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NARRATIVE POLICY FRAMEWORK: NARRATIVES AS HEURISTICS IN THE POLICY PROCESS[1]

MARCELA VESELKOVÁ

Abstract: This paper discusses how the assumption that individuals and policy makers do not automatically update their prior beliefs with the new information has shaped policy process theories. Rather than the rational *homo economicus*, humans are *homo narrans*: they are more likely to respond to narratives than to expert-based information. The assumption that humans are storytellers is central to the Narrative Policy Framework, which (1) examines the strategic construction of policy narratives by competing coalitions and (2) offers improved measures of narrative elements, strategies, etc., which provide insights into how information is processed by individuals and entire organizations.

Key words: narrative policy framework; bounded rationality; policy process theories.

Introduction

Humans are *homo narrans* and narratives play a central role in how they process information, communicate, and reason (McBeth, M. D. Jones, & Shanahan, 2014, p. 229). Narratives are particularly important in the case of "wicked problems" (Rittel & Webber, 1973), such as climate change or poverty, which are characterized by an intense value-based conflict between policy coalitions and that resist resolution by appealing to facts (Schon & Rein, 1994, p. 4). This assumption is supported by the growing number of empirical evidence from fields such as psychology (Kahneman, 2011), health studies (Bekker et al., 2013; Freed, Clark, Butchart, Singer, & Davis, 2011; Nyhan, Reifler, Richey, & Freed, 2014) and risk perception theories (Golding, Krimsky, & Plough, 1992; Kahan & Braman, 2006; Kahan, Braman, Gastil, Slovic, & Mertz, 2007).

The Narrative Policy Framework (NPF) therefore starts with the assertion that the power of policy narratives is worth understanding, especially in the context of the growing importance of policy marketing and the real-time policy communication driven by twenty-four-hour news channels and social media (McBeth et al., 2014, p. 225). The NPF attempts

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to measure how advocacy coalitions compete to present the most compelling narrative and whether these narratives influence beliefs at an individual level.

The rest of the paper is organized as follows. The following section discusses the assumption that individuals are boundedly rational in the dominant theories of the policy process, i.e. Punctuated Equilibrium Theory (PET), Multiple Streams Approach (MSA) and Advocacy Coalition Framework (ACF). It then moves to the NPF, which provides improved measures of heuristics and can easily be incorporated into existing theories of the policy process. Section 3 reviews the NPF measures of narrative elements and strategies, as well as hypotheses about the role of narratives at both the individual and the policy subsystem level. Section 4 reviews the NPF applications at the micro-level which deliberately examine the assumption that boundedly rational individuals pay more attention to narratives than to expert information. The final section is the conclusion.

The assumption of bounded rationality in theories of the policy process

If all individuals and policy-makers were perfect Bayesians, they would update their prior beliefs when the new information was at their disposal. However, learning is not fully rational. People often ignore information dissonant with their preexisting beliefs (Weible & Sabatier, 2009, p. 196). Herbert A. Simon (1955, 1979) therefore proposed an alternative model of learning in which decision makers are boundedly rational, i.e. limited by cognitive abilities and resources. In Simon's view, decision makers should be viewed as satisfiers, rather than utility maximizers. In other words, they settle for the most acceptable alternative.

The view that individuals are limited in their mental abilities to process incoming information is widely supported by laboratory experiments. In their pioneering work, Kahneman and Tversky attempted to obtain a "map of bounded rationality, by exploring the systematic biases that separate the beliefs that people have and the choices they make from the optimal beliefs and choices assumed in rational-agent models" (Kahneman, 2003, p. 1449). One line of their research focused on heuristics or mental shortcuts that help people find adequate, though often imperfect, answers to difficult questions (Kahneman, 2011, p. 98). When confronted with a problem, individuals may choose to limit either the construction of the problem space or the search for solutions. For example, they may substitute a hard question, such as "How should financial advisers who prey on the elderly be punished?" with a related but simpler question, such as "How much anger do I feel when I think of financial predators?" Kahneman's research thus posits two systems of information processing: system 1, which operates automatically and quickly and system 2, which requires conscious reflection and calculation (hence "thinking fast and slow").

