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Who is a Stream?
Epistemic Communities, Instrument Constituencies and Advocacy Coalitions in Multiple Streams Subsystems

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Abstract

John Kingdon's Multiple Streams Framework (MSF) was articulated in order to better understand how issues entered into policy agendas, using the concept of a policy actors interacting in course of sequences of events occurring in what he referred to as the "problem", "policy" and "politics" "streams". In this study Kingdon used an undifferentiated concept of a 'policy subsystem' to organize the activities of various policy actors involved in this process. However, it is not a priori certain who the agents are in this process and how they interact. This paper argues the policy world can also be visualized as being composed of different distinct subsets of subsystem actors who engage over specific sets of interactions over the definition of policy problems, the articulation of solutions and their matching or enactment. Using this lens, this article focuses on actor interactions involved in policy formulation activities occurring immediately following the agenda setting stage upon which Kingdon originally worked. This activity involves the definition of policy goals (both broad and specific) and the creation of the means and mechanisms to realise these goals. The article argues this stage is best analyzed form the perspective of three separate sets of actors involved in these tasks: the epistemic community *which finds itself engaged in discourses about policy problems; the activities of* instrument constituencies *which define the policy stream in which policy alternatives and instruments are formulated; and that of* advocacy coalitions *which make up the politics stream as they compete to have their choice of policy alternatives selected by decision makers. The article argues these different sets of policy actors personify each of Kingdon's three different streams of policy, problem and politics and that extending Kingdon's work to the examination of policy formulation using this basic vocabulary yields superior insights into policy formulation than other extant models.*

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Introduction: Agency and the Multiple Streams Model

John Kingdon's Multiple Streams framework (MSF) has been one of the main models of the policy process utilized in contemporary policy research. As is well known, in his study of the early agenda-setting stage of the policy process, Kingdon envisioned three independently flowing streams of events – the political, policy and problem 'streams' - brought together by fortuitous windows of opportunity to elevate policy items onto the government agenda. But, who is the agent here? That is, who represents and actualizes a "stream" of events or a response to it? While Kingdon emphasized the role of some actors such as policy entrepreneurs in catalyzing the merging of streams, it is not clear who are the actors which give each stream, in Kingdon's words, 'a life of its own'.

In Kingdon's work, the principle player, generally, as was commonly held by many policy theorists in the early 1980s and 1990s (McCool 1998; Sabatier 1991), was the 'subsystem'; defined somewhat vaguely as a relatively cohesive set of actors bound together by a common concern with a policy subject area (Kingdon 2011, Howlett et al 2009). This vision of policy actors sufficed for Kingdon's analysis of agenda-setting activities which was based on understanding how a policy concern moved from the 'policy universe' or undifferentiated public or societal locus of policy attention, to the more focused 'policy community' which was capable of articulating the nature of a problem and possible solutions for it and moving it forward for consideration by government. However, while Kingdon's systematically analyzed the structural mechanics of how this subsystem operated to reduce the number of alternative possible agenda-items to the much smaller number which receive government attention, he was not clear about precisely who was involved in defining and selecting one or more solution over any other, for defining a problem in a particular fashion, or for putting together definitions and proposed solutions..

This is a significant gap in existing work based on the multiple streams framework and in this paper we endeavour to enhance the continuing contribution the MSF has made to modern public policy thinking by exploring how the streams metaphor can be better visualized to incorporate more precise notions of agency, and show how this specification helps to extend Kingdon's model to cover policy formulation activities as well as agenda-related ones. We argue

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that viewing a subsystem as being composed of different and distinct subsets of actors whose interactions drive policy-making forward helps clarify "who is a stream" and to adapt the MSF model to both agenda-setting and activities beyond this early stage of policy-making.

By doing so, this paper sets up a framework available for further empirical testing in order to strengthen its argument of an agency-based distinction of multiple streams. It aims to find points of correspondence between the MSF and phases beyond agenda setting in the dominant 'stages' perspective of the policymaking process, continuing a process of re-thinking and re-casting Kingdon's model begun by Howlett et al (2014). In particular, attention is given in this effort to how the various groups of actors associated with each stream are discernible through their interactions as the policy process continues beyond problem definition and into the realm of policy formulation, and in leading on to decision making and implementation, although the latter two activities are not addressed directly here. The focus throughout the paper is on identifying key subsystem actors involved in defining policy goals (both broad and specific), and creating and deciding upon the means and mechanisms to realise these goals.

