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RESEARCH ARTICLE

The narrative properties of ideology: the adversarial turn and climate skepticism in the USA

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Abstract A central concern in policy studies is understanding how multiple, contending groups in society interact, deliberate, and forge agreements over policy issues. Often, public discourse turns from engagement into impasse, as in the fractured politics of climate policy in the USA. Existing theories are unclear about how such an "adversarial turn" develops. We theorize that an important aspect of the adversarial turn is the evolution of a group's narrative into what can be understood as an ideology, the formation of which is observable through certain textual-linguistic properties. Analysis "of" these narrative properties elucidates the role of narrative in fostering (1) coalescence around a group ideology, and (2) group isolation and isolation of ideological coalitions from others' influence. By examining a climate skeptical narrative, we demonstrate how to analyze ideological properties of narrative, and illustrate the role of ideological narratives in galvanizing and, subsequently, isolating groups in society. We end the piece with a reflection on further issues suggested by the narrative analysis, such as the possibility that climate skepticism is founded upon a more "genetic" meta-narrative that has roots in social issues far removed from climate, which means efforts at better communicating climate change science may not suffice to support action on climate change.

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Introduction

> With all of the hysteria, all of the fear, all of the phony science, could it be that man-made global warming is the greatest hoax ever perpetrated on the American people? It sure sounds like it (U.S. Senator James Inhofe).[1]

> Rarely do American Presidents display the raw willfulness that President Obama did Monday in rolling out his plan to reorganize the economy in the name of climate change. …Meantime, states can help the resistance by refusing to participate. The Clean Air Act is a creature of cooperative federalism, and Governors have no obligation to craft a compliance plan. The feds will try to enforce a fallback, but they can't commandeer the states, and they lack the money, personnel and bandwidth to overcome a broad boycott. Let's see how much "clean power" the EPA really has.[2]

It is said that policy issues do not manifest themselves automatically—rather, they have to be produced in narrative form and reproduced in communicative contexts (Gubrium 2005; Ingram and Schneider 2015). But narratives can be challenged, and counter-narratives can arise in a competition for the public sphere. The issue of climate change policy in the USA is a case in point. Despite near consensus among a majority of the world's foremost scientists (Oreskes 2004; Field et al. 2014), the conservative movement has managed to craft a viable counter-narrative that has hitherto stymied progress on climate change policy on a national level (McCright and Dunlap 2003, 2010). The subject of our investigation is the strength of this counter-narrative, which might be called climate skepticism, and its ability to bind together effective political coalitions.[3] The issue of policy impasse has been an important theme in policy studies (Busenberg 1999; Repetto 2001; Lutzenhiser 2001); what we add to this is a focus on the specific role of narrative in this phenomenon.

In a pluralist political system, agreeing upon and implementing policy initiatives require alignment among contending groups around common policy directions, perhaps forging compromise agreements. Stated another way, policymaking can require constructing common or overlapping meta-narratives among groups whose individual narratives can widely differ (Grafton and Permaloff 2005a, b; Boswell 2013; Lejano and Taufen Wessells 2006; Leong 2015). Scholars of narrative policy analysis emphasize how contending groups might find meta-narratives that refocus discussions from conflict to communication (Roe 1994; Schön and Rein 1994; Hampton 2009). But sometimes a group's narrative can become so recalcitrant and reactionary so as to preclude positive deliberation with other groups. As Howlett and Rayner point out, narratives can prove inflexible and invariant (2006). This can happen when such a narrative takes on the form of a rigid ideology that prevents dialogue over even seemingly undeniable problems. Ideologies, while powerful instruments for maintaining group identity, can blind a group to the positions and perspectives of others. We are not referring to situations where groups disagree over the

[1] Speech given to the US Senate Committee on the Environment and Public Works on July 28, 2003.

[2] "Climate-Change Putsch," Wall Stree Journal, Opinion/Review & Outlook section, Aug. 3, 2015, accessed at http://www.wsj.com/articles/climate-change-putsch-1438642218 on Aug. 11, 2015.