The wealth of heuristics observed in individual decision-making begs a question: how do boundedly rational individuals interact in collective decision-making? Do the quick, biased, emotional decisions of individuals cumulate in organizational decision-making? The issue of information processing within organizations is addressed by all three dominant policy process theories, Punctuated Equilibrium Theory (Baumgartner & B. D. Jones, 1993), Multiple Streams Approach (Kingdon, 1984) and Advocacy Coalition Framework (Sabatier, 1993).

Kingdon's Multiple Streams Approach (1984) explains agenda setting and decision making under conditions of ambiguity. There are three types of processes in agenda-setting:

problems, policies, and politics. These streams are largely separate and are coupled by policy entrepreneurs when the "window of opportunity" opens. The Multiple Stream Approach (MSA) rejects the notion of rational decision-making and assumes:

- ambiguity – while more information may (or may not) reduce uncertainty (Wilson, 1989, p. 228), more information does not reduce ambiguity (Zahariadis, 2007, p. 66)
- bounded rationality – what Kingdon's concept and Simon's bounded rationality share is a focus on attention and search activities: because of cognitive limitations, individuals can focus on only one issue at a time (Zahariadis, 2007, p. 68)
- limited time – which forces people to make choices before their preferences are clear (Cairney, 2012, p. 240).

The expert-based information is placed in two of the streams. In the problem stream, the expert-based information is used to translate a policy issue into a policy problem. However, this new information may be overestimated or ignored by actors. Furthermore, problems receive attention based on how they are identified by actors competing for limited attention. This involves a process of issue framing, assigning causal responsibility or strategic choice of one measure of a policy problem over others (Kingdon, 1984, pp. 98-9). In the policy stream, problems are linked with solutions. But whereas attention shifts from one policy issue to another relatively fast, policy solutions take time to develop. Policy actors therefore have widely-accepted solutions ready in anticipation of future problems (Cairney, 2012, pp. 234-6).

Punctuated Equilibrium Theory extends the agenda-setting theories to explain why generally stable political processes are occasionally disrupted by short but intense periods of policy change (Baumgartner & B. D. Jones, 1993). Like the MSA, it builds on the assumption that individuals are boundedly rational. However, B.D. Jones (2001) does not believe that there is a direct bridge between information processing at the individual and organizational levels. Instead, he argues that formal institutions help overcome individual behavioral limitations by coordinating the activities of the many and in this way expand individual capacities to solve problems (B. D. Jones, 2001, p. 82). He gives an example in which the limits on learning modern medicine are expanded through consultations with physicians who may in turn consult other experts to help them diagnose the health problem and propose a treatment. Similarly, parliaments, political parties, committees and other institutions will work reasonably well in repetitive situations despite individuals being boundedly rational. However, organizations are not fully adaptive to new information. B. D. Jones (2001) points out that members of an organization may continue to apply organization routines even when they should be activating problem-solving approaches. During periods of stability, they neglect information because they identify cognitively and emotionally with the existing solutions to a problem. Periods of stability are disrupted by periods of intense attention given to a certain policy issue, the framing of the problem and mobilization of new supporters.

The Advocacy Coalition framework was developed by Sabatier and Jenkins-Smith (1993) to deal with wicked problems involving substantial goal conflicts, important technical disputes and multiple actors from several levels of government (Hoppe & Peterse, 1993). Drawing on the belief system literature of policy participants (March & Simon, 1958; Putnam, 1976), the ACF views a hierarchical belief system as the most fundamental heuristic

in policy decision-making. At the top tier are deep core beliefs (ideology) or normative assumptions about the relative importance of liberty and equality, the relative priority of the welfare of different groups, or assumptions about whether to accept market outcomes or intervene in the economy. The deep core beliefs are the product of socialization and therefore beyond direct empirical challenge; they are akin to a religious conversion (Sabatier, 1993; Sabatier & Jenkins-Smith, 1999). Policy learning is therefore likely to happen over long periods of time (Bennett & Howlett, 1992; May, 1992; Sabatier, 1987) or at the level of policy core beliefs or secondary beliefs.