Moving Multiple Streams Models Forward to Policy Formulation and Beyond

The relationships between streams beyond agenda-setting in the multiple streams model is problematic. This is due to both the fact that Kingdon's own work dealt exclusively with agenda-setting, as well as with vague aspects of his work, including weak specifications of agency.

Several recommendations for improvement have been put forth by other authors desiring to take the multiple streams framework forward to cover policymaking stages beyond the policy entrepreneur-catalyzed confluence of streams and policy window metaphors used by Kingdon in his 1984 work. As Howlett et al. (2014) have shown, many of these authors have simply carried forward the idea of a confluence of the three streams remaining in place following agenda-setting in order to cover off activities occuring at subsequent stages of the policy process (Teisman 2000). Others, however, have suggested that after an item enters the formal agenda, that at least some of the streams split off once again to resume their parallel courses (Teisman 2000, Zahariadis 2007). And yet others have suggested additional streams emerge that can become apparent through and

beyond agenda setting, such as those involved in operational administrative processes once a problem has been established during agenda setting (Zahariadis 2007; Howlett et al 2014).

While all of these approaches recognize the need for greater specification of activities beyond agenda-setting than contained in Kingdon's book, many of these attempts at extending the MSF model beyond agenda-setting have been less than successful in matching or describing policy empirics because they have weak depictions of streams as sequences of events which impact actors existing outside of them, rather than integrating actors into the very heart of a these events. In these models streams of events flow and interact with each other but how a stream functions is difficult to specify when it is not linked directly to a specific actor or set of actors within a subsystem. Without agency it is difficult to see how essential phenomena such as 'streams' intersecting or agenda-items "moving forward" actually occur in practice (Hood 2010 and Howlett 2012).

Two major challenges therefore become apparent and must be overcome if the MSF framework is to be extended to policy stages beyond agenda setting:

1) How to operationalize or agentify the various streams of events and activities involved in policy-making in order to be able to analytically distinguish them from each other and analyze their interactions during different phases of the policy process; and
2) How to analyse periods of separation and coming together of one or more of the streams before, after and during different phases of policy making activity in terms of these actor relationships.

In what follows, in order to answer these questions, we build on the streams model originally set out by Kingdon. In particular we operationalize Kingdon's original three streams as analytically distinct sets or different communities of policy actors within a policy subsystem who can be observed as forming alliances, colluding and competing over defining problems, finding alternatives or advocating their preferred policies, giving form and structure to the pattern of policy-making highlighted in the multiple streams framework. As the paper will show, extending Kingdon's work to the examination of policy formulation using this basic vocabulary yields

superior insights into policy formulation than other extant models and similar results can be expected from further future extensions to cover decision-making and policy implementation.

Who is a Policy Stream? Identifying Stream Specific Actors at the Sub-Subsystemic Level

The subsystem family of concepts was developed beginning in the late 1950s in order to help better understand the role of interests and discourse in the policy process by allowing for complex formal and informal interactions to occur between both state and non-state actors, something previous policy theory had largely ignored in its focus on formal institutional procedures and relationships between governmental and non-governmental agents such as interest groups and lobbysts (McCool 1998; Howlett and Ramesh 2009). As Kingdon rightly noted, the subsystem was an appropriate unit of analysis for distinguishing the actors involved in the politics, process and problem aspects of policy-making activities such as agenda-setting in which informal interactions were just as important as formal ones in terms of explaining the timing and content of issue attention.

There is no question a subsystems focus allows students of policy sciences to distinguish more precisely who are the key actors in a policy process, what unites them, how they engage each other and what effect their dealings have on policy outcomes (Howlett et al 2009). This view allows for the development of a uniting framework of analysis that can firstly, establish patterns that perpetuate action from one stage of the policy process to another and secondly, analytically deconstruct the 'black box' of each stage, introducing a more nuanced and dynamic view of policymaking than was typically found in older, more institutional analyses (Howlett et al. 2009). The scholarship on such policy actors in the 1970s to 1990s was legion and included a wide variety of sometimes competing concepts such as iron triangles, sub-governments, cozy triangles, power triads, policy networks, issue communities, issue networks, advocacy coalitions, and policy communities, among others, all alluding to the tendency of policy actors to form substantive issue alliances that cross institutional boundaries and include both governmental and non-governmental actors (McCool 1998, Freeman 1997, Arts and van Tatenhove 2006).

