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The Multiple Streams Framework: Foundations, Refinements, and Empirical Applications

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With rising ambiguity and turbulence in global affairs, the Multiple Streams Framework (MSF) is fast becoming a major tool with which to analyze the policy process. In their recent literature review, Jones et al. (2016) report that no fewer than 311 English-language peer-reviewed journal articles published between 2000 and 2013 have empirically applied the framework—with an increasing trend over time. Moreover, in these articles, the MSF is applied to a wide variety of issue areas, countries, and levels of government. In addition, the academic debate of MSF's theoretical refinement has recently broadened, signified by recent special issues of the *European Journal of Political Research* (issue 3/2015), the *Policy Studies Journal* (issue 1/2016), *Policy Sciences* (issue 1/2016), and the *Journal of Comparative Policy Analysis* (issue 3/2016) as well as an edited volume on the framework (Zohlnhöfer and Rüb 2016a).

One of the reasons for the high number of MSF applications could be that the conditions under which policies are made increasingly resemble the framework's assumptions—particularly in contexts for which the MSF originally had not been developed. Problems, from global warming and nuclear energy to migration and trade agreements, have become ever more contested, and even experts disagree fundamentally. Ambiguity has increasingly become (or has come to be realized as) a fact of political life. The same could be said about what the MSF conceptualizes as the political stream. Particularly in the parliamentary systems of Western Europe, things have become much less orderly, with more fragmented party systems, a decreasing relevance of party ideologies, and

voting behavior growing ever more volatile. Nonetheless, MSF's success comes at a price. As Jones et al. (2016) as well as Cairney and Jones (2016) show, many of the empirical applications remain superficial; theoretical innovations in the literature are often ignored, and key concepts more often than not lack clear specification.

In this chapter, we present the current state of MSF thinking, including many innovations that have been suggested in the recent surge of MSF literature. We aim to provide an up-to-date presentation and discussion of the framework from which scholars may begin MSF empirical applications or theoretical refinements. We begin by outlining the main assumptions of the MSF before presenting the five structural elements of the framework. Because the MSF was originally developed for the analysis of agenda-setting processes, we discuss how it is, or can be, applied to other stages of the policy process (decision making, implementation, etc.) next. We then turn to the question of how the framework is applied empirically in different contexts and how it has to be adapted accordingly. Finally, we deal with the (alleged and real) limitations of the framework and its future prospects.

ASSUMPTIONS

Kingdon (2011), who originally put forth the MSF, was inspired by Cohen, March, and Olsen's (1972) garbage can model of organizational choice. Consequently, the MSF's basic assumptions deal with ambiguity, time constraints, problematic preferences, unclear technology, fluid participation, and stream independence. These terms characterize what Cohen et al. have called organized anarchies, such as universities, national governments, and international organizations. In the following sections, we summarize the meaning of each of these basic assumptions.

Ambiguity

Instead of assuming that policymaking is an exercise in rational problem solving, the MSF negates the existence of a rational solution to a given problem. In contrast, the MSF assumes that because of ambiguity, a multitude of solutions to a given problem exists. *Ambiguity* refers to "a state of having many ways of thinking about the same circumstances or phenomena" (Feldman 1989, 5). In contrast with uncertainty, which may be reduced by collecting more information (Wilson 1989, 228), more information does not reduce ambiguity. For instance, more information can tell us how AIDS is spread, but it will not tell us whether AIDS is a health, educational, political, or moral issue. Therefore, we often do not know what the problem is. Because problem definition is vague and shifting, in principle, many solutions for the same circumstance are possible.

Time Constraints

Policymakers operate under significant time constraints and often do not have the luxury of taking their time to make a decision. Basically, time constraints arise because attending to or processing events and circumstances in political systems can occur in parallel, whereas individuals' ability to give attention to or to process information is serial. Owing to biological and cognitive limitations, individuals can attend to only one issue at a time. In contrast, organizations and governments can attend to many (though not infinite) issues simultaneously (March and Simon 1958; Jones 2001) thanks to division of labor. Policymakers, for instance, can actively consider only a relatively small number of issues, whereas the US government can simultaneously put out fires in California, conduct trade negotiations with the European Union (EU), investigate mail fraud, and mourn the loss of soldiers killed in action. Thus, because many issues vie for attention, policymakers sense an urgency to address them and to "strike while the iron is hot." Consequently, time constraints limit the range and number of alternatives to which attention is given.

Problematic Policy Preferences

Problematic policy preferences emerge in the presence of ambiguity and time constraints. How actors think about an issue depends on its overarching label (like health, education, politics, or morality) and on the information that has been taken into account. Consequently, actors' policy preferences are not fixed and exogenously given but emerge during (inter)action. To use economic terms, ambiguity and time constraints result in intransitive and incomplete policy preferences.

The assumption of problematic policy preferences only means, however, that policymakers do not have clear preferences with regard to specific policies. It does not imply that they have no preferences at all. With regard to the outcome of the next election or the question of who will be the next president, they take an unequivocal stand: policymakers want to win elections, and they want their candidate to get elected as the next president.

Unclear Technology

In organizational theory, *technology* refers to work processes that turn inputs into products. If members of an organized anarchy are aware of only their individual responsibilities and exhibit only rudimentary knowledge of how their job fits into the overall mission of the organization, we speak of unclear technology. In political systems, for instance, jurisdictional boundaries are unclear, and turf battles between different departments or agencies are common.

Members of the legislature often complain of unaccountable officials, who, in turn, frequently express their frustration with overburdening reporting rules and independent-minded public managers.

Fluid Participation

Unclear technology is complicated by fluid participation. *Fluid participation* means that the composition of decision-making bodies is subject to constant change—either because it varies with the concrete decision to be made or because turnover is high. Legislators come and go, and bureaucrats, especially high-level civil servants, often move from public service to private practice. In addition, the time and effort that participants are willing and able to devote to any one decision vary considerably.

Stream Independence

In line with the garbage can model, the MSF assumes that independent processes or streams flow through the political system. In a nutshell, the MSF assumes that political problems, policy solutions, and politics—referred to as problem stream, policy stream, and political stream—develop mostly independently of each other. Problems, most obviously in the case of unpredictable problems like those caused by natural disasters, occur regardless of political developments or available policy solutions. Because consensus building in the political stream and in the policy stream takes different forms, these streams also have their own dynamic (Kingdon 2011). In the political stream, the mode of interaction is bargaining; in the policy stream, it is persuasion. More precisely, actors in the policy stream aim to gain acceptance for a policy solution, whereas participants in the political stream build on lobbying and group mobilization.

STRUCTURAL ELEMENTS

The MSF's starting point is the notion of stream independence. Nonetheless, if an issue is to gain agenda prominence, and is ultimately to be decided on, these independent streams need to come together at some point. The opportunity to bring these streams together arises if a "policy window" (sometimes called "window of opportunity") opens. Moreover, because there is no natural or inevitable connection between a problem and a solution, according to MSF thinking, the two often have to be coupled together by a policy entrepreneur and presented to receptive policymakers. We discuss the five structural elements of the MSF in turn—the three streams, the policy or, as we will call it, agenda window, and the policy entrepreneur.

Problem Stream

Policymakers will almost always argue that a policy responds to some problem. But what is a problem? According to the MSF, problems are conditions that deviate from policymakers' or citizens' ideal states and that "are seen as public in the sense that government action is needed to resolve them" (Béland and Howlett 2016, 222). Thus, problems contain a "perceptual, interpretive element" (Kingdon 2011, 110) because people's ideals and reality vary significantly. Moreover, we might come to see a condition that we previously perceived as acceptable as a problem once we learn that other countries are doing better in this regard. Or we start seeing a condition in a different context that turns the condition into a problem. Take the level of unemployment benefits as an example. From a social policy perspective, the relevant problem could be whether the benefits are high enough to provide an acceptable standard of living for recipients. In contrast, from an economic policy perspective, the problem could be that benefits are so high that recipients do not have incentives to look for a new job. As we switch from one perspective to the other, an acceptable condition (benefits are high enough for a decent standard of living) can become a problem (benefits are so high that recipients have no incentives to look for a job).

