Decision-Making under Ambiguity and Time Constraints
Assessing the Multiple-Streams Framework

Edited by
Reimut Zohlnhöfer and Friedbert W. Rüb
Chapter One

Introduction: Policy-Making under Ambiguity and Time Constraints

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Introduction

When John W. Kingdon published his seminal book *Agendas, Alternatives, and Public Policy* in 1984, it was essentially a book on a comparatively narrow subject, namely, agenda-setting in the political system of the United States of America. And the empirical basis of that study was even narrower, as Kingdon had only investigated health and transport policy in detail, essentially during the 1970s. Nonetheless, one of the core insights of that book struck a chord in the wider literature – namely that policy-making is not an exercise in rational problem-solving. Rather, participation in many policy-making forums is fluid and most policy-makers do not know what they want (in terms of policy) most of the time and would not know how to attain particular policy goals even if they knew which goals they were after. Therefore, there is no systematic connection between a problem and a solution; decisions rather come about as solutions ‘look out for’ problems and get ‘coupled’ to these problems by policy-entrepreneurs.

It is certainly no wonder that Kingdon developed his ideas (which themselves were an adaptation of Cohen, March and Olsen’s (1972) ‘garbage-can’ (GC) model of choice, as Harald Saetren reminds us in his contribution (2016, Chapter Two of this volume)) with the US political system in mind. The American presidential system seemed to approximate the assumptions on which the garbage-can model and Kingdon’s ideas rested much more closely than the much more orderly (Zahariadis 2003: 1) parliamentary systems prevalent in Western Europe. Thus, the applicability of Kingdon’s work was initially restricted mainly to agenda-setting in the United States and Kingdon himself never made an attempt to formulate a more general framework.

Nevertheless, Kingdon’s book did provide the foundation of what later became known as the ‘multiple-streams framework’ (MSF), a framework that nowadays belongs to the most-cited theoretical approaches in the field of policy analysis (see Zahariadis 2014: 25; Herweg 2016). In a recent literature review, Jones et al. (2015) report that they found no less than 311 English-language peer-reviewed journal articles applying the MSF published since the year 2000. Thus, at least quantitatively, the MSF seems to be applied more frequently than other theories of the policy process. Baumgartner et al. (2014), for example, in a similar endeavour regarding the punctuated equilibrium theory (PET), came up with
only 303 PET-related publications – and that included 63 non-journal publications and covered a longer period, starting in 1991. Similarly, Jenkins-Smith et al. (2014: 210) only found 224 publications (including eight books and thirteen book chapters) applying the advocacy coalition framework between 1987 and 2013.

Moreover, application of the multiple streams framework has been widened considerably; it is now applied to very different issue-areas, from the regulation of the sugar market (Ackrill and Kay 2011) to labour-market policy (Zohlnhöfer and Herweg 2014); and from devolution (Münter 2005; Bundgaard and Vrangbæk 2007) to privatisation (Zahariadis 1995), to give just a few examples. Moreover, many of these empirical studies also applied the MSF to political systems that differed substantially from the presidential system of the United States. Thus, scholars applied the framework in the context of parliamentary systems, among others to the United Kingdom (Zahariadis 1995; Münter 2005), Denmark (Bundgaard and Vrangbæk 2007) and Germany (Zohlnhöfer and Herweg 2014); to semi-presidential systems like France (Zahariadis 1995); and even to the European Union (Copeland and James 2014). Finally, and probably most importantly, the multiple-streams framework has been extended to explain decision-making rather than just agenda-setting (cf. Zahariadis 1995; Münter 2005; Zohlnhöfer and Herweg 2014).

The success of the multiple-streams framework

The multiple-streams framework’s success (in terms of applications and citations) probably depended on at least two conditions. On the one hand, to borrow from the MSF’s terminology, an academic entrepreneur was needed to prove the framework’s wider applicability. As John Kingdon himself refrained from further elaborating on his book – he even declined Paul Sabatier’s invitation to contribute a piece on his framework to the volume Theories of the Policy Process (Sabatier 2007b: 9) – someone else had to adopt the project and make its popularisation his pet project. That someone probably was Nikolaos Zahariadis, who, in the 1990s, published a book and a number of journal papers in which he applied Kingdon’s ideas to privatisation policy in European countries and adapted the approach accordingly (Zahariadis 1992, 1995, 1996). Thus, he demonstrated that Kingdon’s approach could fruitfully be applied empirically even in countries other than the United States, with only limited modification. Later studies on other countries and further extensions of the framework followed (Zahariadis 2003, 2005, 2008, 2014).

The second condition that helps explain the MSF’s citation success is that its application in contexts for which it was not developed seems to have become increasingly attractive. This is because the terms under which policy-making takes place in other countries than the US (and in particular in the parliamentary systems of Western Europe) have started more and more to resemble the assumptions upon which the MSF was built. In other words: the conditions under which policies are made have changed substantially in recent years – not least in the allegedly more orderly parliamentary systems of Western Europe. With regard to what the multiple-streams framework conceptualises as the problem stream, issues have
grown ever more complex and politically more contestable. In many cases, ranging from nuclear energy to the European debt-crisis, even experts from the scientific community vehemently disagree about feasible policy options. So it is fair to say that governments in all advanced democracies often do not fully understand the problems they have to deal with and they do not know if the policies they choose will solve the problems at hand. Furthermore, depending on the policy issue, problem-production and (national) problem-solving have become disconnected – due to Europeanisation and globalisation. Moreover, even if policies are expected to solve a particular problem, they are very likely to produce unintended (and unwanted) consequences that may very well exacerbate other problems.