However, the relationship between a subsystem and a 'stream' is unclear. In Kingdon's work it was enough simply to argue that a wide range of actors was engaged in policy-making and reacted to, and engaged in, policy, problem and politically-related aspects of issue definition. However once an issue has moved beyond the public realm and has entered into the formal deliberations of government, it is not clear that such an undifferentiated concept of a subsystem is useful and/or in what fashion it related to process-oriented policy 'streams'. This is because responsibility for the range of tasks to be performed in articulating policy, developing and advocating for means to achieve them and ultimately deciding upon them falls on different actors; from experts in the knowledge area concerned in the first instance, to experts on policy tools in the second, to authoritative decision-makers and their colleagues in the third (Howlett et al 2009).

If the idea of a stream is to be effectively operationalized beyond the agenda-setting stage of the policy process, there is a need to disaggregate a subsystem in order to assign agency to each stream of activities involved in policy-making. In re-visualizing these streams as being composed of distinct groups of policy actors within a subsystem, each different actor sub-group becomes can be thought of as a discrete entity. This is not to say these different groups cannot share membership during the policy process, as subsystem actors can engage each other to various degrees and in different forms throughout policymaking. The extent to which this occurs in any particular policy process is an empirical question. However for analytical purposes they can be thought of as separate bodies.

While it would be possible to develop new terminology to describe each sub-group, adequate terms already exist in the policy literature which can be used for this purpose. In this light, as discussed in more detail below, "*epistemic communities",* a term developed in the international relations literature to describe groups of scientists involved in articulating and delimiting problem spaces in areas such as oceans policy and climate change (Haas 1989, 1992, Zito 2001, Gough and Shackley 2001*)* can be thought of as active beyond agenda setting and into policy formulation; being engaged in discourses within the problems stream where the range of discussion spans the definition of broad policy goals to specifying more on-the-ground problem solving measures. Within the policy subsystem of actors defining a particular policy arena (for example, national environmental policy), an epistemic community would exist surrounding

climate change policy, working closely with constituencies that may develop around particular instruments (for example, emissions trading), which would also unite coalitions of actors holding a variety of beliefs regarding (perhaps regarding the legal level or 'cap' of permissible emissions in an economy).

This group is separate but distinct from the activities of "*instrument constituencies",* a term used in the comparative public policy field to describe the set of actors involved in solution articulation (Voss and Simons 2014). Such constituencies advocate for particular tools or combinations of tools to address a range of problem areas and make up a policy stream that heightens in activity as policy alternatives and instruments are formulated and combined to address policy aims. Lastly, the politics stream can be thought of as being the milieu where "*advocacy coalitions",* a term used by students of American policy-making to describe the activities of those involved in the political struggle surrounding the matching of problem definitions and policy tools (Schlager and Blomquist 1996, Sabatier 2007) are most active. These actors compete to get their choice of problem definitions as well as solutions adopted during the policy process.

Each of these three streams and sets of actors is discussed in more detail below.

Advocacy Coalitions and the Politics Stream

Politically active policy actors are more publicly visible than the members of those groups of substantive experts who collaborate in the formation of policy alternatives, and constitute an often "hidden cluster" of actors dealing with alternative specification, according to Kingdon. Visible actors of the politics stream can include, for example in the case of the US Congress he examined, "the president and his high-level appointees, prominent members of the congress, the media and such elections-related actors as political parties and campaigns" (Kingdon 2011, 64) while less visible actors include lobbyists, political party brokers and fixers, and other behind-the-scenes advisors and participants.

Emphasizing the important policy role played by both these sets of political actors in the policymaking process, of course, is central to another of the other major theories of policy-making

often improperly construed as antithetical to the MSF, namely the Advocacy Coalition Framework (ACF). As is well known, the ACF was advanced during the 1980s by Paul Sabatier and Hank Jenkins-Smith as a response to five perceived limitations of existing policy process research programs: the shortcomings of the stages heuristic in establishing a causal theory of the policy process, the lacking discussion about the role of scientific knowledge in policymaking, the polarity of the top-down and bottom-up perspectives of policy implementation, the need to consider time horizons of a decade or more when investigating the policy process, and the need to acknowledge the bounded rationality of policy actors (see among others Sabatier 1987; 1988, Jenkins-Smith 1990, Sabatier and Jenkins-Smith 1993 and 1999; Sabatier and Weible 2007, Weible et al 2009; and Weible et al. 2011).[1]