[3] We do not devote much discussion to the political roots of climate skepticism, which is the subject of a wealth of literature that we are not able to explore herein (some recent literature include Bohr 2016; Bousallis and Coan 2016; Farrell 2016). See also Jacques (2009) who coins the phrase "environmental skepticism" to refer to a counter movement, which claims that global environmental problems have been either highly exaggerated or purposely fabricated.

meaning or course of policy, which is normal in a pluralist system, but rather a condition where rejection of the other side is so complete that no conversation is allowed. In the case at hand, this involves the wholesale rejection of an entire field of science. Parties take extreme positions such that, even while political scientists might rightly consider logrolling as degenerate forms of negotiation (e.g., Warren and Mansbridge 2013), such bargaining cannot even occur with ideologically driven climate skepticism. And the most basic consensus building actions, such as collaborative fact-finding (Susskind et al. 1999; Laws and Forester 2007), become impossible.

The above quote from Senator Inhofe illustrates the dynamic of climate discussions in the USA, which, at the national level, reflects little constructive dialogue and much legislative gridlock. But how does a polity become so divided? When and why does dialogue shift away from constructive exchange to polarized intransigence? As we argue below, one key signal of such an "adversarial turn" is when the discourse emerging from one side (or the other) becomes ideological. It is when a group's narrative coalesces into a coherent, foundational ideology that dialogue turns into polemic.

The formation of an ideology can be seen in certain textual-linguistic properties of a coalition's narrative. Below, we work out what we mean by ideology, and how to precisely identify those textual-linguistic features that distinguish ideological narratives from other narratives. Our intent in this paper is to formulate an analytic that allows us to evaluate how (1) the textual-linguistic properties of a group's narrative can signal the shift toward ideological discourse, and (2) how the narrative is consistent with evolution of groups into strong self-maintaining and other disregarding coalitions, preventing constructive dialogue. Our analytic will show how the roots of polarization and policy impasse can, at least in part, be found in the narrative itself.

Gieve and Provost wrote "policy change occurs because coalitions of actors are able to take advantage of political conditions to translate their strong beliefs about policy into ideas, which are turned into policy" (2012, 61). But the scholarship on advocacy coalitions (Sabatier 1988), discourse coalitions (Hajer 1995; Dodge and Lee 2015) and policy networks (Rhodes 1990) say little about how beliefs become strong enough to so completely reinforce group identity and insulate it from others that polarization and impasse result. We propose that this "adversarial turn," which can involve coalition coalescence (via enhanced group identity) and coalition isolation (via self-imposed alienation from other groups), can be traced to the development of a group narrative into an ideology, and this can be seen in specific textual-linguistic properties of the narrative.

The questions that concern us are as follows:

- When does a coalition's narrative turn into an ideology, and how do we recognize this?
- Can we find manifestation or origins of a group's strong identity and self-exclusion in the properties of the group's narrative?
- What are the implications for public deliberation over pressing social issues (beginning with climate change)?

To answer these questions, we examine ideologies using a narrative analytic approach that treats ideologies as narratives. Clearly, ideologies can be represented as narratives, since a coherent belief set can generally be rendered in the form of a story (Mumby 1987). Narrative approaches have proved to be powerful ways to characterize group identity, as well as the ideologies that often bind a group together (Enriquez 2014; Polletta 1998). Our approach offers a framework that recognizes differing narrative properties in ideological systems of thought and, distinguishes one system from another, to understand how they fare in the policy realm.

We begin by problematizing ideology and the adversarial turn in policymaking. We then discuss how narrative concepts can complement existing theories by elucidating the properties of ideological versus non-ideological narratives, and how they support analysis of coalition (1) coalescence and (2) isolation. We then derive a set of corresponding criteria for empirical analysis and illustrate their use in analyzing narratives around climate change. Part of the task is demonstrating how beliefs evolve into ideology. We end with a reflection on the potential implications of this theoretical development for understanding policy conflicts. As we discuss in the conclusion, narrative analysis can more clearly delineate why intransigence over climate change may be founded upon more fundamental social polarization (see also Dunlap, McCright and Yarosh 2016).

The adversarial turn

An enduring interest in policy studies is understanding how coalitions interact in the political arena and translate ideas and beliefs into policy and administrative action. Often, this involves processes of deliberation and social learning (e.g., Pahl-Wostl 2009; Rietig 2016). However, the literature has focused less on how, sometimes, ideas and beliefs come to be so coherent and foundational as to preclude the formation of agreements capable of resisting contestation during implementation. This is a critically important line of inquiry. Even if ideological narratives do not widen a coalition into a majority, a minority can attract a sufficient number of adherents to impede program implementation.