Nonetheless, many conditions deviate from citizens' or policymakers' ideal states, and not all of them receive political attention. Rather, indicators, focusing events, and feedback bring specific conditions to policymakers' attention. Numerous *indicators* are in principle relevant for policymakers or the public, for instance, unemployment figures, budget balances, and crime statistics. Some of these indicators are published regularly, and in other cases they are collected for a specific occasion. It is important to keep in mind, however, that all of these indicators only inform about conditions until an actor defines them as problems. It will be easier to do so if an indicator changes for the worse because, if people did not worry about a condition previously and the condition has not changed, it is very difficult to frame the condition as a problem now.

According to Tom Birkland's (1997, 22) definition, *focusing events* are sudden and relatively rare, are at least potentially harmful, and are known to policymakers and the public at the same time. Although it is far from certain whether events like natural disasters (earthquakes, hurricanes), severe technical accidents (airplane crashes, nuclear accidents), and particularly serious forms of violent crimes (terrorist attacks, school shootings) will lead to agenda change, they at least increase the probability of agenda change. Moreover, there are different forms of focusing events. Whereas some are so grave that they "simply bowl over everything standing in the way of prominence on the agenda" (Kingdon 2011, 96), others are more subtle, including powerful symbols or personal experiences of policymakers (for an overview, see Birkland

and Warnement 2016). Finally, *feedback* about existing programs may direct attention to specific conditions. If it becomes known to policymakers or the public that a program does not attain its goals, that costs are skyrocketing, or that unwanted side effects occurred, this might also be framed as a problem.

Nevertheless, policymakers are made aware of numerous problems on a daily basis, and it is impossible to pay attention to all of them because policymakers can attend to only a limited number of issues at any given time (Kingdon 2011, 184–186; Herweg, Huß, and Zohlnhöfer 2015). Thus, whether a problem receives policymakers' attention also depends upon which other problems are currently discussed. In the aftermath of terrorist attacks or in a deep recession, other problems have a difficult time receiving attention. More generally, the more politically relevant a condition becomes, the more likely it is that it will be dealt with. However, what exactly *political relevance* means is not entirely clear. Herweg, Huß, and Zohlnhöfer (2015) suggest that political relevance is strongly related to the electoral relevance of a condition: if a problem jeopardizes a policymaker's reelection, it will probably be defined as a relevant problem the policymaker needs to attend to.

Thus, MSF does not see problems (and their severity) as objective facts but rather as social constructs. That implies that agency becomes relevant in the problem stream because someone then has to frame a problem in a specific way if it is to receive policymakers' attention. Moreover, the framing of a problem is of utter importance because how a problem is defined substantially affects the solutions that can be coupled to it.

Recent research suggests different ways of introducing agency into the problem stream (cf. Mukherjee and Howlett 2015; Knaggård 2015, 2016). Knaggård (2015, 452), for example, argues that problem brokers are actors who "frame conditions as public problems and work to make policymakers accept these frames. Problem brokers thus define conditions as problems." Problem brokers can also be the policy entrepreneurs, but not necessarily. The key analytical difference between the two roles is that the problem broker only argues that something must be done about a specific condition, whereas the policy entrepreneur suggests solutions to the problem. For empirical applications, it is necessary to define when the streams are ready for coupling. The problem stream should not pose difficulties in this regard because policy entrepreneurs are always able to frame a condition as a problem that can be coupled with their favored policy proposal.

Policy Stream

In the policy stream, policy alternatives are generated in policy communities. A policy community "is mainly a loose connection of civil servants, interest-groups, academics, researchers and consultants (the so-called hidden participants), who engage in working out alternatives to the policy problems of a specific policy field" (Herweg 2016a, 132). The overwhelming majority of

members of a policy community are policy experts who advocate and discuss policy ideas. Thus, various ideas float around in what Kingdon (2011, 116) called a policy "primeval soup." During the process known as "softening up," members of the policy community discuss, modify, and recombine these ideas. This process is very much characterized by arguing. Although the number of ideas floating around in the primeval soup originally is quite large, the process of softening up filters out many of them until a limited number of viable policy alternatives emerges, each backed by a substantial part of the policy community. Only these alternatives will receive serious consideration.

This process is heavily influenced by the structure of the policy community. Where policymakers search for solutions and how ideas germinate in the primeval soup depend on the degree of integration of the policy community—that is, the linkages among its members. The gestation period of ideas in the policy stream varies from rapid to gradual. The content ranges from totally new to a minor extension of the old. The typology that emerges from these criteria yields four categories: quantum (rapid propulsion of new ideas); emergent (gradual gestation of new ideas); convergent (rapid gestation of old ideas); and gradualist (slow gestation of marginal extensions of existing policies) (Durant and Diehl, 1989). Integration encourages one type of evolution rather than another. Less integrated policy communities, those that are larger in size and interact in a competitive mode, are more likely to facilitate a quantum to gradualist evolution of ideas. More integrated, that is, smaller and consensual policy communities, are likely to follow an emergent to convergent pattern. This is not to say that other combinations are not possible but rather that integration renders such evolutionary trajectories more likely. The hypothesis helps explain the ease with which ideas such as privatization have been gaining prominence among specialists in the United Kingdom but have had relative difficulty doing the same in Germany (Zahariadis 2003).

External influences on the policy stream should also be considered. For example, Lovell (2016) finds that MSF must be supplemented with theoretical insights from policy mobility as ideas move across national boundaries. This point makes policy communities more porous than previously conceived because ideas may not take time to soften up domestically because they acquire "legitimacy" through success in other countries. Whereas originally Zahariadis (1995) conceptualized this phenomenon as part of externally imposed spillover across sectors, in technical policy sectors where innovation is highly prized Lovell (2016) finds external nonstate actors may actually be thought of as regular members of an international network in a more broadly conceived domestic policy community.

Regardless of the structure of the policy community, it is by no means random which proposals survive in the primeval soup. To the extent that proposals fulfill certain criteria, they are more likely to become viable policy alternatives. Kingdon (2011, 131–139) discussed various "criteria for survival": technical

feasibility, value acceptability, public acquiescence, and financial viability. Thus, when policy experts doubt an idea can be implemented smoothly, when a proposal contradicts the values of many members of the policy community, when it is perceived as unlikely that an idea can find a majority in the political stream, or when costs are high, it is unlikely that the idea will survive the softening-up process. More recently, other criteria of survival have been suggested (Zohlnhöfer and Huß 2016). In EU member states, for example, ideas that do not conform to EU law have a smaller chance of surviving in the primeval soup. Similarly, if an idea's conformity with constitutional regulations is doubted, the likelihood that this idea is pursued further decreases, particularly in countries with strong judicial review. Finally, path dependence can be incorporated in the selection criteria. If an idea strongly deviates from a previous policy path that is characterized by increasing returns, its chances of becoming a viable alternative are very low—consider the idea to turn a pay-as-you-go pension system into a funded system. Although path dependence could be subsumed under the criterion of technical feasibility, it is important to remind scholars that path dependence can be modeled within the MSF (see also Spohr 2016).

The policy stream can be defined as ready for coupling when at least one viable policy alternative exists that meets the criteria of survival. If no such alternative is available, the MSF leads us to expect that coupling is unlikely.

Political Stream

The policy stream is located at the level of the policy subsystem, and the political stream is located at the level of the political system. Whereas arguing is the dominant mode of interaction in the policy stream, bargaining and powering dominate in the political, as majorities for proposals are sought here. Kingdon identified three core elements in the political stream: the national mood, interest groups, and government.

The national mood is certainly the most empirically elusive of these elements. This elusiveness has led some researchers to dismiss it as an analytical category (Zahariadis 1995). The *national mood* refers to the notion that a fairly large number of individuals in a given country tend to think along common lines and that the mood swings from time to time. Kingdon suggested that government officials sense changes in this mood and act to promote certain items on the agenda according to the national mood. Thus, the national mood is characterized by a strong element of perception on the part of policymakers. Accordingly, Kingdon advises not to confound the national mood with the results of opinion polls because the latter lack the perceptual element. Nonetheless, given the immense professionalization of politics, which includes a proliferation of opinion polls many of which are actually commissioned by policymakers themselves, it seems plausible to follow more recent research (e.g.,

Zahariadis 2015) and rely on opinion poll results for the operationalization of the national mood—preferably in addition to more direct sources of policy-makers' perceptions.