The ACF holds that subsystem actors are boundedly rational in that they employ cognitive filters that limit how they perceive information while functioning within the subsystem. Actors aggregate and coordinate their actions into coalitions based on shared policy core beliefs and several such coalitions can occupy a subsystem. Led by their primary interest in forwarding their beliefs, the realm of coalitions falls distinctly in the political vein of the policy process, as coalitions compete with opponent coalitions to transform their beliefs into policies and tend to amplify the maliciousness of those with opposing beliefs.

These beliefs as well as coalition membership stay consistent over time and the relative success of a coalition in furthering its policies depend on a number of factors, including external factors like natural resource endowments and the nature of policy problems that remain relatively constant over time (Sabatier 2007). Other external factors that are also important yet more unpredictable include public opinion and technology developments. Factors that are internal include the coalition's own financial resources, level of expertise and number of supporters. Coalition members employ knowledge about what are the competing views on important policy problems or solutions to a "variety of uses from argumentation with opponents to mobilization of supporters" (Weible and Nohrstedt 2011).

Although often posited by ACF advocates as comprised of all elements of a policy subsystem, the role of advocacy coalitions in vying to get their preferred problem and solutions

chosen in policy decisions implies that, consistent with Kingdon's ideas, they can more usefully be thought of as synonymous with politics stream. As pointed out above the venue of advocacy coalition activity ranges from agenda setting to decision making, but remains in the background while the policy and problem communities come to the forefront of alternate specification.

Epistemic Communities and the Problem Stream

This is different from the role played by problem 'experts' (Craft and Howlett 2013) who can be distinguished and thought of as composing a second, separate, set or stream of policy actors. That is, once a policy problem has been elevated on the policy agenda, it necessitates its translation into one or several policy goals that can guide the formulation of appropriate policy options. Some subsystem actors are more involved than others in deliberating about the nature problems and developing and expanding upon ideas about the origins and causal structure of the conditions which comprise such problems (Hajer 1997, 2005, Howlett et al. 2009). These "epistemic communities", as Peter Haas (1992) termed them, have "influenced policy innovation not only through their ability to frame issues and define state interests but also through their influence on the setting of standards and the development of regulations" (Adler and Haas 2009, p. 378).

The academic exploration of epistemic communities thus far has been dominated by examples from environmental policy, a field that is constantly involved in connecting scientific findings to policy. Haas described the 'epistemic communities' involved in deliberations in this sector as a diverse collection of policy actors including scientists, academics experts, public sector officials, and other government agents who are united by a common interest in or a shared interpretation of the science behind an environmental dilemma (Haas 1992, Gough and Shackley 2002). Knowledge regarding a policy problem is the "glue" that unites actors within an epistemic community, differentiating it from those actors involved in political negotiations and practices around policy goals and solutions as well as those, discussed below, who specialize in the development, design and articulation of policy tools or solutions.

In the agenda stage epistemic communities are crucial in leading and informing the activities of other actors, defining the main direction of the policy process followed thereafter. This path-dependent evolution of problem definition indicates, as Adler and Haas (2009) noted,

that "the effects of epistemic involvement are not easily reversed. To the extent to which multiple equilibrium points are possible...epistemic communities will help identify which one is selected" (Adler and Haas 2009, p. 373).

Instrument Constituencies and the Policy Stream

The policy instruments that are devised or revised and considered and assessed in the process of matching problems and solutions can also usefully be viewed as the cognitive constructs of specific sets of social policy actors as they grapple with policy-making. Voss and Simons (2013, 2014), for example, have highlighted the role played those actors who, albeit originating from a multitude of backgrounds and organizations, come together in support of particular types of policy instruments; forming a third policy stream, the "instrument constituency". Not to be conflated with Sabatier's or Haas' notions of advocacy coalitions or epistemic communities, these actors are united by their adherence to the design and promotion of specific policy instruments as the solutions to general sets of policy problems, usually in the abstract, which are then applied to real-world conditions.