Narrative Policy Framework (NPF) is the latest theory of the policy process, which assumes that individuals are boundedly rational. Drawing on literature from a number of fields such as psychology (Kahneman, 2011), risk perception theories (Kahan & Braman, 2006; Kahan et al., 2007) and policy process theories (B. D. Jones, 2001; Shanahan, M. D. Jones, & McBeth, 2011, p. 557, fn 4), the NPF assumes individuals to be *homo narrans*, who are more likely to respond to narratives than to expert-based information. M. D. Jones, McBeth, and Shanahan (2014, pp. 11-13) posit the following postulates for the NPF model of the individual:

1. Individuals are boundedly rational, i.e. make decisions using a limited amount of information and under time constraints and consequently settle for an acceptable alternative.
2. Individuals rely on mental shortcuts (known as heuristics) to process information and to facilitate decision making.
3. Emotion—or "affect" highlights what is important and sets priorities (B. D. Jones, 2001, pp. 73-74) by assigning positive or negative values to stimuli.
4. There are two types of cognition—an involuntary and automatic System 1 and a conscious and focused System 2 (see Kahneman, 2011).
5. All concepts and objects in public policy are potentially affect laden (Lodge & Taber, 2005; Morris, Squires, Taber, & Lodge, 2003). System 1 tends to assign affect to unfamiliar concepts and objects based on the individuals existing understanding of the world.
6. Individuals suffer from confirmation and disconfirmation bias. This refers to situations where individuals accept evidence that is in line with their prior beliefs and reject evidence that is not (Taber & Lodge, 2006).
7. Individuals selectively expose themselves to sources and information that are congruent with what they already believe (Taber & Lodge, 2006).
8. Individuals use selective exposure, as well as confirmation and disconfirmation bias to protect their prior identity (Kahan et al., 2007).
9. Individuals process information within social, professional and cultural networks, which help them to assign affect to social and political concepts and objects (Kahan & Braman, 2006).
10. Narrative is the preferred means for organizing thoughts, memories, affect and other cognitions (Berinsky & Kinder, 2006; M. D. Jones & Song, 2014), and as such it is the primary heuristic by which individuals make sense of the world (Polkinghorne, 1988, p. 1).

Based on this model, the NPF argues that policy narratives will play a crucial role in the policy process. An examination of policy narratives will therefore shed light on belief

systems operating as an important heuristic in information processing (M.D. Jones et al., 2014, pp. 15-16). At the same time, the NPF is concerned with strategic manipulation and examines how individual actors, media or groups strategically construct policy narratives to achieve their goals or, in other words, how they exploit the irrationalities of individuals (McBeth & Shanahan, 2004).

The NPF's contribution to existing research on the role of heuristics in the policy process is twofold. First, the NPF can be incorporated into existing framework and theories. Narratives can be viewed as a missing link between external shocks and policy change in the Punctuated Equilibrium theory, as a tool used by policy entrepreneurs to merge streams in multiple streams theory, or as containers of stable core policy beliefs, and as political strategies used by coalitions to expand or contain the conflict within the Advocacy Coalition Framework (McBeth, Shanahan, Arnell, & Hathaway, 2007, p. 90; Nowlin, 2011, p. 53; Shanahan, M.D. Jones, McBeth, & Lane, 2013, p. 455).

At the same time, the NPF offers improved measures of heuristics, such as "a way for policy scholars to empirically measure how policy relevant information is transmitted and interpreted by both policy elites and the mass public" (Nowlin, 2011, p. 53). So far, the NPF has made important contributions to the Advocacy Coalition Framework, broadening it by "marrying bounded rationality and belief systems with an interpretation of social construction in assessing how coalitions engage in strategic framing" (Weible et al., 2011, p. 353). The focus centers on measures of ACF concepts such as belief systems, policy learning, public opinion and strategy (Weible et al., 2011, p. 353). The following section discusses these measures in more detail.