Interest group campaigns are the second element of the political stream. Quite evidently, the more interest groups are opposed to an idea and the more powerful these interest groups are, the less likely it is that that idea will make it on the agenda. It is important to keep in mind, however, that there is more to the activities of interest groups than just campaigns—and that the MSF is able to accommodate this fact. As discussed earlier, interest group representatives can be members of the policy community and thus propose ideas and participate in the softening-up process. But these activities take place in the policy stream and need to be kept distinct from the campaigns interest groups might launch against proposals.

Governments and legislatures, in particular, changes in their composition, constitute the third element of the political stream. For example, some ministers or members of parliament might be more open-minded with regard to some policy proposals, or certain ideas match better with the ideology of one party than with that of another one, and therefore turnover may make a difference for which items enter the agenda. But this element of the political stream is not entirely about elected officials and political parties. Bureaucratic turf battles and important administrators are also highly relevant here.

When is the political stream ready for coupling? For two reasons it is slightly more difficult to answer this question regarding the political stream than for the problem and policy streams—at least as far as agenda setting is concerned. First, the three elements of the political stream do not need to point in the same direction for a given policy proposal. For example, although the government might be receptive to a proposal and policymakers might sense a supportive national mood, interest groups could at the same time be rather negative. How does this constellation affect the possibility of agenda change? Though it is clear from Kingdon's work and other applications that it is not necessary that all elements of the political stream are favorable to a proposal, the MSF literature has not been very explicit about the conditions under which individual elements of the political stream take precedence over others. Building on the work of Zahariadis (1995, 2003), who suggested collapsing all three elements of the political stream (government, national mood, and interest group campaigns) into the variable "party politics," Herweg, Huß, and Zohlnhöfer (2015) argue that government and legislatures are the most relevant actors in the political stream—because ultimately these are the actors who have to adopt a policy change. At the same time, their position may well be influenced, but not determined, by the national mood and interest group campaigns. Thus, it is possible under certain conditions that a government is willing to ignore interest group campaigns and even a reluctant national mood.

Second, it is not yet necessary at the agenda-setting stage to build political majorities that may eventually be needed to adopt legislation. Indeed, in many cases legislative majorities are only gathered after an issue is on the agenda. Nonetheless, the political stream is certainly also important during agenda setting. The minimum that is needed to make the political stream ready for coupling is for a key policymaker, such as the relevant minister or an influential member of legislature, to actively support the idea in question and be willing to stitch together a majority for it (Zohlnhöfer 2016). Following Roberts and King (1991, 152), Herweg Huß, and Zohlnhöfer (2015, 446) have suggested calling these actors "political entrepreneurs." In contrast to policy entrepreneurs, political entrepreneurs are neither necessarily members of the policy community nor do they have to be involved in the development of the policy proposal at an early stage. Rather, once a policy entrepreneur has convinced a political entrepreneur of the project, the political entrepreneur, because of the individual's formal leadership position, can further the idea from inside the formal governmental system and work for its adoption.

Agenda (Policy) Window

Even when all three streams are ready for coupling agenda change may not come about automatically. Rather, a coupling of the three streams, and eventually agenda change, becomes much more likely at specific points in time, which Kingdon has called policy windows. A *policy window* is defined as a fleeting "opportunity for advocates of proposals to push their pet solutions, or to push attention to their special problems" (Kingdon 2011, 165). Although *policy window* is a generic term widely used in the literature, it has been proposed recently to refine this term to capture important nuances. To distinguish opportunities to get an issue on the agenda from opportunities to get policies adopted, Herweg, Huß, and Zohlnhöfer (2015) have suggested calling the former "agenda window" and the latter "decision window." We follow this suggestion but keep the term *policy window* for more generic use.

Agenda windows are rare (at least with regard to a particular policy proposal) and ephemeral; they can be predictable (elections, budgets) or unpredictable (disasters). They can open in two of the three streams: the problem or the political stream. A window in the political stream opens if the partisan composition of government changes or new members enter legislature. The incoming actors are interested in new ideas and are therefore open to novel policy proposals. Similarly, a significant shift in the national mood can open an agenda window. In contrast, an agenda window opens in the problem stream when indicators deteriorate dramatically—for example, unemployment or the budget deficit skyrockets in a very brief period. Alternatively, focusing events like natural disasters or terrorist attacks can open an agenda window.

Depending on the stream in which the window opens, coupling differs. In the case of a window that opens in the political stream, we should expect "doctrinal coupling" (Zahariadis 2003, 72) or "problem-focused advocacy" (Boscarino 2009, 429). The main task is finding a problem to a given solution. Take a change of government, for example. The new government is likely to argue that it was elected to adopt new policies and will be eager to prove that it delivers. Thus, although the solution is already in the manifesto, the government looks for problems that these solutions can solve. Because many conditions could be framed as problems, it should not be difficult to find a problem that suits the solution.

Coupling in response to windows opening in the problem stream is called "consequential coupling" (Zahariadis 2003, 72) or "problem surfing" (Boscarino 2009, 429). It differs from coupling in windows that open in the political stream in at least two ways. First, the duration during which the window is open is shorter in the former than in the latter case because response to a problem must be more or less immediate (Keeler 1993). Second, in the case of a window that opens in the problem stream, a solution needs to be found that fits the problem that is on the agenda. Remember, however, that the window is open only for a limited period of time, which in most instances is insufficient to work out a solution after the problem has risen to prominence. Rather, even in the case of consequential coupling the problem will be coupled to a preexisting solution that is somehow linked to the problem. Thus, in both cases, under doctrinal and consequential coupling, the relationship between problem and solution is not particularly tight.

Ackrill and Kay (2011) introduce a third coupling mechanism: commissioning. In contrast to doctrinal and consequential coupling, where policy entrepreneurs sell their pet proposals to policymakers, commissioning captures policymakers' active reaction to the opening of a policy window. The opening of a policy window signals to policymakers that an issue needs to be addressed. Instead of waiting for a policy entrepreneur to sell a solution, policymakers actively select the solution they deem appropriate (and thus the policy entrepreneur who advocates it) as a reaction to changes in the problem or political streams.

The main analytical problem with the concept of the agenda window in empirical applications is that it is usually only identified ex post. Certainly, some agenda windows are predictable, such as elections or budget negotiations. When the three streams are ready for coupling and issue competition is low, the likelihood is high that these kinds of windows can be used for coupling. Many other windows are less predictable, however—think of accidents, high school shootings, and a swing in the national mood. The main problem is not only that these events are very difficult (if not impossible) to predict. Rather, the issue is that it is often hard to decide *ex ante* whether these events constitute

an agenda window for a given policy at all (cf. Béland 2016, 234). Certainly, agenda windows are to an extent construed by problem brokers and are a function of how crowded the agenda is. Nonetheless, according to Herweg, Huß, and Zohlnhöfer (2015), the chances that an event can be utilized as an agenda window increase as the electoral relevance of an issue increases. Take labor market policy under the social democratic chancellor Schröder in Germany as an example (Zohlnhöfer 2016). Although the unemployment rate had more or less stagnated at a high level for almost the entire term of office, the government had failed to do anything about it for three and a half years because it believed that unemployment figures would go down as a result of demographic change. When this hope evaporated and high unemployment rates endangered the government's reelection, even a minor scandal regarding placement statistics by the Federal Labor Office sufficed to initiate the largest labor market reform in living memory. As the government's struggle for reelection critically depended on employment policy, Schröder used the scandal to prove his willingness and ability to introduce a major reform. Thus, less dramatic events can open agenda windows in electorally salient issue areas. Conversely, severe focusing events are indispensable conditions that may open windows in the problem stream in electorally less salient fields.