The members of such constituencies are not necessarily inspired by the same definition of a policy problem or by similar beliefs, like the other two, but rather come together to support specific policy solutions or instrument choices. Instrument constituencies are thus "networks of heterogeneous actors from academia, policy consulting, public policy and administration, business, and civil society, who become entangled as they engage with the articulation, development, implementation and dissemination of a particular technical model of governance" (Voss and Simon 2013). They comprise actors that exist to promote and further develop a particular instrument and who form conscious groupings attempting to realize their particular version of the instrument. Such actors "whose practices thus constitute and are constituted by the instrument" develop "a discourse of how the instrument may best be retained, developed, promoted and expanded" (Voss and Simons 2013). What unites these actors is the role they play "the set of stories, knowledge, practice and tools needed to keep an instrument alive both as model and implemented practice" (Voss and Simons 2013).

The General Model and Argument Concerning the Application of Multiple Streams Models to the Policy-Making Process

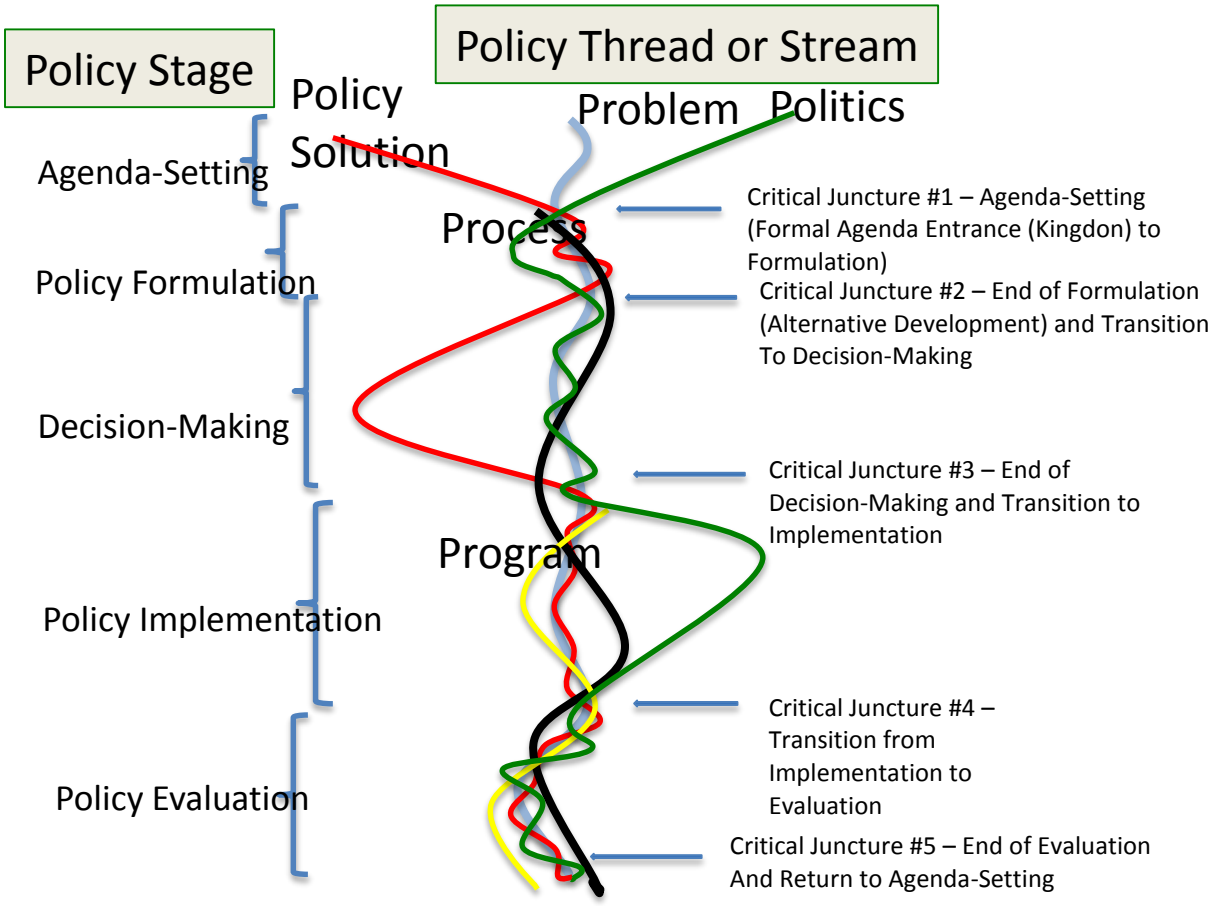
The overall argument made here is that the three streams Kingdon described represent the actions of the three distinct communities of actors outlined and that these groups interact to different degrees during different stages and activities of policy making, from agenda-setting to policy evaluation. At the stage of policy formulation in particular, the problem and policy streams share various points of correspondence during the process of articulation of policy alternatives, while the politics stream flows independently alongside these other two until it too joins the others as decision-making unfolds. This is a different vision of this activity than raised by any of the authors cited above in their own efforts to develop a multiple streams vision of the policy process beyond agenda-setting.