The literature on public views of climate change provides some insights. This literature demonstrates that political ideology is one of the most consistent predictors of climate change views in the USA, second only to environmental values (McCright et al. 2016). Unsurprisingly, political conservatives have a considerably greater likelihood than liberals to indicate that the seriousness of global warming is exaggerated in the news and a considerably lower likelihood of saying that global warming has already begun, is caused by human activity and poses a serious threat to one's way of life, and that scientists agree that it is occurring (Dunlap et al. 2016).

The explanations for these ideological differences among US citizens vary. One thesis suggests that the conservative movement has created an "echo chamber," or a "bounded, enclosed media space" that creates a self-protective enclave. This enclave "reinforce[s] the views of … like-minded audience members, help[ing] them maintain ideological coherence, protect[ing] them from counter-persuasion, [and] reinforce[ing] conservative values and dispositions" (Jamieson and Cappella 2008, p. x). Jasny et al. (2015) test this idea quantitatively using network analysis methods and find evidence for the presence of echo chambers in elite climate change policy networks in the USA. Another thesis asserts that the American conservative movement is a force of "anti-reflexivity" that "has emerged to reassert the certitude of the industrial capitalist social order" (McCright and Dunlap 2010, p. 105). Anti-reflexivity refers to the conservative movement's resistance to the environmental movement and "impact science," both of which demand reflexivity and action on the risks of industrial society, sometimes seeking its transformation. Jacques's (2009), in developing the concept "environmental skepticism," similarly asserts that the hegemonic power of the industrial order works to "discipline us from taking these [environmental] threats seriously" (17; see also Oels 2005).

Scholars applying these approaches illuminate the tactics that conservative movements employ to keep climate change off the agenda or prevent action on climate change, such as

misrepresenting or manipulating the results of scientific research, intimidating individual scientists, creating new rules or procedures for making scientific knowledge public, manipulating media coverage, framing the mainstream media as "liberal" to discredit or take advance of neutrality norms, ridiculing political opponents, among others (Dunlap and McCright 2015; McCright and Dunlap 2010; Jamieson and Cappella 2008). These tactics serve to protect conservative ideological views on climate change from moderating forces.

Coalitions in opposition to a policy continue to dispute policy disagreements at considerable cost to administrative agencies and the courts, as in the current debate over President Obama's carbon-mitigating Clean Power Plan, which has faced a host of legal challenges (Potts and Zoppo 2014). Though there have already been initiatives in the USA on carbon mitigation at state and local levels (Rabe 2007), at a national level, Congress has shown "a proclivity to either 'pass the buck, pass the pork, or pass the microphone' on climate change rather than demonstrate a serious capacity to assume a leadership role" (Rabe 2010, p. 18). Such impasse on climate change is also apparent at the global level (Dryzek and Stevenson 2014; Jagers and Stripple 2003). Even those policy ideas that gain traction become intractable due to problems of implementation in a divided polity.

The structure of ideological narratives makes agreement, even bargaining, difficult. This is so because ideologies are self-isolating and other excluding, giving some groups considerable power to block implementation even when broad agreement exists elsewhere. Narrative concepts complement existing theories of policymaking because they provide precise conceptual tools for identifying when beliefs (or interests or storylines) develop to inform insular identities and polarizing discourse. They also aid in understanding the effects of a move toward ideological narrative for implementation, particularly when it becomes adversarial.

Without understanding when and how coalitions' ideas and beliefs become foundational and absolutist—that is, closed to engagement with other ideas and, thus, ideological—we lose important insights about why and how an adversarial turn will emerge. To be clear, our intent, in this paper, is not to demonstrate how evolution of an ideological narrative leads processually to the adversarial turn—that remains for future work. Rather, our goal in this exploratory phase is simpler, which is to formulate an analytic for analyzing the textual-linguistic properties of a group narrative and assessing its transformation into an exclusive ideology. At the same time, we acknowledge the possibility, as pointed out elsewhere (e.g., the concept of the narrative network in Ingram et al. 2015), that the narrative and the group are mutually constitutive, such that properties in one reflect properties in the other.

Ideology and narrative

An ideology can be thought of as a system-constituting narrative (Lejano and Park 2015). To quote Sargent (2009): "An ideology is a system of values and beliefs regarding the various institutions and processes of society that is accepted as fact or truth by a group of people. An ideology provides the believer with a picture of the world both as it is and as it should be, and, in doing so, organizes the tremendous complexity of the world into something fairly simple and understandable" (p. 2). Mannheim refers to the general form of ideology as tending toward a comprehensive *Weltanschauung* or worldview (Mannheim 1936, p. 106).