Policy Entrepreneur

Policy entrepreneurs, that is, "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" (Kingdon 2011, 179), are key actors in the MSF. They can be individuals or corporate actors and are not defined by a specific formal position. Essentially, any policy-relevant actor—policymaker, bureaucrat, academic, journalist, representative of an interest group, or member of parliament—can become a policy entrepreneur. Policy entrepreneurs push their proposals ("pet projects," in MSF parlance) in the policy stream and adapt them in order to find broad support among the members of the policy community and make them viable alternatives.

Once that has been achieved, they attempt to couple their pet project with the other two streams. When agenda windows open, policy entrepreneurs must immediately seize the opportunity to initiate action. Otherwise, the opportunity is lost and the policy entrepreneurs must wait for the next one to come along. Policy entrepreneurs are thus more than mere advocates of particular solutions; they are also manipulators of problematic preferences and unclear technology (Mintrom and Norman 2009). Entrepreneurs must be not only persistent but also skilled at coupling. They must be able to attach problems to their solutions and find politicians who are receptive to their ideas, that is,

political entrepreneurs. An issue's chances of gaining agenda status dramatically increase when all three streams—problems, policies, and politics—are coupled in a single package.

Not all entrepreneurs are successful at all times. More successful entrepreneurs are those who have greater access to policymakers. For example, the Adam Smith Institute had greater access to the government during Margaret Thatcher's tenure in power in Britain because its ideologies matched more closely than those of other groups. Hence, options put forth by individuals associated with the institute had a greater receptivity among policymakers. Entrepreneurs with more resources, that is, the ability to spend more time, money, and energy, to push their proposals have greater rates of success. Entrepreneurs have a variety of instruments at their disposal, including framing of a problem, affect priming, "salami tactics," and the use of symbols (Zahariadis 2003, 14; 2015).

The MSF argues that agenda setting is not primarily an exercise in rational problem solving. Rather, sometimes a problem comes up that is coupled with a preexisting policy that somewhat "fits" it, whereas at other times a political opportunity arises—with the advent of a new government, for instance—to get a policy on the agenda and that policy then needs to be coupled to some problem. Nonetheless, this does not exclude the possibility of formulating hypotheses for each of the MSF's key elements as well as for the framework as a whole. We present a number of testable, probabilistic hypotheses in Table 1.1.

APPLICATIONS AND ADAPTATIONS TO STAGES OF THE POLICY CYCLE

Originally, Kingdon developed his framework to explain agenda setting in health, transport, and fiscal policy at the federal level of the United States. The subsequent literature, however, has also applied the MSF to different policy domains, further stages of the policy cycle, and different political systems. The policy domains covered range from gender equality policy (Béland 2009) to foreign policy (Travis and Zahariadis 2002). In their literature review, Jones et al. (2016) report that twenty-two policy domains were explored using the MSF, with health, environment, governance, education, and welfare covering almost 80 percent of the MSF applications analyzed (see also Rawat and Morris 2016, 614).

Although applying the framework in various policy domains does not automatically require adaptations, such a need arises when the MSF is applied to different policy stages and political systems. The MSF has mostly been applied to the policy stages of agenda setting and decision making. But it has also been applied to policy implementation and policy termination, though only rarely (e.g., Geva-May 2004). We discuss below some of the adaptations that have been suggested in the literature for decision making and implementation.

TABLE 1.1 MSF Hypotheses on Agenda Setting

HYPOTHESIS FOR THE FRAMEWORK AS A WHOLE	
Agenda change becomes more likely if (a) a policy window opens, (b) the streams are ready for coupling, and (c) a policy entrepreneur promotes the agenda change.	
HYPOTHESES FOR THE FRAMEWORK'S KEY ELEMENTS	
Problem stream	• A problem broker is likely to be more successful framing a condition as a problem the more an indicator changes to the negative, the more harmful a focusing event is, and the more definitely a government program does not work as expected.
Political stream	• Policy proposals that fit the general ideology of a government or the majority in a legislature have a better chance of gaining agenda status.
Policy stream	• If a policy proposal does not fulfill the selection criteria, the likelihood of gaining agenda status, and thus being coupled, decreases significantly. • As the integration of policy communities decreases, it becomes more likely that entirely new ideas can become viable policy alternatives.
Policy window	• The policy window opens in the problem stream as a result of at least one of the following changes: change of indicators, focusing events, or feedback. • The more a condition puts a policymaker's reelection at risk, the more likely it is to open a policy window in the problem stream. • The policy window opens in the political stream as a result of at least one of the following changes: changes in legislature, election of a new government, interest group campaigns, or a change in the national mood.
Policy entrepreneur	• Policy entrepreneurs are more likely to couple the streams successfully during an open policy window if (a) they have more access to core policymakers and (b) they are more persistent.

Decision Making

To understand how the MSF needs to be adapted to apply to decision making, it is necessary to explicate the differences between agenda setting and decision making (see, for example, Knill and Tosun 2012). During agenda setting, a large number of actors compete for attention for various proposals, whereas decision making is about obtaining a majority for a specific proposal. Thus, the number of actors tends to decrease during decision making. At the same time, the relevance of the institutional setting increases as we move from agenda setting

to decision making (Baumgartner et al. 2009). This implies that the decision-making process is more structured and orderly and that institutions need to be taken into account much more thoroughly. Because the original formulation of MSF essentially failed to integrate institutions (see Zohlnhöfer, Herweg, and Huß 2016 for an overview), this fact alone makes adaptation of the framework necessary.

Several authors have suggested how the MSF can be adapted to explain decision making (see Zahariadis 1992, 2003 as classics, and Howlett, McConnell, and Perl 2015 and Herweg, Huß, and Zohlnhöfer 2015 as elaborate recent attempts). We discuss Herweg, Huß, and Zohlnhöfer's (2015) concept because it leaves the operating structure of the MSF untouched and still explains decision making.

Herweg, Huß, and Zohlnhöfer's (2015) main idea is to distinguish two windows, and consequently two coupling processes (see Figure 1.1): one for agenda setting, which they label agenda window, with its associated agenda coupling (see above); and one for decision making, called decision window, with the related decision coupling. We discussed agenda windows and agenda coupling above, so we concentrate here on decision windows and decision coupling. According to Herweg, Huß, and Zohlnhöfer (2015), a decision window opens once agenda coupling succeeds. The result of successful decision coupling is the adoption of a bill.

The main question during decision coupling is how to build the necessary majorities to adopt a proposal that has already been coupled to a specific problem during agenda setting. Political entrepreneurs, that is, those who hold an

FIGURE 1.1 A Modified MSF
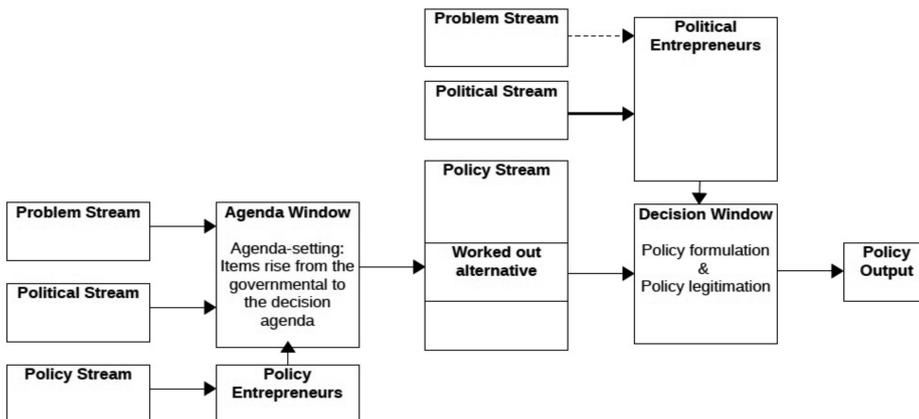
elected leadership position and who actively support a proposal (see above), are the key actors in this process. They try to obtain majority support for their projects and bargain over the specific details of the policy.