Narrative policy framework: improved measures of narratives

NPF scholars were not the first to examine the role of policy narratives in the policy process. The "argumentative turn" in policy analysis (see Fischer & Forester, 1993) began with the recognition that public policy constructed through language is the product of argumentation (Fischer & Gottweis, 2012, p. 2). Since the late 1980s, a number of scholars have studied the role of narratives in public policy (e.g., Roe, 1994; Stone, 1989). However, these postpositivist approaches to the study of the policy process were criticized by proponents of the traditional social science approach to hypothesis testing. Sabatier (2000, p. 183) argued that narrative policy analysis failed to provide clear concepts and falsifiable hypotheses and as such "demonstrated very little concern with being sufficiently clear to be proven wrong".

The NPF addresses the criticism of postpositivist approaches to the study of narratives in two ways. First, it demonstrates that policy elements, such as characters or plots can be reliably quantified (McBeth, Shanahan, & M.D. Jones, 2005). It utilizes the seminal work of Deborah Stone (1989, 2001) who argued that narratives are more powerful than evidence-based knowledge in shaping how people view policies. Stone focuses on the various forms these stories take. She is particularly interested in the use of narratives to produce fact bias; more precisely, she seeks to understand how "political actors use narrative story lines and symbolic devices to manipulate so-called issue characteristics, all the while making it seem as though they are simply describing facts" (Stone, 1989, p. 283). Every policy narrative is a causal story (intentional, inadvertent, mechanical or accidental) that does not merely explain

how the world works but assigns responsibility for problems. Political actors use these causal stories to assign blame, to identify oppressors and their victims and to claim the right to intervene. Political actors will therefore be more interested in crafting stories with relatively strong, pure positions—accident and intent—rather than relatively weak, mixed positions—mechanical and inadvertent cause.

Building on Stone (1989, 2001), the NPF argues that a policy narrative includes a (1) clear policy stance and (2) at least one character who is cast as a hero or a potential fixer of the problem, a villain who is causing the problem or a victim who is harmed by the problem (Shanahan et al., 2013, p. 457). Contrary to the postpositivists, who view the form and content of each narrative as unique, the NPF embraces a structuralist interpretation of narratives, asserting that consistent policy components are used across competing narratives (McBeth et al., 2014, p. 228). These components include (1) narrative elements (the use of story type, causal mechanism, policy solution, characters and the science), (2) narrative strategies (diffusion or concentration of costs and benefits, the use of condensation symbols, policy surrogates and the devil shift) and (3) policy beliefs, which are operationalized through narrative elements, such as different use of heroes and victims (Shanahan et al., 2013).

Consider the following example. In their study of Cape Wind's proposal to install wind turbines off Nantucket, Shanahan et al. (2013) use content analysis to examine public consumption documents, such as newsletters, editorial opinion pieces, speeches and reports disseminated in the public domain by Pro-Wind and Anti-Wind coalitions (Shanahan et al. 2013, p. 457). The Anti-Wind coalition identified the victim as Native American Tribes whose sacred lands would be destroyed, whereas the Pro-Wind coalition cast the Koch Brothers as villains who value their view more than clean energy for the rest of us. Finally, Cape Wind and Associates were depicted as heroes determined to fix the problem because they wished to site the wind farm off Cape Cod. Policy beliefs are then identified from the use of characters in the policy narratives and calculated to achieve a - 1.00 to + 1.00 scale. Shanahan et al. (2013, pp. 465-6) test three distinct belief systems: The Polis-Market Belief, Nature-Human Relationship, and Conservation-Business Belief. The individual vs. public or common interests policy belief was anchored in Stone's (2001) polis vs. market model or self-interests vs. public or common interests and calculated using victims cast as individuals (rate-payer, voter) and victims cast as groups (sacred grounds, the environment).

The human–nature policy belief was calculated using human and wildlife/environment victims and measures the extent to which competing coalitions harbor biocentric or anthropocentric values. Finally, the business–conservation policy belief was calculated using heroes cast either as conservationist or pro-business and is centered on the jobs versus environment belief. Statistically significant differences across each coalition's policy beliefs indicate the "wickedness" of the policy problem.