What is more, with regard to the MSF’s political stream, the role of party ideology has diminished in most parliamentary democracies (Katz and Mair 1995; Häusermann et al. 2013). While ideologies traditionally helped the comparatively cohesive parties in parliamentary systems put together somewhat coherent policy programmes, this is less and less the case as the relevance of ideology diminishes. If ideology cannot guide the policy choices of decision-makers any longer, they indeed increasingly resemble Kingdon’s actors holding unclear policy preferences. They might still have a preference for pursuing policies that are popular among the electorate but, as voting behaviour itself is also becoming ever more volatile, it is hard for policy-makers to tell who their voters are and what interests they have. Therefore, the policy preferences of decision-makers are growing ever more unclear, even in parliamentary systems with traditionally strong and programmatically comparatively coherent political parties.

Finally, policy-makers have little time to think through their decisions as the pace of economic and social change has accelerated and media reporting has become continuous and more intrusive. Thus, decision-makers act under severe time-constraints, which limit the number of issues a political system can deal with at any given point in time. This, in turn, means that there are many more problems than political systems can attend to. Thus, for all political systems, the most important question becomes how attention is rationed (Zahariadis 2007: 65).

These conditions, in turn, render models of rational problem-solving highly unconvincing, even in political systems that do not resemble the presidential system of the United States, and this made the MSF attractive to scholars of decision-making in these other systems, too.

Nevertheless, there remain significant differences between the American political system Kingdon had in mind when developing his framework and the parliamentary or semi-presidential systems in other advanced democracies to which the MSF has been applied recently (let alone the political system of the European Union). Moreover, if Kingdon’s framework is to be applied to decision-making, and not only to the agenda-setting for which it was originally conceived, further adaptations might become necessary. Zahariadis (1995, 2003) suggested a number of relevant adaptions that modified Kingdon’s original approach slightly. Although Zahariadis was not the only author to propose modifications to Kingdon’s original framework, most of these other adaptations were ad hoc modifications in order to make the approach applicable
to the particular cases at hand. Thus, close to no systematic debate on potential theoretical refinements of the multiple-streams framework, its analytic value and its empirical applicability has taken place so far. Rather, the approach or some of its key concepts – such as ‘policy-window’ or ‘window of opportunity’, ‘policy-entrepreneur’ and ‘focusing event’ – have often been used to guide case studies without much consideration of the theoretical implications such work has for the multiple-streams framework itself (cf. Herweg 2016). In the following, we first briefly summarise the main argument of the MSF before we discuss the most prominent criticisms of the framework.

The core concepts of the MSF

One of the main reasons for the multiple-streams framework’s attractiveness for scholars of agenda-setting and decision-making is its core argument, namely, that policy-making is not a rational response to clearly defined social or economic problems; rather, the MSF argues that there is no systematic relation between a problem that comes first and a solution which is sought in order to solve that problem. Policy-making can instead be seen as a process in which solutions are looking out for problems to which they can be attached. Thus, according to the MSF, the development of policies is basically unrelated to problems and once a problem gets on the agenda, a solution (that is, a policy that can be regarded as a reasonable response to the problem at hand) must already be available. As discussed above, given the omnipresence of ambiguity and the immense time-constraints under which policy-makers have to decide, this idea does not seem to be too far-fetched in most circumstances.

In terms of theory-development, a logical consequence of the insight that the elaboration of policy proposals is (mostly) unrelated to the problems that are currently being dealt with in the political system is to understand both as distinct processes – or streams – that are (mostly) independent of each other. In addition to the problem and the policy streams, the MSF distinguishes a political stream, which comprises the politics dimension of agenda-setting and decision-making. Each stream is assumed to operate according to its own specific logic and independently from the other two streams.

In the problem stream, conditions are turned into problems that need to be dealt with politically if attention is directed to a condition by indicators that change substantially over short periods of time, by feedback from previous programmes or by focusing events like crises or disasters (see Birkland 1997, 1998). Kingdon’s (2003[1984]: 90) main insight with regard to the problem stream, however, is that ‘problems are … not entirely self-evident’; rather, conditions need to be interpreted and framed in a certain way to make them problems. In the policy stream, experts in policy subsystems interact in policy communities, contributing to what Kingdon (2003[1984]: 166) figuratively calls ‘the policy primeval soup’. Policy proposals are put forward by policy-entrepreneurs; these proposals are discussed, criticised, modified and combined or, as Kingdon calls it, ‘softened up’. Proposals that meet the policy community’s criteria of survival, namely, technical
feasibility, value-acceptability, public acquiescence and financial viability, can become viable alternatives that are ready to be coupled, that is, connected to a particular problem. While the policy stream is located at the subsystem level and the dominant mode of interaction is arguing, things look quite different in the political stream. Powering and negotiations prevail in this stream, which is located at the level of macro-politics, where majorities are sought for getting proposals adopted. Thus, the composition of government and parliament is relevant here, as are interest-group campaigns and public opinion or, as Kingdon prefers to call it, the ‘national mood’.