On the one hand, it is clear that the political stream dominates during decision coupling. As we will see, that is not to say that the problem and policy streams are irrelevant at this stage, but their importance is reduced compared to the agenda-setting stage. On the other hand, it should be noted that institutional settings circumscribe whose support is needed. Therefore, there exist differences across countries and sometimes across issue areas and over time. The chances of a political entrepreneur getting a pet proposal adopted once it is on the agenda increase if the entrepreneur is a cabinet member in a Westminster kind of political system. Thus, in systems with few or no veto actors, decision coupling will be smoother in most instances because the adoption of a policy that is supported by the responsible minister is almost certain. The analytical value-added of the concept of decision coupling becomes clearer in situations in which the political entrepreneur does not command a majority for policy adoption—think of divided government, coalition governments, minority governments, or cases in which supermajorities are required. In all these cases, the political entrepreneur must organize the necessary majority during decision coupling; in these cases the concept substantially increases the framework's leverage.

What can a political entrepreneur do to win over enough support to secure a majority for adoption of a proposal? The literature (Herweg, Huß, and Zohlnhöfer 2015; Zohlnhöfer, Herweg, and Huß 2016) suggests three instruments: package deals, concessions, and manipulation.

The basic idea of package deals in an MSF context is that more than one policy proposal can be coupled to any given problem. Therefore, political entrepreneurs may win additional support for their pet proposals if they combine a proposal with another proposal from the policy stream, thus winning the support of those policymakers who prefer the other option. For example, a political entrepreneur who favors a specific spending program in response to a recession could include a tax cut in the proposal to broaden support.

Package deals might not always be feasible, however. To use the above example, budgetary restrictions might prevent the simultaneous adoption of spending programs and tax cuts. Therefore, it might be necessary to make some concessions, that is, to adopt the proposal in a diluted version. Less far-reaching changes are generally easier to adopt for a variety of reasons (see Zohlnhöfer 2009) that may also help political entrepreneurs obtain majorities for their proposals. Strategies for more far-reaching change could be introduced later (known as "salami tactics"; cf. Zahariadis 2003, 14).

Finally, political entrepreneurs could try to manipulate policymakers. There are numerous ways to do so. For example, political entrepreneurs can resort to the problem stream and present the problem that the proposal under discussion is supposed to deal with as growing ever more severe. This way, they can

pressure policymakers, particularly if they succeed in presenting the problem as a threat to policymakers' reelection. Another way of manipulating is to centralize policymaking processes. Indeed, case studies (Zohlnhöfer 2016; Herweg 2017) have shown that sometimes policymakers circumvent other relevant actors in the decision-making process. For example, German chancellor Gerhard Schröder threatened to resign should his reluctant party not follow his course in labor market policy. The European Commission likewise threatened to take certain member states to court should they not support its liberalization plans. In both (and many other) cases, this allowed political entrepreneurs to get their proposals adopted despite the resistance of veto actors.

The distinction between the two coupling processes thus makes it possible to analyze decision making from an MSF perspective. It allows formulating hypotheses on the likelihood of policy adoption as well as on how much a policy is altered during decision coupling (see Table 1.2). Moreover, by distinguishing agenda coupling and decision coupling we can integrate formal political institutions into the framework. In doing so, MSF sheds a novel light on the well-known effect of political institutions on public policies by bringing back into the debate political entrepreneurs and the possibility that veto actors can be circumvented and majorities built.

Implementation

Clearly, the notion of ambiguity has made its way to implementation studies (e.g., Baier, March, and Sætren 1986). But MSF has not been widely used in

TABLE 1.2 MSF Hypotheses on Decision Making

Policy adoption	• Policy adoption is more likely if the proposal is put forward by political entrepreneurs who hold an elected leadership position in government. • Policy adoption is more likely if the proposal is put forward by a government or majority party that is not constrained by other veto actors. • Policy adoption is more likely if different viable alternatives embraced by different actors can be combined in one package. • Policy adoption is more likely if the problem that the policy is supposed to solve is salient among the voters.
Size of change to the original proposal during decision making	• The policy adopted will likely differ significantly from the original proposal if actors other than the government have veto power (e.g., second chambers). • The more powerful the interest groups' campaign against the original proposal, the more different the adopted policy is likely to be.

implementation research largely because ambiguity raises the specter of purposeless laws and symbolic practices that can be very expensive and conflict prone (Zahariadis 2008b; Matland 1995). Nevertheless, the few implementation studies that have taken MSF seriously agree on the importance of policy entrepreneurs coupling three streams during open policy windows (Sætren 2016). Some (e.g., Zahariadis and Exadaktylos 2016) begin by conceptualizing a nested policy system (Howlett, McConnell, and Perl 2015) and proceed to explain how transitions among phases affect coupling strategies. Others (e.g., Ridde 2009; Boswell and Rodrigues 2016) focus primarily on changes within the stage of implementation. The implication in both cases is that coalitions that support policy during the policy formation phase may be different from the ones that implement it (Aberbach and Christensen 2014, 8). Nevertheless, all view decision outputs as constituting implementation windows (Ridde 2009).

Zahariadis and Exadaktylos (2016) estimate two phases (formation and implementation) with multiple rounds of deliberation. Each phase is marked by continuities with previous actions and by additions of new actors, potentially new resources, or both. They argue the process of reducing ambiguity inherent in many laws involves mechanisms organically linking actors, resources, and strategies in interactive ways. Focusing only on coupling strategies, they maintain that what leads to success in decision making increases the chances of failure in implementation. When policies adversely affect the status quo, successful entrepreneurial strategies of issue linkage and framing, side payments, and institutional rule manipulation are more likely to lead to implementation failure under conditions of crisis, centralized monopoly, and inconsistent political communication. In MSF terms, the mechanisms linking strategy to failure involve decoupling problems from solutions, undermining support in the political stream, and altering estimates of equity and efficiency in the policy stream. Take the example of Greek higher education (Zahariadis and Exadaktylos 2016). The authors argue that the activation of a new set of actors during implementation—university administration, professors, and students (and through them political parties)—likely undermined the successful entrepreneurial coupling strategies of issue linking and framing during policy implementation.

Boswell and Rodrigues (2016) focus on the department or ministry level, arguing that organizations rather than political parties are more important because implementation needs to take into account mainly those who execute policy. They also adapt the dynamics of the political and problem streams to include central commitment to the policy and solution fit to the organization's problem perception. Doing so enables them to construct a two-by-two matrix of likely implementation outcomes and track switches in modes of implementation in the same issue (climate change, defense, and asylum policy) over time.

Ridde (2009) moves in the adaptation direction as well. Although he still finds coupling to be the main ingredient of implementation success, he adds

some interesting twists to the MSF logic without adding new concepts. Applying MSF to health policy at the local level in Burkina Faso, he suggests two amendments to the framework. First, following Exworthy and Powell (2004), he differentiates between big and small windows. The former refers to policy windows opening at the federal/national level, and the latter at the local level. Ridde (2009, 948) maintains that the chances of implementation at the local level in a centralized system are higher when solutions are coupled to problems during open big windows, that is, when they originate at the center. Second, international organizations play a big role in two ways. In one way, when agenda setting and decision making are international in origin, international organizations play a critical role in implementation largely through the political stream. In the other way, the more countries rely on external funds for implementation, the greater will be the number of policy windows to facilitate implementation coupling of the streams.

INTERNATIONAL AND COMPARATIVE APPLICATIONS

The MSF has also been employed to explain policy processes in political systems that differ substantially from the original system in which the MSF was devised, namely, the political system of the United States. For instance, MSF has been applied to parliamentary systems, ranging from Australia (Beeson and Stone 2013; Tiernan and Burke 2002; Lovell 2016), Belgium (Vanhercke 2009), Canada (Blankenau 2001), Germany (Storch and Winkel 2013; Zohlnhöfer 2016) and Italy (Natali 2004) to India (Liu and Jayakar 2012; Sharma 2008). We also find a limited number of contributions applying MSF to policymaking processes in autocracies: for instance, Iran (Jafari et al. 2016) and China (Liu and Jayakar 2012; Zhou and Feng 2014; Zhu 2008). But the framework's applicability is not confined to politics at the level of the nation-state. Rather, MSF has proved to be applicable to subnational (Dudley 2013; Lieberman 2002; Liu et al. 2010; Oborn, Barrett, and Exworthy 2011; Ridde 2009; Robinson and Eller 2010) and, increasingly, to international (EU) levels (see Bache 2013; Cairney 2009; Copeland and James 2014; Saurugger and Terpan 2016).