As discussed above the politics stream separates out from the policy-problem nexus as actors interested in policy instrument formation deliberate on technical solutions to the identified problem (Craft and Howlett 2013). Once policy solution packages are devised, the politics thread returns to the main weave as advocates of different policy solutions compete to have their favoured policy instruments selected during decision making. The activity of actors involved in thie problem stream on the other hand can be seen to advance steadily throughout the policy process without bowing out in some areas as do some of its counterpart streams. And the policy stream personified by an instrument constituency remains in a tight link with the problem stream or epistemic community throughout the formulation phase - marked as it is by the matching of policy ends to policy means. The policy means or tools that constituencies are involved with can range anywhere from single tool calibrations to the instrumental logic of multi-tool mixes. The constituency need not stay united because of any other reason except for a common fidelity to a particular instrument or a particular combination of instruments. Once solutions have been proposed, the constituency takes a step back during decision making, but re-joins the policy process for implementation and evaluation.

Figure 1 illustrates how these dynamics can be envisioned as the policy process unfolds, including those activities which take place in the immediate aftermath of the agenda-setting

activities originally examined and modelled by Kingdon. As Figure 1 indicates, different sets of actors interact differently in different policy-related activities. The politics stream (shown as the green continuum in Figure 1), for example, composed of events in which advocacy coalitions appear as key players, continues throughout all phases of policy-making, however, it does so in the background in some activities, most notably policy implementation, and often acts without entangling itself directly with the problem and policy streams during policy formulation. This set of actors and stream of events is more active during agenda setting and later during decision making through the actions of political coalitions that compete to get their interests represented and their preferred options chosen at later stages of the policy process.

Figure 1: Five Policy Process "Streams"



The problem stream (light blue line) and the epistemic communities it involves, on the other hand, maintain a central position as most policy activity revolves around the framing or definition of an issue area. And instrument constituencies, like advocacy coalitions, wax and wane as solution-based activity occurs, being actively engaged in formulation, less so in decision-making and then again actively involved in implementation and evaluation.

Conclusion: Moving the Multiple Streams Framework Forward by Disaggregating the Policy Subsystem

After three decades of comparative policy research that has critiqued, deliberated and debated the major frameworks of the policy process, the original assertions of these dominant metaphors remain monolithic, with limited meaningful cross-fertilization (Sabatier and Weible 2014). As argued by John (2012, 2013) and Cairney (2013), however, the time is ripe to move the discussion of policy-making forward beyond dueling frameworks and some efforts have already been made in this direction (Howlett et al 2014). Here this project has been extended to the multiple streams model, uniting it with several other frameworks, notably the Advocacy Coalition Framework but also works dealing with epistemic communities and their role in policy advisory systems, into a single more powerful combination.

That is, merely saying that multiple streams and multiple phases of policy-making exist, as scholars basing their work on Kingdon's (1984) lead have done, begs the question of how the mechanisms identified by Kingdon are actually carried out by policy agents. If the multiple streams framework is to say anything meaningful about policy-making it has to address questions head-on about the streams identified by Kingdon come in to existence and how they operate. And doing so immediately raises other questions about what exactly are they comprised and composed. The present article goes some way towards answering these questions by disaggregating the policy subsystem construct used by Kingdon into three separate component elements - epistemic communities, advocacy coalitions and instrument constituencies -which heretofore have always been addressed separately in the literature.

This analysis and approach takes the discussion from Howlett et al. (2014) about the close relationship between streams and stages of policy-making forward beyond the multiple streams and phase-cycle models to also incorporate advocacy coalition thinking. Distinguishing these separate actor groupings in practice and investigating their interrelationships, presence and activities in a variety of sectors and countries is a logical next step in understanding the level of autonomy or independence each set of actors enjoys. Such analyses promise to bear fruit in providing a much better understanding of how each stream operates, leading to better analysis and understanding of the degree to which each subset of the policy subsystem interacts or disconnect with the others during the flow of the policymaking process, affecting its timing, content and impact, key questions which continue to concern adherents of the multiple stream and other frameworks of policy-making.