If the three streams flow independently through the political system, they need to be brought together at some point in order to make agenda-change possible. This happens during a ‘policy-window’ or ‘window of opportunity’. As Kingdon (2003[1984]: 165) explains, ‘a policy-window is an opportunity for advocates of proposals to push their pet solutions, or to push attention to their specific problems’. These opportunities can arise because of changes either in the problem stream – a problem becomes so important that something needs to be done about it – or in the political stream – for example, as a result of changes in government or parliament.

A policy-window is only a necessary condition for agenda-change, however. The three streams also need to be ‘ripe’; that is to say, a viable alternative has to be available which can be coupled to a problem that has captured the attention of policy-makers; and policy-makers in the political stream must be receptive to both the problem and the proposal to be attached to the problem. If these conditions hold, that is, a policy-window opens and all three streams are ripe, a policy-entrepreneur can try to couple the three streams and get his pet project on the agenda. According to Kingdon (2003[1984]: 179), policy-entrepreneurs are ‘advocates who are willing to invest their resources – time, energy, reputation, money – to promote a position in return for anticipated future gain in the form of material, purposive, or solidary benefits’. The policy-entrepreneur is of primary importance in the MSF. As policy-makers have neither a clear idea of what the relevant problem is nor what an adequate solution might be, policy-entrepreneurs can take advantage of the ambiguity and attach their pet project to a specific problem. It is important, however, to keep in mind that policy-entrepreneurs may fail in their attempt to combine the streams, even if the streams are ripe and a policy-window opens. Thus, the MSF leaves room for contingency and sometimes even ‘dumb luck’ (Kingdon 2003[1984]: 183).

Apart from the idea that policy-making is not an exercise in rational problem-solving, the MSF has been much cited due to the introduction into the scholarly literature of concepts that are lacking in other theoretical approaches, particularly the terms ‘policy-window’ or ‘window of opportunity’, which denotes that, at certain times, circumstances may make it much easier to get a policy adopted than at others. Similarly, the concept of the policy-entrepreneur as an actor pushing for a particular policy has turned out to be influential and has been included in other theoretical frameworks, for example, the punctuated equilibrium theory (Boushey 2013).
A critical discussion of the MSF

Despite its success, the MSF has been criticised for a number of reasons (see Weir 1992; Mucchiaroni 1992, 2013; Bendor et al. 2001; Sabatier 2007a), which we discuss in this section.

One of the core problems of the MSF, according to some critics, is the lack of testable hypotheses. As Paul Sabatier (2007a: 327) explained: ‘the multiple-streams framework has no explicit hypotheses and is so fluid in its structure and operationalization that falsification is difficult’. This criticism has two aspects. On the one hand, critics question whether hypotheses can be derived from the framework at all; on the other hand, they doubt that the framework’s core concepts can be operationalised properly, as they lack clear definitions due to Kingdon’s figurative language. We will discuss these two points in turn.

While it is true that Kingdon (and to a certain extent also Zahariadis) failed to develop falsifiable hypotheses from the MSF, that is not to say that it is impossible to do so. To the contrary, the main argument of the MSF can easily be transformed into a falsifiable hypothesis, namely that an agenda-change becomes more likely if the streams are ripe, a policy-window opens and a policy-entrepreneur is present to couple the streams. This hypothesis could be falsified by showing that agenda-change has occurred although (at least) one of the streams was not ripe, or there was no policy-window or no policy-entrepreneur pushed for the change. Similarly, one could test whether fulfilling the selection criteria increases a proposal’s chances to be coupled or whether coupling is more likely to succeed when a policy-entrepreneur has direct access to key policy-makers. Other authors have also derived more specific hypotheses from the MSF that guided specific research questions (good examples include Blankenau 2001; Boscarino 2009; and Hansén 2016, Chapter Twelve of this volume), while Herweg, Huß and Zohlnhöfer (2016) have developed a set of more general hypotheses.

Moreover, other theoretical lenses of the policy process, for example, the advocacy coalition framework, can also be described as frameworks (Jenkins-Smith et al. 2014: 188). A particularly telling example is Fritz Scharpf’s (1997) ‘actor-centered institutionalism’, which deliberately abstains from formulating explicit hypotheses. Therefore, we can conclude that it does not seem to be a necessary condition for useful frameworks in policy analysis to provide explicit hypotheses, nor is it impossible to derive hypotheses from the MSF.

The figurative language of the original formulation of the MSF is a more problematic point, however. Streams, open windows of opportunity, coupling, policy-entrepreneurs, primeval policy soup, etcetera are indeed concepts that lack clarity and analytical precision. All five basic categorical concepts – the ‘policy’, ‘problem’ and ‘political’ ‘streams’; the ‘policy-entrepreneur’ and the ‘window of opportunity’ – are highly metaphorical and have to be reconstructed and operationalised for empirical or comparative research. The same holds true for many sub-components of these concepts. ‘Indicators’, ‘feedback’ and ‘focusing events’ for the problem stream; value-acceptability and technical feasibility for the policy stream; and, above all, the ‘national mood’ for the political stream:
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John Kingdon (1984: 20) makes it perfectly clear that the analytical-theoretical construct he presented in his seminal book was based on a modified and simplified version of the equally well known garbage-can (GC) model of organisational decision-making, formulated by Cohen, March and Olsen (1972) a good decade earlier. Kingdon has been richly and rightly praised and awarded for his contribution in demonstrating the relevance of the GC logic at the highest level of decision-making in society – public policy-making – where it is, no doubt, even more appropriate and useful.