Depending on how much the political system analyzed differs from the US presidential one, it is necessary to adapt the framework to different degrees. Parliamentary systems necessitate fewer adaptations, whereas policymaking in autocracies requires more encompassing modifications. The adaptations necessary to make the MSF applicable to EU policymaking is somewhere in between these extremes. Nonetheless, these adaptation requirements have scarcely been addressed explicitly and systematically. Focusing on the political systems that have gained most scientific attention in non-US MSF applications (i.e., parliamentary systems and the EU), we discuss some promising adaptations that have been suggested.

Parliamentary Systems

Compared to the US presidential system, parliamentary systems have been described as more "orderly" (Zahariadis 2003, 1), and thus less well suited for MSF analysis. In parliamentary democracies, governments depend on the confidence of the majority in parliament to a considerable degree. This implies that party discipline tends to play a much larger role in these systems compared with in the US one. Therefore, parties are the key political actors in most parliamentary systems although they do not figure very prominently in the original formulation of the MSF. Moreover, parties in many parliamentary systems used to be programmatically more coherent than their US counterparts.

Does the assumption that policymakers have unclear policy preferences hold for these actors? Although it cannot be denied that many parties in parliamentary (and many presidential) systems have some basic programmatic positions, these are less and less able to guide concrete policy choices (see Herweg, Huß, and Zohlnhöfer 2015). In other words, although parties might in principle be conservative, liberal, or socialist, it is often very difficult to derive preferences on specific policy proposals from these ideological positions. Therefore, the specific policy preferences of parties in parliamentary systems can be regarded as equally unclear as those of their US counterparts, particularly in recent years.

Nonetheless, the MSF must be adapted to the important role political parties play in parliamentary systems (cf. Zahariadis 2003). The literature on political parties suggests that parties pursue three goals (Strøm 1990): they want to win votes, get into office, and get their preferred policies adopted. Thus, political parties fill different roles at different times and should be included in more than one stream (Herweg, Huß, and Zohlnhöfer 2015; see also Novotný and Polášek 2016).

On the one hand, parties' policy experts are often members of the policy community. They participate in the softening-up process by proposing their ideas, criticizing proposals of other members, and recombining proposals (see the examples in Zohlnhöfer and Huß 2016). Party ideology could play some role here insofar as a party's policy experts will be more likely to support proposals that can be attached to the basic party ideology or that address already well-known core positions of that party (Herweg, Huß, and Zohlnhöfer 2015). Moreover, these policy experts can play an important role in bringing viable policy alternatives to the parties. On the other hand, the party leadership is active in the political stream, where it seeks to organize majorities for policy adoption. In the political stream, party discipline and coalitions, which are typical of many parliamentary systems, are particularly relevant (especially during decision coupling), because political entrepreneurs seeking to obtain majorities will not focus on individual policymakers but rather on party leaders in these systems. In cases in which the political entrepreneur is a member of the

governing party or coalition, this is certainly an advantage, while it tends to be a disadvantage for political entrepreneurs from opposition parties.

The fact that parties—and interest groups (Rozbicka and Spohr 2016)—are relevant in two streams does not contradict the assumption of independence of streams as long as the two roles are kept distinct analytically. Moreover, in the case of parties, the different roles are filled by different actors: policy experts in the policy stream and party leadership in the political stream.

European Union

EU policy processes are astonishingly well captured by the features of organized anarchies (Peters 1994; Richardson 2006; Natali 2004; Corbett 2005). Although this similarity qualifies the MSF for being a promising analytical framework to study EU policy processes (see Ackrill, Kay, and Zahariadis 2013), it was only in 2008 that Zahariadis addressed the question of which adaptation requirements arise if the MSF is applied to EU decision making. With regard to the policy areas or issues covered, MSF has since been applied widely (though to different degrees), ranging from economic policy (Borrás and Radaelli 2013; Copeland and James 2014; Huisman and de Jong 2014; Sarmiento-Mirwaldt 2015; Saurugger and Terpan 2016), energy policy (Herweg 2016b; Jegen and Mérand 2013; Maltby 2013), sugar policy (Ackrill and Kay 2011), quality of life (Bache 2013), visa liberalization (Bürgin 2013), and children's rights (Iusmen 2013) to counterterrorism (Kaunert and Giovanna 2010) and defense policy (Jegen and Mérand 2013).

In line with the findings on MSF applications in general (Cairney and Jones 2016; Jones et al. 2016), these contributions do not build on a shared definition of the framework's key concepts. Most obviously, though not exclusively, this applies to the political stream. Nonetheless, in the thirteen EU applications referred to above, we find six articles that do not include a theoretically derived definition of the political stream, and each of the remaining seven articles introduces a different and only partly overlapping definition (Herweg and Zahariadis, forthcoming).

The concept which has gained most attention is the policy window (which refers to both the agenda window and the decision window in our terminology) (cf. Ackrill and Kay 2011; Huisman and de Jong 2014; Saurugger and Terpan 2016). Ackrill and Kay (2011, 75), for instance, introduce the concept of institutional ambiguity in order to address the question why decision windows do not close as quickly as predicted by Kingdon (2011). They define institutional ambiguity as "a policy-making environment of overlapping institutions lacking a clear hierarchy." According to the authors, various policy issues fall in the realm of more than one directorate-general (or policy area) without prioritizing one directorate-general over the other(s). Owing to institutional

interconnectedness, a change in the policy issue in one policy area can trigger change in that issue in related policy areas. Ackrill and Kay (2011) refer to this kind of reform pressure as endogenous spillover, whereas exogenous spillover resembles Kingdon's idea that change occurs in institutionally unrelated policy areas.

In terms of theory building, Herweg (2017) presents the most elaborate attempt to transfer the MSF to EU agenda setting and decision making. Building on Zahariadis (2008a), she systematically defines functional equivalents of the MSF's key concepts at the EU level and applies Herweg, Huß, and Zohlnhöfer's (2015) suggestion to differentiate between agenda windows and decision windows. She also explicitly derives and tests hypotheses, using EU natural gas market policy between the mid-1980s and late-2000s as a case study.

Foreign Policy/International Relations

Zahariadis (2005), Mazzar (2007), Travis and Zahariadis (2002), and Durant and Diehl (1989) probe the utility of MSF in foreign policy. They find that MSF is a good candidate to bridge the divide between domestic and foreign policy. The key problem is to link domestic and external variables. Despite differences regarding the ability of interest groups and corporate actors to access the foreign policy establishment of a particular country, particularly those representing or having extensive ties to foreign interests, domestic concerns and actors assess and filter external threats while pursuing their own domestic pet projects. Ultimately, foreign policy outcomes need to be acceptable to domestic audiences who will ratify the solutions. The external environment plays a role, but externally generated problems or solutions still need to be domestically interpreted. Policy entrepreneurs play a major part in coupling, just like in the case of domestic policies (Blavoukos and Bourantonis 2012; Hamson 2014). Having started as an explanation of domestic policy in a "disorderly" presidential democracy, MSF proves to be useful even in small, parliamentary democracies, such as Greece, and in foreign policy where participation is less fluid.

Investigating Greek foreign policy, Zahariadis (2005) probes the utility and explanatory power of three lenses, MSF, rational internationalism, and two-level games, yielding some intriguing findings. Conceptualizing the dependent variable as degree of confrontational or cooperative policy, to avoid idiosyncratic explanations he finds that although MSF provides the better overall fit because it more accurately explains a greater number of occurrences, it systematically underexplains cooperative policy. More recently, Zahariadis (2015) adds the role of emotion as a tool for anchoring foreign policies around specific options, making it exceedingly difficult to take corrective action even when there is widespread agreement that the policy is not producing desirable results.