Endnotes

[1] Weible and Nohrstedt (2011) provide a thorough review of the theoretical evolution of the ACF since the 1980s, along with a discussion of lessons drawn from key empirical works that have shaped the framework over the last two decades.

References

Arts, Bas, Pieter Leroy, and Jan Van Tatenhove. "Political modernisation and policy arrangements: a framework for understanding environmental policy change." *Public organization review* 6.2 (2006): 93-106.

Adler, Emanuel and Peter M. Haas (1992). Conclusion: epistemic communities, world order, and the creation of a reflective research program. *International Organization*, 46, pp 367-390 doi:10.1017/S0020818300001533

Howlett, M., & Rayner, J. (2013). Patching vs Packaging in Policy Formulation: Assessing Policy Portfolio Design. *Politics and Governance*, *1*(2), 170-182.

Bobrow, D. B., & Dryzek, J. S. (1987). *Policy Analysis by Design*. Pittsburgh: University of Pittsburgh Press

Baumgartner, F. (2006). Punctuated Equibrium Theory and Environmental Policy. *Punctuated Equilibrium and the Dynamics of U.S. Environmental Policy*. R. Repetto. New Haven, Yale University Press.

Cairney, Paul. "Standing on the Shoulders of Giants: How Do We Combine the Insights of Multiple Theories in Public Policy Studies?" *Policy Studies Journal* 41, no. 1 (2013): 1–21.

Craft, Jonathan, and Michael Howlett. "Policy Formulation, Governance Shifts and Policy Influence: Location and Content in Policy Advisory Systems." *Journal of Public Policy* 32, no. 02 (2012): 79–98. doi:10.1017/S0143814X12000049.

Downs, A. "Up and Down with Ecology - The 'Issue-Attention Cycle'." *Public Interest* 28 (1972): 38–50

Freeman, Jody. "Collaborative governance in the administrative state." *UCLA L. Rev.* 45 (1997): 1.

Gough, C. and Shackley, S. (2001), The Respectable Politics of Climate Change: The Epistemic Communities and NGOs. International Affairs, 77: 329–346. doi: 10.1111/1468-2346.00195

Haas, P (1992) 'Introduction: epistemic communities and international policy coordination', *International Organization* 14: 1, 1992 (1-36)

Hajer, M. A. (1997) "The Politics of Environmental Discourse: Ecologial Modernization and the Policy Process. Oxford: Oxford University Press

Hajer, M. A. "Setting the Stage: A Dramaturgy of Policy Deliberation." *Administration & Society* 36, no. 6 (2005): 624–647.

Hall, P. A. (1993). Policy Paradigms, Social Learning and the State: The Case of Economic Policy Making in Britain. *Comparative Politics*, *25*(3), 275-296.

Hood, C. (2010). *The blame game: Spin, bureaucracy and self-preservation in government*. Princeton, NJ: Princeton University Press.

Howlett, Michael, M. Ramesh, and Anthony Perl. *Studying Public Policy: Policy Cycles & Policy Subsystems*. 3rd Edition, Toronto: Oxford University Press, (2009).

Howlett, M., & Cashore, B. (2007). Re-Visiting the New Orthodoxy of Policy Dynamics: The Dependent Variable and Re-Aggregation Problems in the Study of Policy Change. *Canadian Political Science Review*, *1*(2), 50-62.

Howlett, M., & Cashore, B. (2009). The Dependent Variable Problem in the Study of Policy Change: Understanding Policy Change as a Methodological Problem. *Journal of Comparative Policy Analysis: Research and Practice*, *11*(1), 33-46.

Howlett, M. (2012). The lessons of failure: Learning and blame avoidance in public policy-making. *International Political Science Review* 33(5): 539–555.

Howlett, M., McConnell, A. and Perl, A. (2014), Streams and stages: Reconciling Kingdon and policy process theory. European Journal of Political Research. doi: 10.1111/1475-6765.12064

Jones, Brian and Frank R. Baumgartner, (2005). *The Politics of Attention: How Government Prioritizes Problems*. Chicago: University of Chicago Press.