Nevertheless, the main argument to be addressed in this paper is that several essential features of the GC model were left out in Kingdon’s translation of it to the MS framework, thereby seriously impairing its analytical and theoretical leverage in a broader policy-making context. Lost in this translation were not only some key theoretical concepts but also the intentions of Cohen, March and Olsen in developing their GC model, as well as the assumed relationship between decision streams and how they are connected. Neglecting the organisational-institutional connection to policy streams is by far the most serious omission in this respect. Realising the full potential of the MS framework as a synthesising multi-theoretical policy-making construct requires re-conceptualising it back to the core of its original concepts. This will also greatly facilitate combining and fusing it with some other promising theoretical constructs embedded in the historical institutionalism and policy-design research literature.

A few caveats are in order before we proceed with analysing what got lost (and with what consequences) in the translation from the GC model to the MS framework. First, Kingdon did not name his simplified theoretical construct the ‘multiple streams’ or ‘policy streams’ approach or framework. This was done by later policy scholars inspired by his work. Second, Kingdon’s ambition was to analyse and theorise about the apparently fluid nature of the agenda-setting stage of the policy process, not the entire policy process from beginning to end. Hence, when we criticise some of the shortcomings of the MS framework, we primarily target those who interpreted and launched Kingdon’s simplified version of the GC model under this label as a more comprehensive policy-making theory.
Third, the naming of Kingdon’s simplified construct has changed from the policy streams approach/framework during the late 1980s and early 1990s (for example, Mumper 1987 and Sabatier 1991) to the multiple-streams approach/framework from the mid 1990s; the latter term was coined by one scholar in particular, Nikolaos Zahariadis (1995, 2002). For the sake of simplicity, we use the later nomenclature multiple-streams (MS) framework, which seems to have become the more common label.

A nearly universally held misconception must be corrected at the outset. It is the belief that Kingdon was the first to demonstrate the applicability and utility of the logic of the GC model in a public-policy-making context. This is simply not true! One of the GC model co-authors actually published an article in Scandinavian Political Studies the same year as the GC model was published (Olsen 1972). Here, the relevance of the logic of the GC model as a more general analytical framework for the policy process was spelled out for the first time, without changing and simplifying the core concepts in the way Kingdon did. Four years later, March and Olsen (1976) followed up by publishing a book containing several case-studies demonstrating empirically the wider applicability of the GC model in a public-policy-making context. There is no reference in Kingdon (1984) to these earlier applications of the multiple-streams framework in a public-policy-making context. This is not mentioned here to detract from the praise Kingdon deserves in promoting the GC model logic so effectively by applying it in his seminal book. Rather, we just want to set the record straight!

On balance Kingdon must also be credited for adding something valuable to the GC model in his translation of it. The most important thing in this respect is probably the more explicit attention to the role of human agency – through the policy-entrepreneur concept – in the successful coupling of policy streams. Another is the policy-window concept which represents more focused attention and elaboration on the temporal-order idea so crucial in the original GC model by Cohen, March and Olsen. Policy-design is another type of highly relevant literature to the MS framework. However, with a few exceptions (for example, Sætren 2009) this link has not been made: though doing so would no doubt enhance the analytical-theoretical leverage of the MS framework even further. Nevertheless, the main purpose of this chapter is not to present and discuss a fully fledged, revised and more comprehensive version of the MS framework, along the lines just suggested above. Rather, our aim is more limited yet of critical importance: pointing out how the organisational-structural dimension of the GC model got lost in Kingdon’s simplified translation, an omission that, unfortunately, was transmitted in subsequent scholars’ interpretation of his work into their own policy streams/multiple-streams frameworks.

A further discussion of the model elements that were lost in Kingdon’s translation and which should be retrieved as part of re-conceptualising the revised MS framework requires briefly revisiting the main purpose, features and logic of the GC model and comparing it to Kingdon’s modified and simplified version. In this context, we will try to demonstrate how the theoretical leverage of the MS framework will be substantially enhanced just by giving more explicit attention
to organisational and institutional factors as well as by extending its analytical focus to more stages of the policy process, including both policy-authorisation and policy-implementation.

Revisiting the garbage-can model

It is not uncommon to interpret the GC model as one claiming that organisational decision processes are basically chaotic, that is, lacking any clear order or structure, thus producing largely unintended and unpredictable decision-outcomes. Cohen, March and Olsen (1972) may have contributed in no small part to this misconception by referring to their object of study in the late 1960s – universities – as organised anarchies and by the rather indelicate naming – garbage can – of their model. Nevertheless, and perhaps surprisingly, this is clearly not the main message the authors intended to convey.