In contrasting ideological from pragmatic belief systems, Sartori characterizes ideology as fixed, strongly affective, and cognitively closed. The term "cognitively closed" pertains to the believer's opposition to expanding or revising the belief system (Sartori 1969). Pragmatic systems exhibit the opposite properties, characterized by openness (to other narratives). Our contention is that these and other properties of *ideological systems* should, at least in part, be evidenced in structural and linguistic patterns in the *narratives* through which they are represented.

The purpose of this article is to identify these and other features that mark ideological texts as distinct from non-ideological texts. For this, we turn to narrative analysis.

Narrative analysis

As we will illustrate below, open texts have narrative properties that include intertextuality, contextuality, contingency, and plurivocity (see Table 1). The opposite narrative properties describe closed or strongly ideological texts, namely autopoiesis, decontextuality, invariance, and univocity. We explicate each set of opposites as continua that can be used to characterize narrative elements in the text. The guiding insight, connecting narrative properties to the question of policymaking, is that the properties characterizing a group are paralleled by, or follow directly from, those properties found in its narrative (see Weick 1995; Ingram et al. 2015). These narrative properties illuminate how coalition coalescence and coalition isolation are maintained. Let us first characterize these properties.

Autopoiesis versus intertextuality

A narrative can be open, allowing reference to other narratives, or closed, remaining self-insulated. Openness involves *intertextuality*. Generally speaking, intertextuality refers to how the meaning of a text derives in part from readings of other texts to which it refers (Bakhtin 1981; Kristeva 1980). It means a referentiality within the narrative to other narratives. But sometimes, a narrative emerges even more resilient to change, where its narrators close off the possibility of other ideas. This is the non-hermeneutic property of ideology, wherein narratives exhibit little intertextuality. We describe self-contained, self-referential narratives as *autopoietic* rather than intertextual.

Table 1 Narrative properties of ideological versus non-ideological texts

Ideological texts	Non-ideological texts
Autopoiesis—remains closed to exchange with other narratives; self-contained, self-referential; high degree of internal coherence	*Intertextuality*—contains references to other narratives; open
Decontextuality—lack of reference to events or conditions in the outside world; insulated from the modifying effect of context; unchanging	*Contextuality*—contains reference to events or conditions in the outside world; suggests connection between text and context; changing
Invariance—makes universal claims that apply in perpetuity; exhibit high degree of generalizability, objectivity across time and place	*Contingency*—makes claims that are *particular* to some situations (not others); modifiable over time and place
Univocity—shows one general, closed narrative; narrator transcends events in the narrative	*Plurivocity*—shows multiple perspectives, can manifest as multiple/shifting voice

An autopoietic text exhibits a high degree of internal coherence, logically and ontologically (Lejano and Park 2015). By logical coherence, we simply mean that the set of propositions or assumptions that underlie the narrative be consistent with each other. For example, the statements that "man-made global warming is a hoax" and "the idea that humans can affect the climate is arrogant" are mutually consistent in the sense that both point to the same logical conclusion that science which presents climate change as anthropogenic must be false.

Ontological coherence has to do with the ability of an ideology, as a narrative, to construct a complete system or worldview. To the extent that an ideology can be all-encompassing, explaining phenomena across multiple arenas of social life, it can ignore or deny alternative systems of thought outside it. As an example, consider the success of Donald Trump's strategy of claiming conspiracies across a whole range of issues, from the media to vote-counting to the internal revenue service, not to mention climate science.[4] To the ideological mind, conspiracy is necessarily pervasive and encompassing of all sectors of society.

An autopoietic text maintains itself, unchanging, despite other contending narratives arising in public discourse. To the extent that autopoietic texts are internally consistent and self-referential, they need not have any "feedback" loops between them and other systems of thought. The foremost property of such texts, then, is their low degree of *intertextuality* (i.e., little reference to texts outside the narrative in question).

While low intertextuality characterizes closed or autopoietic texts, high degrees of intertextuality constitute open texts. To assess the degree of intertextuality of the text, we look for what Barthes refers to as paradigmatic indices (Barthes 1974). These are references in the form of allusion or other literary devices that point the reader away from the text at hand and onto texts outside it. While ideological texts will exhibit few if any references to other texts, open, non-ideological texts will contain paradigmatic indices referencing texts outside its corpus as a bridge to another system of thought. For example, if the quote from Senator Inhofe that opened this article cites another climate "skeptic," we would not count this as intertextuality since it refers only to another member of the same corpus of climate skeptical texts.[5]

Though in concept it is difficult to precisely delimit the bounds within which we assign a corpus of texts to the same system of thought, this is usually not difficult in practice. Often, we find texts to be clearly marked, using phrases or images that serve as anchors (Barthes 1974), thus signaling how the text is to be interpreted. For example, a phrase such as "tax-and-spend" anchors a text as one belonging to a fiscally conservative ideology.