The second contribution of the NPF to the existing literature is related to a number of testable and falsifiable hypotheses at both the individual and policy level (see M. D. Jones et al., 2014, p. 14, 17-18). At the policy or meso level, the NPF scholars proposed a number of hypotheses related to the narrative strategies, policy beliefs and policy learning (see M. D. Jones et al., 2014, pp. 17-18). The first set of hypotheses is related to the scope of the conflict, i.e. groups or individuals will use narrative elements to (1) expand the conflict to get others

involved and increase the size of their coalition or (2) contain the conflict to discourage others from getting involved (M. D. Jones & McBeth, 2010; McBeth et al., 2007; Shanahan et al., 2011; Shanahan et al., 2013):

1. Identifying winners and losers: to expand the issue and mobilize opposition to change the status quo, a coalition will portray itself as losing; to maintain the status quo, the coalition will portray itself as winning.
2. Construction of benefits and costs: to expand the issue, the coalition will describe the opposing policy alternative as diffusing costs and concentrating benefits, to contain the issue, the coalition will describe its own policy solution as concentrating costs and diffusing benefits.
3. Condensation symbols: losing groups use condensation symbols more often than winning groups to expand the conflict.
4. The policy surrogate: losing groups are more likely to entangle policy issues in larger, emotionally charged debates to expand the scope of the policy issue.

The NPF scholars also found support for the "Devil Shift" hypothesis (see Sabatier et al., 1987), which refers to a high-conflict situation in which political actors overstate the power and "evilness" of their opponents and understate their own power (Shanahan et al., 2011; Shanahan et al., 2013). The devil shift is measured as the significantly higher use of villains in the policy narratives compared to the competing coalition. Finally, it was hypothesized that advocacy coalitions with stronger bonds are more likely to influence policy outcomes (Shanahan et al., 2011; Shanahan et al., 2013). At the meso-level, NPF scholars are thus concerned with the ways belief systems influence the strategic construction of the policy narratives.

At the micro-level, the NPF is concerned with how narratives shape individual opinions about the policy issue. In contrast to the above-discussed theories of the policy process, which merely assume individuals to be boundedly rational, the NPF uses experimental and within-subjects designs to examine this assumption (Sabatier, 2007). So far, the following hypotheses have been tested (see M. D. Jones, McBeth, & Shanahan, 2014, p. 14):

H1: Congruence and Incongruence: individuals are more likely to be persuaded by a narrative, which is similar to their own understanding of the world (Lybecker, McBeth, & Kusko, 2013; McBeth, Shanahan, Hathaway, Tigert, & Sampson, 2010; M. D. Jones & Song, 2014).

H2: The Power of Characters: the way narrative characters (heroes, victims, and villains) are portrayed is more likely to influence opinions than expert information (M. D. Jones, 2010, 2013).

H3: Narrative Transportation: the more a reader becomes immersed in a story, the more likely the narrative will persuade him (M. D. Jones, 2014).

The existing NPF research provides persuasive evidence that individuals are boundedly rational. McBeth, Lybecker, and Garner (2010) and Lybecker et al. (2013) found that individuals were more likely to support recycling efforts if the issue was congruent with their beliefs (H1). Both conservatives and liberals supported conservative frames of recycling, whereas liberal frames were supported only by liberals. Furthermore, individuals with a more engaged view of citizenship (participatory, global and committed to social justice) supported the engaged and duty-based recycling frames, whereas duty-based citizens (voting, obeying

the law and proud of their nation) supported only duty-based recycling frames. Similarly, Jones and Song (2014) found that individuals engage in confirmation and disconfirmation bias when exposed to culturally nuanced story frames and filter information embedded in stories in accordance with their prior beliefs. As a result, respondents are better at cognitively organizing information from culturally congruent stories. Regarding H2, M. D. Jones (2013) found that the character of the hero was most important in influencing citizen perceptions of climate change. So far, there is little evidence of H3. M. D. Jones (2014a) did not find that narratives are more likely to persuade individuals about climate change than fact lists.