Their point of departure at that time was an overly rationalistic conception of organisations and related internal decision-processes, stemming from classical economics, that Herbert Simon spent much of his career correcting and modifying. Thus, the ideas of bounded rationality and satisficing behaviour were launched as more realistic core assumptions than absolute rationality and maximising behaviour (Simon 1955; March and Simon 1958). In the same vein, the purpose of Cohen, March and Olsen in developing the GC model was not to reject a rational-choice model (based on more or less realistic core assumptions) in favour of a polar-opposite model postulating that organisational choices were predominantly characterised by anarchy and chaos. Rather, they wanted to call attention to the less analytical-rational aspects of decision-making frequently observed by organisational scholars, such as when choices became politicised or appeared to be a result of almost random chance events. Furthermore, and this is the crux of the GC model, the aim was to identify and specify under what conditions the behaviour of organisational decision-makers is likely to appear more, or less, rational.

To make their point, they introduced some very unconventional notions about organisational decision-making, accompanied by a language-style and metaphor-use that many would have found quite provocative:

… an organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they can be aired, solutions looking for issues to which they might be the answer and decision makers looking for work.

They went on in the same vein to suggest that:

… one can view choice opportunity as a garbage can into which various kinds of problems and solutions are dumped by participants as they are generated. The mix of garbage in a single can depends on the mix of cans available, on the labels attached to the alternative cans, on what garbage is currently being
produced, and on the speed with which garbage is collected and removed from the scene (Cohen, March and Olsen 1972: 2).

Nevertheless, forty years later, the same authors caution against the all too common chaos theory interpretation of their GC model, emphasising that these novel ideas were originally presented as ‘an aspect of organizational decision making’ and as ‘A...model, not the model,’ and was ‘an attempt to enlarge rather than to replace other interpretations of organizational life’ (Cohen, March and Olsen 2012: 22; italics in original).

In their latter work, the authors remind us of the unique context in which their unconventional ideas about organisational decision-making originated. They were based on observations of higher-education institutions during the late 1960s in California, at a time when not only universities but society as a whole seemed to be in state of flux, experiencing fundamental changes in core values as well as in political and social institutions.

Hence, it is now time to spell out in more detail what was lost in Kingdon’s translation and the implications of those omissions; and to suggest how this can be rectified.

**Lost in translation**

*The missing policy-stream elements*

Cohen, March and Olsen (1972: 3), Olsen (1972) and March and Olsen (1976) identified four decision-stream elements (see Table 2.1). Kingdon (1984: 20) reduced these to three, keeping the two first (problems and solutions) but substituting for Cohen, March and Olsen’s *participants* and *choice-opportunities* his own choice of concept: *politics*. There are at least two basic problems associated with this. First, participants and choice opportunities do not totally disappear. Instead they are lumped into the hodge-podge concept *politics*, with other potentially important but very different phenomena, like *pressure-group campaigns, public/national mood, election results, partisan or ideological distribution of Congress and changes in administration* (Kingdon 1984: 152). Thus, the political-stream concept assumes the function of a very heterogeneous residual category, containing almost anything that does not constitute problems or

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<td>Problems</td>
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<td>Policy-proposals (solutions)</td>
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<td>Participants</td>
<td>Politics</td>
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<td>Choice-opportunities</td>
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*Table 2.1: Decision streams as conceptualised by Cohen, March and Olsen (1972) and Kingdon (1984)*
Re-conceptualising the MSF Back to its Source

Table 2.2: Core theoretical concepts related to two versions of MS framework

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<td>Temporal orders</td>
<td>Policy-windows</td>
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<td>Organisational structure:</td>
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<td>1. Hierarchical</td>
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<td>2. Specialised</td>
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<td>3. Open/unsegmented</td>
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Table 2.3: Implications of decision and access structures following from three ideal-typical organisational structures in GC model

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<th>Organisational structure</th>
<th>Decision structure</th>
<th>Access/agenda structure</th>
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<tr>
<td>Hierarchical</td>
<td>Only important/high-ranking organisational members can participate in important choice opportunities/decision arenas.</td>
<td>Important problems/issues have access to many choice opportunities; important choice opportunities/decision arenas are accessible only to important problems/issues.</td>
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<tr>
<td>Specialised</td>
<td>Each organisational member can participate only in one choice opportunity/decision arena.</td>
<td>Each problem/issue has access to only one choice opportunity/decision arena.</td>
</tr>
<tr>
<td>Open/unsegmented</td>
<td>Any organisational member can participate in any choice opportunity/decision arena.</td>
<td>Any problem/issue has access to any choice opportunity/decision arena.</td>
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policy proposals (solutions). Hence, the analytical clarity of the politics concept is greatly impaired.

The missing organisational-structure context

The omission of the choice-opportunities concept, however, is much more serious: its unfortunate consequence has been to disconnect Kingdon’s simplified construct from the organisational context so crucial to the GC model. Collective decision-making does not happen in an organisational or institutional vacuum. Thus, the concept of choice-opportunities refers to the various formalised and institutionalised settings – decision arenas – in which organisational and political decisions are supposed to be made.

However, even within hierarchical and specialised structures in which decision streams are supposedly more closely connected, there are inevitably certain ambiguities and uncertainties related to stream elements that might
be conducive to lack of process stability and predictability. There are four of
these ambiguity-and-uncertainty-creating factors. Two are basic axioms of the
GC model. They are: 1) any decision opportunity is basically an ambiguous
stimulus; and, 2) most decision-makers are part-time participants. This means
that the definition of problems/issues and their solutions is seldom crystal-
clear at the outset, implying that there is often some discretionary space for
clever and creative interpretation of issues – depending on whoever chooses
to exercise her/his privilege to participate. This means that turnover of
participants during a decision process could easily result in unstable issue-
definition over time. But the opposite could also be the case. That is, the type
of issue on the decision-agenda and its content (proposed solution) could also
determine, to a large extent, who chooses to become activate and participate.
This suggests that activation and definition processes respectively may play
a dynamic critical role in how decisions are formulated, authorised and
implemented.

