the level of subsides, and in the Italian administrative case through variations in hiring and personnel policies – built up over the years until the original goals of the overall policy were unrecognizable, constituting a paradigmatic change, but in the 'incremental' fashion suggested by Lindblom in his 1979 article, rather than as an abrupt externally driven change.

5. Conclusion: the lessons of incrementalism for the contemporary studies of policy dynamics

As this discussion has shown, the policy change research agenda is a work-in-progress. Continuous waves of approaches and frameworks characterize scholars' attempts to account for policy dynamics and the policy literature agrees that in order to explain policy change, we need better frameworks (Bressers & Lulofs, 2009; Capano, 2009; John, 2003). While there is a growing body of empirical evidence which supports the claim that public policies typically change in a "punctuated equilibrium" fashion, there is also convincing evidence of a need for improved specification in the current orthodoxy of several key aspects of policy dynamics.

One area which requires more work, for example, concerns the links between the nature of the political system and its policy "subsystem". Politics and political leadership as the ongoing activity whereby power and policy are created, pursued and maintained are tightly connected, but too often the features and workings of political systems have been poorly handled in public policy studies. Mainstream political science, for example, has often dealt with policies as simple, direct outputs of political dynamics. On the other hand, policy scholars have too often underestimated the degree to which political dynamics have affected, influence and deeply interact with policy outcomes.

Policy dynamics, and political agency and structures, are strictly intertwined and political and policy arenas very often overlap to a large extent. This requires further investigation, since it is in this intertwining and overlapping that the various different drivers of change have the chance to be productive. Policy actors decide or otherwise, learn or fail to learn, implement or fail to implement, press for change or resist change. Policy-makers are those who actually perform in the policy arena, and as such they deserve special attention, if their rationale, goals, beliefs and 'technical' capabilities and their impact on policy dynamics are to be properly understood. Their role is key in processes of marginal adaptation, as Lindblom noted. Small transformations, as Lindblom pointed out so long ago, require policy-makers to change their standard, routine behaviour or to consciously adapt to internal and external pressures. But actors are even more important in the event of significant changes. Radical changes develop through a complex process in which focal events, critical junctures and policy windows offer opportunities for change. And there lies the case for the strategic role of agency, as advantage has to be taken of any ongoing momentum if change is to occur; focusing the spotlight once again on the entrepreneurial and leadership qualities of key actors.

Of course, emphasizing the role of agency in policy-making, is hardly a novelty. As one scholar pointed out some years ago: "...background factors don't do policies. Policymakers do" (Lundquist, 1980, XIII). And, again, it is worth noting that Lindblom also worked in this domain, linking his work closely to the facets and particularities of the operation of pluralist political systems (Lindblom, 1980). As his work suggests, political variables such as leadership and coalition behaviour among subsystem members need to be part of any model of policy change and the punctuated equilibrium models currently in fashion need to be just as strongly supported and nurtured by in-depth, macro and micro-empirical research, as was Lindblom's work from over a half a century ago.

¹¹ In this sense, Streeck and Thelen (2005) and Mahoney and Thelen (2010), for example, have argued that institutional change can come about in a variety of ways and often in a subtle and gradual manner. Mahoney and Thelen (2010, p. 16) highlight four types of gradual change: displacement, layering, drift and conversion. In this model, large non-incremental changes are likely with a displacement mode (albeit the process can also be a gradual one), but much of the analysis stresses the very concrete possibility that a large amount of institutional change may come about in a gradual endogenous fashion. In Mahoney and Thelen (2010, p. 31) it is noted how "the interactions between features of the political context and properties of the institutions themselves [are] critically important explaining institutional change" and how the type of change-actors and the different strategies they adopt are likely to differ in specific institutional settings.

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