NPF applications at the micro-level

Past applications of the NPF have focused on environmental issues (see McBeth, Shanahan, Hathaway et al., 2010; M. D. Jones, 2013; Lybecker et al., 2013; Shanahan et al., 2013). However, the content of each story is by definition unique, i.e. environmental narratives cannot be morphed into a narrative about an unrelated topic (M. D. Jones et al., 2014, p. 5). To moderate the problem of narrative relativity, M. D. Jones and McBeth (2010) propose populating stories with content derived from tried and tested belief system measures such as cultural theory (Thompson, Ellis, & Wildavsky 1990), ideology (Barker & Tinnick, 2006; Lakoff, 2002), cultural cognition (Kahan & Braman, 2006) or moral psychology (Haidt, 2007). Context independent narrative elements such as characters and settings can then be populated by content already imbued with generalizable meaning (M. D. Jones & Song, 2014, p. 450).

The following example illustrates how the NPF utilizes cultural theory (CT). CT measures belief systems along grid and group dimensions (see Thompson et al., 1990). The former measures levels of group interaction, the latter the degree to which these groups are expected to constrain beliefs and behavior. Each quadrant produced by the two dimensions represents a distinct view of nature: fatalist, hierarchic, individualist, and egalitarian. The culturally specific climate change policy narratives are listed in Table 1. M. D. Jones (2013, 2014) and M. D. Jones and Song (2014) used these stories to construct experimental narrative treatments and test the influence of the narrative.

In M. D. Jones and Song (2014), each treatment story has the same stymied progress plot (Stone, 2001): climate change is real, some progress toward dealing with it has been made; however, that effort has now been halted by the other two cultural types. For example, the egalitarian story frame identified the Club of Rome as a hierarch villain and the Cato Institute as an individualist villain. Every story offers also the favored policy solution of that specific cultural type, such as nuclear energy favored by hierarchs or market mechanisms favored by individualists. Respondents (who were identified as a certain cultural type based on a survey) are then randomly assigned to read one of the experimental treatments or a control list consisting of general information about climate change and the projected consequences. Following the exposure, the respondents are asked to sort words or phrases related to climate change into categories. The findings of this study indicate that story frames matter for cognition to occur in line with a motivated reasoning model of the individual: both egalitarians and individualists are better at cognitively organizing information from culturally congruent stories, a clear indication of confirmation bias. M. D. Jones (2013)

Table 1. Climate change narrative summary

	Setting	**Characters**	**Plot**	**Moral**
	fixed referents within the story that few contest (Stone, 2001)	a villain who harms a victim and a hero who offers a solution to either prevent or stop the victim from being harmed	ties characters with the setting and usually assigns blame and/or causality (Stone, 1989)	a policy narrative culminates in a policy solution (Stone, 2001)
Profligacy: An Egalitarian Story	a fragile world where humans have overstepped their bounds	profit-driven corporations are the villains, groups that seek the elimination of greenhouse gasses are heroes	selfishness has driven the environment to the brink of destruction	humankind is doomed if it does not correct for past mistakes; policy solution: renewable resources
Lack of Global Planning: A Hierarchical Story	a world where humans have not properly managed economic and societal systems to allow for sustainable growth	impartial scientists and the government that employs them are heroes, the Cato Institute is a villain	runaway markets have led to excessive economic and population growth	increased scientific management and governmental intervention will curtail climate change; policy solution: expert-driven solutions like nuclear energy
Business as Usual: An Individualistic Story		groups such as the Cato Institute and organizations like the Wall Street Journal are heroes, the Club of Rome is the villain	global climate change story was fabricated by generally na ve but dangerous idealists (egalitarians) and self-interested government representatives (hierarchs)	allow market forces to move naturally as individuals compete and innovate to create new technologies that reduce carbon emissions and allow adaptation; policy solution: market solutions such as cap-and-trade on GHGs

Source: M. D. Jones (2014a, p. 652).