Table 2.4 suggests how variation in activation and definition processes related
to decision-makers may produce results consistent with three different types of
decision-making models.

Two other ambiguity-uncertainty factors in the GC model are well known
in the organisation-theory literature (Thompson 1967: 134). They relate to
whether 1) goals and 2) goals–means relationships are clear or unclear or well
understood or not, respectively. Rational decision-making presupposes both clear
goals and well understood goal–means relations. Conversely, when goal–means
relations, especially, are not well understood, decision-making becomes a risky
and unpredictable enterprise, regardless of whether goals are clear or not. It is
when all these factors coincide in the ambiguity-and-uncertainty-creating mode
in organisational settings that Cohen, March and Olsen use the term organised
anarchies.

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<th>Rational model</th>
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<th>Artifactual/chance model</th>
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<td><strong>Definition process</strong></td>
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Table 2.4: Patterns of activation and definition processes and how they affect
likelihood of three types of organisational decision-models.
Chapter Three

Clear Enough To Be Proven Wrong?
Assessing the Influence of the Concept of Bounded Rationality within the Multiple-Streams Framework

Johanna Kuhlmann

Introduction

The multiple-streams framework (MSF) plays a special role in policy analysis. On the one hand, it is one of the most-cited approaches in policy analysis (Sabatier 2007a: 9); on the other hand, it is also criticised by leading scholars in the field. Sabatier’s well-known critique of the approach concentrates especially on three points (Sabatier 2007b: 332). First, the dependent variable is not clearly defined; second, falsification of some important theoretical assumptions is impossible; and, third, causal processes are under-specified, mainly because there is no consistent conception of the individual. So the main assumption of theory construction, ‘[to] be clear enough to be proven wrong’ (Sabatier 2007b: 327), is violated and theoretical progress is complicated.¹

Nonetheless, the literature disagrees with one point of Sabatier’s critique in particular: Many scholars state that the individual in the MSF is boundedly rational and is, therefore, by no means under-specified. When talking about processes underlying the political system, the founder of the multiple-streams approach, John W. Kingdon, points to the limits of rational policy-making by referring to the work of James G. March and Herbert A. Simon (Simon and March 1958). They were the first to analyse organisations by linking them to the concept of bounded rationality (Jones 2003: 396), which was developed by one of the authors, Simon, in 1945. Regarding policy-makers, Kingdon (2003[1984]: 78) claims that the ‘ability of human beings to process information is more limited than … a comprehensive approach would prescribe’. Thus, in a review article comparing different approaches in policy analysis, Edella Schlager (2007: 302) states that the individual in the MSF is ‘firmly grounded in Simon’s boundedly rational individual’. That is why she characterises the individual as a ‘satisficer’ (Schlager 2007: 302). So Schlager’s conclusion seems to oppose Sabatier’s: while the latter denies a consistent model of the individual in the MSF, the former claims the individual in the MSF to be ‘firmly’ conceptualised in the sense of Simon’s concept of bounded rationality.

¹. For a critique on Sabatier in this regard, see Herweg 2013.
Against the background of these contradictory assumptions concerning the theoretical premises of the MSF, this article aims to critically analyse the actual influence of the concept of bounded rationality within the multiple-streams approach. This does not imply that it is essential for any approach in policy analysis to have a micro-foundation. However, if the multiple-streams approach is considered to have one, this needs to be highlighted; because placing the actors in the MSF within the concept of bounded rationality has implications not only for the micro-theoretical foundation of the approach but for theory construction as a whole: the fundamental relevance of bounded rationality for political science lies in the assumption that human behaviour can be transferred to macro-politics (Jones 2003: 395). Against this background, this chapter will analyse two questions:

1. is the individual in the MSF based on the boundedly rational individual in Simon’s sense?; and, based on that,
2. what role does bounded rationality play within the whole MSF?

The chapter, thus, furthers our knowledge of the conception of the individual in the MSF: if bounded rationality is identified as consistently underlying the MSF, Sabatier’s critique that the approach lacks logical and causal consistency has to be denied. If, however, the MSF is considered as being inconsistent with bounded rationality, the next question would be: is there another micro-foundation underlying the approach, or does the approach completely lack a micro-foundation? Either way, the chapter aims to contribute to a better understanding of the MSF and – keeping in mind Sabatier’s (2007a) call for better theories – also builds a theoretical basis for further development.