John, Peter. "New Directions in Public Policy: Theories of Policy Change and Variation Reconsidered." Grenoble, 2013.

John, Peter. *Analyzing Public Policy*. Abingdon, Oxon; New York: Routledge, 2012.

Kingdon, John W. *Agendas, Alternatives and Public Policies*, 2nd Edition, Boston: Longman, 2011

McCool, Daniel. "The Subsystem Family of Concepts: A Critique and a Proposal", *Political Research Quarterly*, 51(2), 551-570

Pralle, S. B. (2009). "Agenda-setting and Climate Change." *Environmental Politics* 18(5): 781-799.

Sabatier, P. "Knowledge, Policy-Oriented Learning, and Policy Change." *Knowledge: Creation, Diffusion, Utilization* 8, no. 4 (1987): 649–92.

Sabatier, P. A. "An Advocacy Coalition Framework of Policy Change and the Role of Policy-Oriented Learning Therein." *Policy Sciences* 21, no. 2/3 (1988): 129–68.

Sabatier, P. A. "The Advocacy Coalition Framework: Revisions and Relevance for Europe." *Journal of European Public Policy* 5, no. 1 (1998): 98–130.

Sabatier, P. A. "Toward Better Theories of the Policy Process." *PS: Political Science and Politics* 24, no. 2 (1991): 144–56.

Sabatier, P. A., and N. Pelkey. "Incorporating Multiple Actors Ands Guidance Instruments into Models of Regulatory Policymaking: An Advocacy Coalition Framework." *Administration & Society* 19, no. 2 (1987): 236–63.

Sabatier, P., H. Jenkins-Smith, P. A. Sabatier, and H. C. Jenkins-Smith. "The Advocacy Coalition Framework: Assessment, Revisions, and Implications for Scholars and Practitioners." In *Policy Change and Learning: An Advocacy Coalition Approach*, 211–36. Boulder: Westview, 1993.

Sabatier, Paul A, and Christopher . M. Weible, eds. *Theories of the Policy Process*. Boulder: Westview Press. Accessed December 27, 2014. http://westviewpress.com/books/theories-of-the-policy-process/.

Schlager, Edella, and William Blomquist. 1996. "Emerging Political Theories of the Policy Process: Institutional Rational Choice, the Politics of Structural Choice, and Advocacy Coalitions." Political Research Quarterly 49 (September): 651–672.

Sidney, Mara (2006) "Policy Formulation and Policy Tools," 2006, in Frank Fischer, Gerald Miller, and Mara Sidney, Eds., Handbook of Public Policy Analysis, Taylor & Francis.

Stone, Deborah A. 1989, "Causal stories and the formation of policy agendas" *Political Science Quarterly* 104(2), 281-300

Voss, Jan-Peter and Arno Simons. "Instrument constituencies and the supply-side of policy innovation" Paper presented at International Workshop*: Designing Optimal Policy Mixes: Principles and Methods.* Lee Kuan Yew School of Public Policy, National University of Singapore. 29th February – 1 March 2013, Singapore

Voß Jan-Peter & Arno Simons (2014): Instrument constituencies and the supply side of policy innovation: the social life of emissions trading, Environmental Politics, DOI: 10.1080/09644016.2014.923625

Weible, Christopher M, Paul A Sabatier, Hank C Jenkins- Smith, Daniel Nohrstedt, Adam Douglas Henry, and Peter deLeon. "A Quarter Century of the Advocacy Coalition Framework: An Introduction to the Special Issue." *Policy Studies Journal* 39, no. 3 (August 1, 2011): 349–60. doi:10.1111/j.1541-0072.2011.00412.x.

Weible, Christopher M., Paul A. Sabatier, and Kelly McQueen. "Themes and Variations: Taking Stock of the Advocacy Coalition Framework." *Policy Studies Journal* 37, no. 1 (February 2009): 121–40. doi:10.1111/j.1541-0072.2008.00299.x.

Zahariadis, N. "The Multiple Streams Framework: Structure, Limitations, Prospects." In *Theories of the Policy Process*, edited by Paul Sabatier, 65–92. 2nd ed. Boulder: Westview, (2007).

Anthony R. Zito (2001) Epistemic communities, collective entrepreneurship and European integration, Journal of European Public Policy, 8:4, 585-603, DOI: 10.1080/13501760110064401