examines whether narrative communication structures influence individual perceptions of risk and policy preferences related to climate change. Here, the setting and the plot of the story, as well as the victim are held constant. However, heroes and villains, as well as the policy solution championed by the hero character, are experimentally manipulated. Each narrative thus assumes two villains, who are heroes in one of the opposing narratives. The control narrative presents the same information as the setting section of the treatments but bulleted in list form. The findings suggest that narrative structure plays a prominent role in shaping policy preferences regarding climate change and character affect. Respondents showed higher levels of affect for the hero and lower levels of affect for the villain after being exposed to a cultural narrative. This implies that narrative structure helps people form initial emotional assessments of characters, which then play an important role in helping people support the arguments imbedded in the narrative (M. D. Jones, 2013, p. 22).

The following study illustrates the positivist approach of the NPF to the study of narratives. M. D. Jones (2014a) conducted a micro-level analysis of the impact of policy narratives about climate change on individual opinion. He was particularly interested in narrative transportation or the process by which people become involved in a story. As people experience strong emotions, they may forget about the real-world facts that contradict assertions made by the narrative and experience a belief change (M. D. Jones, 2014a, p. 648). To test the narrative transportation hypothesis, M. D. Jones conducted the following experiment. He randomly assigned respondents to one of four experimental tracks. The first group (or the control group) was asked to read lists of facts about climate change taken from the Intergovernmental Panel on Climate Change (2007) report. The remaining three groups were presented with culturally specific climate change policy narratives. As in M.D. Jones (2013), approximately one quarter of each cultural narrative varied in terms of heroes, villains, and policy solutions. The findings do not support the idea that narratives are any more transportive than fact lists in directly persuading respondents to accept specific climate change policies. Nevertheless, exposure to the narratives influenced affect for hero characters, which indirectly influences the persuasiveness of a story (see also M. D. Jones, 2014b).

Narrative policy framework and policy communication

This paper discussed the assumption that individuals rely on heuristics or mental shortcuts when processing incoming information. Specifically, the paper focused on the Narrative Policy Framework, a quantitative, structuralist, and positivist approach to the study of policy narratives (M. D. Jones & McBeth, 2010, p. 330), which offers methodological tools for studying how individuals process policy-relevant information (M.D. Jones & McBeth, 2010; McBeth et al., 2007; McBeth et al., 2010; Shanahan et al., 2013).

The contribution of the NPF is twofold. First, the NPF operationalizes narratives and provides improved measures of narrative elements, strategies, etc., which provides insights into how the information is processed by both individuals and entire organizations. Second, in contrast to dominant theories of the policy process, which merely assume that individuals are boundedly rational, the NPF deliberately tests this assumption. The existing research provides evidence that individuals engage in confirmation and disconfirmation bias, i.e. pay more

attention to information which is in line with their existing beliefs and reject information, which contradicts their prior beliefs (Lybecker et al., 2013; McBeth et al., 2010; M. D. Jones & Song, 2014). Furthermore, populating the narratives with heroes and villains makes people more responsive to arguments in the policy narratives than to simple fact sheets (M. D. Jones, 2013). These findings have important implications for the political communication of so-called "wicked problems" (Rittel & Webber, 1973), which are characterized by high uncertainty, complexity, and polarization. In other words, the way policy makers construct their policy narratives matters a lot for effective policy communication. The strategic construction of policy narratives to achieve policy goals is the main focus of NPF scholars at the group or coalitional level. NPF scholars examine how coalitions use narratives to attract more members or, on the contrary, to discourage greater involvement in the policy issue (McBeth et al., 2007) and how they reconfigure policy narrative elements to alter the policy landscape without any new information or events (Shanahan et al., 2011). The NPF's focus on the strategic construction of policy narratives by competing coalitions and their impact on the public opinion thus offers promising contributions to the theorizing about the policy process.

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Faculty of Social and Economic Sciences,
Institute of Public Policy,
Comenius University Bratislava,
Mlynské luhy 4,
821 05 Bratislava,
Slovakia
Email: marcela.veselkova@gmail.com