The structure of the paper is as follows: the first section gives a short overview of different micro-foundations in important theories of policy analysis. The second section then traces in detail the influence of bounded rationality on the MSF, in order to answer the two research questions. The analysis will be based on five categories: the theoretical point of departure briefly identifies whether the concept of bounded rationality and the MSF theorise on the micro- or macro-level. It is self-evident that the conception of the individual as well as handling of rationality are crucial for understanding the micro-foundation of the two approaches. The connection between the individual and the organisation is important because the main notion of the concept of bounded rationality, as already stated, is that the conception of the individual has an effect on the organisation’s structures and processes. Thus, to assess the influence of the concept of bounded rationality within the MSF, it is necessary to analyse if there is a similar connection between the individual and the organisation in the MSF. Finally, decision-making will be

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2. By doing this, I will primarily refer to the work of Nikolaos Zahariadis, who has extensively worked with the multiple-streams framework (Zahariadis and Allen 1995; Zahariadis 1998; Zahariadis 2008; Ackrill et al. 2013) and elaborated the initial concept as developed by John W. Kingdon. However, it is important to note that Kingdon’s and Zahariadis’ conceptualisation of the multiple-streams framework differ in some important aspects, for example, regarding certain concepts like the policy-entrepreneur or the politics stream, and also in the scope of the approach.
analysed, because this is where the other principles actually come into operation. The final section summarises the central implications of the analysis and also contains some reflections on the implications of these findings for the MSF.

**Discussing the micro-foundation in theories of political science – a short overview of relevant approaches**

The most common approach for addressing the question how actors make decisions is still the concept of the ‘economic man’ (*homo oeconomicus*), which has been developed in the field of economic theory. He possesses preferences concerning possible alternatives, orders these preferences according to their respective benefits, and chooses the option that enables him best to achieve his goals (Dehling and Schubert 2011: 31). Although the concept of economic man is very popular in political science, especially in the field of public choice (Howlett and Ramesh 2003: 22), there are also many approaches that deviate from the notion that individual action is primarily driven by self-interested utility-maximisers – without, however, necessarily completely denying it.

Herbert A. Simon was the first to reject the assumption of comprehensive rationality postulated by the model of economic man; he replaced it by a ‘bounded rationality’ model. His book *Administrative Behavior: A study of decision-making processes in administrative organizations*, first published in 1945, has become a milestone in a multiplicity of disciplines and was awarded the Nobel Prize in Economics in 1978 (Sherwood 1990: 252). Simon’s main assumption – which will be explained in more detail in the next section – is that human rationality is bounded but that these boundaries depend on the individual’s administrative environment. Against this background, ‘the organization … takes from the individual some of his decisional autonomy, and substitutes for it an organization decision-making process’ (Simon 1976: 8). Individual goals, then, become administrative goals, resulting in an outcome that is considered to be more rational. Thus, the concept of bounded rationality does not at all neglect rational action (Rüb 2009: 358) but expounds the problem of achieving it.

*Administrative Behavior* can be seen as the ‘first bold step’ (Jones 2003: 396) in the evolution of the concept of bounded rationality. In the meantime, the concept has become both popular and unspecific, where defining central assumptions turns out to be difficult (Campitelli and Gobet 2010). While the influence of the concept of bounded rationality on many disciplines (including, for example, sociology, economics and psychology) is beyond controversy, political science is often said to neglect the concept’s assumptions (Bendor 2003; Jones 2003). This is particularly surprising if one considers that the concept, at least implicitly, underlies many established approaches in policy analysis (Schlager 2007; Pump 2011).

Another influential approach that emerged in contrast to the rational model and which sheds light on a specific form of micro-foundation was developed by Charles Lindblom. His article ‘The science of muddling through’ (Lindblom 1959) provided the basis for the so-called ‘incremental model’. Although sharing Simon’s
opinion on (individual) constraints on comprehensive rationality, Lindblom was sceptical of the likelihood of improving rational decision-making (Parsons 1995: 284). In the incremental model, decision-making is seen as a political process characterised by bargaining and compromise among self-interested decision-makers .... In this model, the decisions eventually made represent what is politically feasible rather than desirable, and what is possible rather than ‘maximal’ (Howlett and Ramesh 2003: 170).

Accordingly, ‘The science of muddling through’ indicated that decision-making proceeded in rather small steps away from the status quo, due to the high costs of radical change and to bureaucratic hurdles (Howlett and Ramesh 2003: 171). When developing the MSF, Kingdon recognises the importance of the incremental model but claims that it only explains a certain part of the policy process, that is, the development of alternatives (Kingdon 2003[1984]: 83). When it comes to policy-change, however, non-incremental change takes place. That is why the incremental model will not be analysed in the present article.

In recent years, ‘prospect theory’ has been increasingly used to explain political decision-making (McDermott 2004; Vis 2011). It was initially developed by Kahneman and Tversky (1979) and analyses individual behaviour under risk. In contrast to rational-choice theory, individual action does not depend on final states but on whether individuals are facing gains or losses. Losses are felt more than gains; this means that people are inclined to accept risks when facing losses and to avoid risks when facing gains (Vis 2011). However, as the MSF evolved in a completely different context and does not analyse individual behaviour based on a certain reference point, the influence of prospect theory will not be analysed here.

While these approaches do not completely abandon the notion of rationality, but rather modify it in order to be able to build on more realistic assumptions, the ‘garbage-can’ model of organisational choice (Cohen, March and Olsen 1972) was the first model that did not place rationality (or partial departures from rationality), but rather ambiguity at the centre of analysis. The model focuses on organisations as ‘organized anarchies’ (Cohen, March and Olsen 1972: 1). They are characterised by ‘problematic preferences’, ‘unclear technology’ and ‘fluid participation’ (Cohen, March and Olsen 1972: 1), which is the reason why decision-making is no longer considered to be a rational process. Rather, the connection between problem and solution is interrupted so that decisions are made randomly and unpredictably (Rüb 2009: 350).