At the international/systemic level of analysis, Lipson (2007) explains changes in peacekeeping as the result of policy entrepreneurs' linking of a solution (peacekeeping) to a problem (intrastate conflicts) in the context of a policy window created by the ending of the Cold War. More recently, Lipson (2012) looks at administrative reforms in UN peacekeeping. He outlines how lenses of rational design, principal-agent relations, sociological institutionalism, and garbage can processes provide divergent explanations. Examining in depth the case of matrix management operations, he argues that the creation of Integrated Operational Teams in the UN Secretariat is consistent with garbage can expectations. Bossong (2013) focuses on the utility of policy windows and the ensuing narratives and finds MSF to be a useful tool to analyze patterns of agenda setting (as opposed to particular events) and nonincremental policy change in the fields of international security and European counterterrorism.

LIMITATIONS

Despite its wide appeal among policy analysts, MSF has also generated substantial criticism. We discuss the most relevant points in the following (cf. also Zohlnhöfer and Rüb 2016b, 6–10).

Are the Streams Really Independent?

MSF argues that although the streams are not completely independent of one another, they can be viewed as each having a life of its own. Participants drift in and out of decisions, making some choices more likely than others. Problems rise and fall on the government's agenda regardless of whether they are solvable or have been solved. Similarly, people generate solutions, not necessarily because they have identified a particular problem, but because the solution happens to answer a problem that fits their values, beliefs, or material well-being. Changes in the political stream take place whether or not problems facing the nation have changed. Thus, each stream seems to obey its own rules and flows largely independently of the others (Sager and Rielle, 2013).

Critics, including Mucciaroni (1992, 2013) and Robinson and Eller (2010), disagree, questioning the appropriateness of conceptualizing independent streams. The streams can be more fruitfully viewed as interdependent, Mucciaroni maintains, and changes in one stream can trigger or reinforce changes in another. For example, a focusing event, like the public's response to a terrorist attack, may well have an impact on the national mood.

Stream independence is a conceptual device. It has the advantage of enabling researchers to uncover rather than assume rationality. Not all solutions are developed in response to clearly defined problems; rather, sometimes policies are in search of a rationale or they solve no problems (Stone, 2011;

Zahariadis, 2003). Edelman (1988) goes as far as to argue that solutions create problems. Consider, for example, the decision by the Bush administration in 2003 to go to war in Iraq. Whereas the initial rationale had to do with what was claimed to be the clear and imminent danger posed by Saddam Hussein's possession of weapons of mass destruction, subsequent rationalizations emphasized connections to terrorists, the liberation of Iraq, and democratization and nation building. The solution remained the same—depose Saddam—while the problem constantly drifted in search of an anchor. As insiders, such as Richard Clarke (2004), the former counterterrorism "czar," pointed out later, the administration was fixated on Saddam long before the attack. The question was not whether but when and how to do it.

It is impossible to make the preceding argument in the absence of stream independence. The key is to specify when policy may be in search of rationale, but we cannot logically make this statement or explain why unless we differentiate between the development of problems and their solutions. Besides, assumptions are simplifications of reality. If policy analysts readily accept the assumption that people do not have to be rational, that they only need to act *as if* they are rational, analysts can also accept the assumption that streams don't have to be independent, they only need to flow *as if* they are independent.

Is MSF Clear Enough to Be Proven Wrong?

The question of whether MSF is clear enough to be proven wrong, put forward by Kuhlmann (2016) among others, points to two related criticisms. Critics claim that MSF's core concepts lack clear definitions and they do not generate falsifiable hypotheses (for example, Sabatier 2007). Regarding the latter criticism, it is true that Kingdon in his original formulation of the framework did not derive hypotheses. This does not mean, however, that it is impossible to derive hypotheses. In subsequent work, at least some researchers have put forward hypotheses, although many of these were rather case specific (e.g., Blankenau 2001; Boscarino 2009; Saurugger and Terpan 2016). More recently, more general MSF hypotheses have been made explicit, and we present some of these hypotheses in this chapter. We hope that these hypotheses will guide future MSF applications.

The metaphorical language of the approach (Béland and Howlett 2016, 223) poses more intricate problems. Streams and windows, primeval soups and criteria of survival, national mood and focusing events are all somewhat difficult to measure and seem to invite story-telling rather than rigorous empirical analysis. And although it cannot be denied that a significant part of MSF-related research has indeed been plagued by this problem (see the overview in Jones et al. 2016), this does not have to be the case. Rather, as Herweg's (2016a) discussion of policy communities shows, MSF's concepts can be defined with substantial

precision. We have tried to move forward in the same direction in this chapter by providing additional conceptual groundwork that, for example, permits more precise analysis of when the individual streams are ready for coupling.

Are Policy Entrepreneurs More Rational Than Policymakers?

Some critics argue that the assumptions about policymakers and policy entrepreneurs do not easily fit together. Policymakers are assumed to have unclear preferences, which means that they do not really know which policies they favor; policy entrepreneurs are expected to know exactly what they want—namely, to get their pet proposals adopted. So it might seem that according to the MSF some people have policy preferences while others do not. That would indeed be a problematic inconsistency.

However, this apparent contradiction can be resolved (Zohlnhöfer and Rüb 2016b, 7). Policy entrepreneurs should not be considered as acting more rationally than average policymakers. Kingdon (2011, 183) already warned us not to "paint these entrepreneurs as superhumanly clever." Rather, on the one hand, MSF presumes that *all* actors, policymakers and policy entrepreneurs, have unclear preferences concerning the vast majority of policies. On the other hand, any policymaker can become a policy entrepreneur for a specific proposal. The exact reasons why a policymaker catches fire for a particular issue can vary: personal reasons, party ideology, or advancing a political career. Whatever the reason, it is unlikely that there is a great amount of rationality involved when it comes to explaining who pushes for the adoption of a particular policy project and not for another one. Most importantly, however, while policy entrepreneurs (sometimes even irrationally) pursue pet projects, they are likely to have entirely unclear preferences with regard to all other issue areas that are under discussion in parallel.

Are Elements Lacking from MSF?

Another important criticism of MSF is that it lacks some elements. Of particular relevance seem to be political institutions and path dependence (for example, Mucciaroni 2013; Rüb 2014). Although until recently it has been tried only rarely (see Béland 2005; Ness and Mistretta 2009; and Blankenau 2001), nothing in the MSF per se precludes the integration of these elements into the framework—as we have shown in this chapter. Institutions affect the integration of policy communities and define whose agreement a political entrepreneur must obtain during decision coupling. Similarly, path dependence can be understood as one of the criteria of survival that affect a proposal's chances of becoming a viable policy alternative. Alternatively, Spohr (2016) suggests a way to combine MSF with Historical Institutionalism.

Another relevant factor that is missing from MSF—and many other policy process theories—is the mass media (Rüb 2014). The way the media report on certain issues, which issues they take up, and which they neglect are likely to have an important impact on the political agenda. The media's role is indeed a topic that has not yet been theorized from an MSF perspective. But it is a matter of lack of empirical application and not theoretical omission.

Can Hypotheses Generated by the MSF Be Tested in Medium- to Large-*N* Studies?

Methodological pluralism may be a virtue, but medium- to large-*n* analyses add weight to a lens's explanatory power in ways that case studies do not. It is noteworthy in this context that the vast majority of MSF studies are case studies (Jones et al. 2016; Rawat and Morris 2016), whereas the number of MSF-guided medium- to large-*n* applications is in the low-single-digit percentage range (Engler and Herweg 2016). Notwithstanding this disparity between case studies and medium- to large-*n* applications, there seems to be broad agreement in the literature that it would be useful to test MSF in a larger sample size (cf. Jones et al. 2016; Zohlnhöfer 2016). How could this be done?

Because quantitative applications are the exception, not the rule, we highlight conceptual considerations exclusively faced by quantitative applications (for the following, see Engler and Herweg 2016). More specifically, we focus on the choice of method. To date, the methods applied in quantitative and medium- to large-*n* MSF applications are regression analysis (for examples, see Liu et al. 2011; Travis and Zahariadis 2002) and qualitative comparative analysis (QCA) (for examples, see Sager and Rielle 2013; Sager and Thomann 2016). Both methods have different advantages and drawbacks in terms of accurately modeling the framework.