Although the garbage-can model has been an important and influential innovation in organisation theory (Bendor et al. 2001: 169), it has, among other things, been criticised for its high level of abstraction (Muccarioni 1992: 463) and for being ‘cloud-like’ (Mucciaroni 1992: 482). Despite the criticism, however, the model has been regarded as an important ‘starting point’ (Mucciaroni 1992: 482) for further development of agenda-setting approaches. What is more, it is often said that the MSF represents a more elaborate version of the garbage-can model (Bendor et al. 2001: 186). Also, scholars of the MSF stress the central role that the
model plays for the approach (Kingdon 2003[1984]: 86; Rüb 2009: 350; Zahariadis 2007: 66). However, as the garbage-can model does not have a micro-foundation at all (Bendor et al. 2001: 172), it will also be excluded from the analysis.3

The concept of bounded rationality

Theoretical point of departure and conception of the individual

As the concept of bounded rationality theorises at the micro-level, the ‘administrative man’ is crucial to the whole concept. Starting his explanation, Simon states that ‘the social sciences suffer from acute schizophrenia in their treatment of rationality’ (Simon 1976: xxvi): while the economists think of the individual as acting perfectly rationally (economic man), social psychology conceives of the individual as being affect-controlled. In contrast, Simon settles his administrative man between rational and non-rational behaviour:

To anyone who has observed administrative organizations or has concerned himself with their theory, it seems obvious enough that human behavior in organizations is, if not wholly rational, at least in good part intendedly so (Simon 1976: xxviii) [italicisation in original].

This assumption has two implications (Simon 1976: xxix). First, the administrative man does not seek, as economists state, the best solution for a problem: rather, he looks for solutions that are good enough – in Simon’s words: ‘satisficing’ – because his limited cognitive skills do not allow him to find an optimal solution. So every decision automatically becomes a compromise. Second, the administrative man has a very simplified picture of reality, insofar as he considers most of the factors in the world irrelevant to his personal situation. On the one hand, this enables him to make his decisions faster than the economic man, as he does not have to search for all alternatives and weight them against each other. On the other hand, based on his simplified world view, he can also make his decisions by using ‘relatively simple rules of thumb’ (Simon 1976: xxx) that do not challenge him intellectually.

Handling of rationality

The conception of the individual is strongly tied to the understanding of rationality. For Simon, the individual is confronted with many complications when he or she tries to act rationally: ‘Roughly speaking, rationality is concerned with the selection of preferred behaviour alternatives in terms of some system of values whereby the consequences of behaviour can be evaluated’ (Simon 1976: 75).

3. Considering that 1) the concept of bounded rationality is claimed to be the micro-foundation on which MSF is built and, 2) the MSF is claimed to be an elaboration of the garbage-can model, which does not have a micro-foundation, the question of the actual influence of the concept of bounded rationality within the MSF gains even more importance.
However, this definition does not make clear what happens with unconscious and unintended processes or with behaviour that is based on erroneous information (Simon 1976: 75). It is also hard to identify measurable benchmarks for rationality. Simon’s solution lies in a plural definition of rationality, indicating that a single rationality does not exist but that rationality always depends on the respective frame of reference. To give an example: ‘A decision is “organizationally” rational if it is oriented to the organization’s goals; it is “personally” rational if it is oriented to the individual’s goals’ (Simon 1976: 77).

**Connection between individual and organisation**

What is more, acting fully rationally is, for an individual, at the same time impossible and unnecessary, as people act nearly always within organisations (Simon 1976: ix). These organisations enable individuals to come close to what Simon calls objective rationality, indicating that a decision is ‘in fact … the correct behaviour for maximizing given values in a given situation’ (Simon 1976: 76). Within this context, for Simon, the term organisation refers to the complex pattern of communication and relationships in a group of human beings. This pattern provides to each member of the group much of the information and many of the assumptions, goals, and attitudes that enter into his decisions, and provides him also with a set of stable and comprehensible expectations as to what the other members of the group are doing and how they will react to what he says and does (Simon 1976: xvii).

At the centre of analysis lies the decision-behaviour of an organisational participant. However, he is influenced ‘within and by the organization’ (Simon 1976: 3). As individual and organisational goals overlap, the individual accepts the influence of the organisation (Simon 1976: 110).

Although the preceding arguments suggest that stability is assured within the organisation by certain routines, ‘the organization objective is by no means a static thing’ (Simon 1976: 114). Rather, organisational goals have to be permanently adapted. Within this process, the organisation and the organisational participants find themselves in a kind of symbiotic relationship, also called ‘the equilibrium of the organization’ (Simon 1976: 110).

Even though the organisation controls, to a certain degree, non-rationality, one should not overestimate rationality within the organisation: while choosing alternatives, the organisation is also confronted with boundaries. In addition to that, certain authorities can also refuse to make a decision. In this context, it is also important to specify the role of time (Simon 1976: 67).

**Decision-making**

The actual decision can be understood as a ‘composite decision’ (Simon 1976: 221), where the role of a single individual can be neglected as the development