Compared to QCA, logistic regression analysis and event history analysis adequately capture hypotheses on individual elements of the MSF. Mirroring the framework's probabilistic logic, the MSF, for instance, hypothesizes "If a policy window opens, agenda change becomes more likely." Building on linear algebra, regression analysis allows for testing "The wider a policy window is open, the more the agenda changes," or with regard to logistic (or event history) analysis, "If a policy window opens, agenda change becomes more likely (the time until agenda change decreases)." Instead, QCA builds on Boolean algebra (and thus on a deterministic logic) and tests "If a policy window opens, the agenda changes." Furthermore, logistic regression analysis and event history analysis manage to capture the MSF's idea that temporality matters by pooling time series and cross-section data and (in case of event history analysis) by modeling an element's duration effect (the time until agenda change occurs).

However, assessing the combined effect of the framework's five key concepts on agenda change is next to impossible in a regression setting because this leaves researchers with the task of interpreting a specification of thirty-one independent variables, including a fivefold and various four-, three-, and two-fold interaction terms. A solution might be to test the MSF only partially. Liu et al. (2011), for instance, test whether the opening of a window in the problem stream (indicated by a change in indicators and the occurrence of focusing events and feedback dealing with climate change) is correlated with change in the agenda of the US Congress (measured by congressional hearings dealing with climate change).

In terms of testing how the interplay of different MSF concepts affects agenda change, QCA is the method of choice because it allows for testing which (combinations of) factors are necessary/sufficient for agenda change. Consequently, given their different strengths and weaknesses, regression analysis and QCA should not be treated as substitutes but as complements (Thiem, Baumgartner, and Bol 2016). Regardless of the choice of method, MSF applications must explicitly define the units of analysis, their dependent and independent variables, and the causal mechanisms they expect because they vary with the policy stage analyzed.

PROSPECTS

The MSF has gained a lot of momentum recently. Not only is the number of empirical applications high and rising but also there have been numerous attempts to refine the framework theoretically. Nonetheless, more work is needed. Four issues deserve particular attention in future MSF-related research: (1) further theoretical and definitional refinement; (2) more systematic empirical applications; (3) an adaptation and empirical application of the framework to autocratic regimes; and (4) more MSF-inspired research on global policy.

Refine Hypotheses and More Clearly Operationalize Concepts

The operational definitions of when the streams are ready for coupling need to be further refined. This is particularly true with regard to the political stream. As we argue above, the political stream is ready for (agenda) coupling when a relevant actor is receptive to a proposal and is willing to act as political entrepreneur. The necessary (parliamentary) majorities can be stitched together after the item has been placed high on the government's agenda. But what exactly does it mean to be receptive to a proposal? Similarly, we argue that the policy stream is ready for coupling when a viable policy alternative is available. But how exactly do we know when a policy alternative is viable? Similar efforts could be directed at other core concepts of the framework, like policy windows,

policy or political entrepreneurs, and so forth. It may not always be possible to come to definitions that leave no room for interpretation—precisely because of the ambiguity of political life that is the framework's starting point. But we can certainly try to develop more precise definitions and measurements.

Moreover, the recent theoretical advances have hardly been tested empirically and are likely to need further elaboration. In particular, we probably need more well-defined hypotheses derived from the framework. What is more, the policy stages after decision making have rarely been theorized from an MSF perspective (but see Howlett, McConnell, and Perl 2015; Zahariadis and Exadaktylos 2016). More work in this direction would also be extremely helpful to advance the MSF to a framework capable of explaining the complete policy process.

Conduct More Systematic Empirical Analysis

Analysis is viewed here in terms of both method and context. The recent literature reviews (Jones et al. 2016; Cairney and Jones 2016; Rawat and Morris 2016; see also Weible and Schlager 2016) amply demonstrate the point that the overwhelming majority of empirical applications are case studies, and most of them do not speak to each other. Thus, MSF scholars need to find ways to test the framework more systematically. Despite a number of obstacles, researchers should aim at quantitatively testing empirical implications of MSF thinking (see Engler and Herweg 2016). More hypotheses make it easier to collect or find data and thus facilitate a wider range of analytical techniques to probe them. In this regard, the recent surge in hypotheses generated by the MSF is very helpful.

Systematic testing is not necessarily limited to the application of quantitative techniques, however. We should also find ways to use the large number of existing case studies and even more importantly produce case studies that are suitable for knowledge accumulation. Thus, on the one hand, literature reviews that provide more detailed assessments of the cumulative results of existing case studies would be helpful. On the other hand, we should develop criteria that MSF-inspired case studies need to fulfill to ensure their results can be compared with others. Moreover, hypotheses should be tested not only in cases where a change occurred but also in cases characterized by continuity (as an example, see Clark 2004).

In terms of context, scholarship can more sharply differentiate between issues and levels of governance. MSF is theorized to be applicable in particular contexts—national policymaking, for instance—but is it equally applicable to certain types of issues regardless of level? If MSF can explain agenda items across issues within the same level (national context), can it explain with similar ease the same issue across (national, subnational, and international) levels? Surely, the same fundamental assumptions about preferences, participation,

and technology apply to some issues (e.g., structural reforms) across national, international, and subnational levels. Zahariadis (2016) mentions this intriguing possibility and constructs a matrix to classify the different types of theorizing. Future research may systematically elaborate on the logic and adaptations needed to accomplish this task.

Apply MSF to Nondemocratic Political Systems

As we have seen, MSF has rarely been applied to agenda setting and policy making in nondemocratic regimes. In general, the framework should be applicable in these settings, too. Autocratic regimes need to couple problems to solutions and need to decide on which problems or policy projects they want to invest their time and resources—which might be even more limited as the centralization of an autocratic regime increases. In the absence of, or under conditions of limited, political freedom, the processes in the three streams are likely to differ from the processes we observe in democratic systems (see, for example, Liu and Jayakar 2012; Zhu 2008). Policy communities might be smaller, and the most important criterion of survival is probably acquiescence of the dictator. Problem brokers might need to find different ways to convince policymakers of their problem definition, and the national mood and changes in government are unlikely to play an equally important role in autocracies. But the central idea that policies need to be coupled to some kind of problem in certain political contexts can be easily applied in nondemocratic settings. Thus, future research should discuss which characteristics of autocratic regimes require adaptations of the MSF and suggest relevant modifications that would then need to be systematically tested.

Theorize and Apply MSF in Global Contexts

Policymaking beyond the nation-state is a particularly suitable field for the application of the MSF because of fluid conditions (in terms of issues and institutions). If we accept the premise that international organizations are semiautonomous bureaucracies (Barnett and Finnemore 2004), MSF can provide interesting explanations about why and how they make the decisions they do. For example, agenda setting or decision making in global institutions, such as the Security Council, is extremely fluid not only because of (mostly) rotating participation but also because of significant variability in problem definitions and focusing events. Famines as focusing events can sway the global community into action when no such appetite existed before, for example, Ethiopia in the mid-1980s. MSF could also provide fertile theoretical ground for international relations theorists who view transnational activism as external leverage over domestic opponents (e.g., Keck and Sikkink 1998). Activism may be

conceptualized as an entrepreneurial activity seeking to couple problems and solutions to receptive political audiences. Transnational activists act as policy entrepreneurs—they reframe issues, build coalitions, lobby, protest, and link internal contention to international conflict (Tarrow 2005). Their strategies could enrich MSF not only by pointing out the obvious venue-shopping implications but also by illuminating the benefits and drawbacks of national policymaking.

CONCLUSION

The academic debate on the MSF is currently more lively and exciting than it has ever been before. A remarkable number of suggestions for the theoretical advancement of the MSF has been published, many of which we have presented in this chapter. Nonetheless, more steps need to be taken in the coming years, including the further refinement of operational definitions of the framework's key terms, the empirical application of the various theoretical innovations that have been suggested, as well as adaptation of the MSF to more contexts such as authoritarian regimes and international relations. The surge in the literature of the last few years makes it clear that there is a lot to be learned about agenda setting and policymaking in various contexts by adapting and applying the MSF.

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