How do we assess degrees of intertextuality? Chandler suggests including looking for explicitness of reference and structural unboundedness (2007). The first pertains to how directly and explicitly a text refers to texts outside it, the most explicit being direct quotation. Unboundedness refers to how the text at hand is clearly seen to be part of a larger corpus of texts—e.g., an article on a blog implicitly belongs to the corpus of texts comprising the entire blog.

[4] https://www.washingtonpost.com/news/post-politics/wp/2016/09/16/here-are-10-more-conspiracy-theories-embraced-by-donald-trump/?utm_term=.0afa60be11a9.

[5] Some theorists maintain that all texts are inherently intertextual (Kristeva 1980). Even the most strident, closed ideological text draws presuppositions from other texts. This is why we apply intertextuality to mean direct reference to texts outside the corpus of text belonging to an ideology.

Decontextuality versus contextuality

While intertextuality/autopoiesis pertain to reference to other texts, contextuality/decontextuality are about reference to material and social conditions in the world.[6] They define the relationship between the text and a broader context in which it is situated. This relationship is similar to what Ricoeur refers to as the move from *sense* to *reference* or moving from what the text says to the world that it talks about (Ricoeur 1981; Lejano and Leong 2012). Contextuality refers to a narrator's sensitivity to conditions in the larger pale of society and empirical evidence that refutes or supports claims within the text. Decontextuality, on the other hand, refers to a turning away from those conditions.

The relationship between the narrative and its external context can result in a range of responses by the narrator(s). The decontextualized, ideological narrative will make no reference to the material realm, relying instead on the "truth" of basic principles foundational to the narrative. It does not adjust to changes in material conditions or to empirical evidence that may refute (or support) the narrative. The contextualized narrative, in contrast, will show adjustment to context, and openness to information that refutes its basic claims.

What we should look for in the narrative, then, is not merely empirical content but *emplotment* of empirical material (events, actors) into the narrative. Empirical information can become part of the sequence of events that blend into the narrative, for example. For example, an op-ed piece on climate change that mentions ongoing El Niño-related events in various parts of the world, whether skeptical or not, exhibits contextuality while a narrative that continually omits reference to increasing numbers of extreme weather events exhibits some degree of decontextuality.

Invariance versus contingency

A third set of opposites distinguishes ideological from non-ideological narratives: invariance and contingency. These refer to the degree to which a narrative makes claims that are universal versus particular, whether across times, places, or situations. Contingent texts are particular to certain situations and not others and are modifiable over time, while invariant texts make universal claims that apply in perpetuity. Invariant narratives exhibit a high degree of generalizability, signaling closedness versus openness. They exhibit the property of transcendence, where narrative claims are thought to be objectively and generally true regardless of time or place. Racist ideologies are especially illustrative in this regard, in their penchant to represent persons as general archetypes rather than particular characters.

Univocity versus plurivocity

Finally, the properties of univocity and plurivocity distinguish ideological from non-ideological narratives. They refer to the tendency in a text to reveal a unified perspective or a richly diverse one. In texts characterized by plurivocity, the plot will shift with each retelling by the same narrator or with each new telling by a different narrator. Open narratives can exhibit an appreciable degree of plurivocity as they maintain the possibility of different narrators telling the general narrative in richly different ways while remaining within the compass of that narrative (Thatchenkery 1992; Lejano et al. 2013). The text can

[6] Note that, if we ascribe to Ricoeur's notion that actions can also be considered as text (Ricoeur 1981), then the two concepts are essentially equivalent.

show multiple perspectives, manifested as multiple and shifting voice or focalization. Plurivocity characterizes the narrative itself, as a richly diversified one.

In contrast, a low degree of plurivocity—or univocity—is seen in the presence of one general, closed narrative, perhaps rendered by a narrator that is transcendent to the events in the narrative (e.g., an omniscient point of view). There is no incorporation of other voices into the text, especially not those that would seriously challenge the narrative's foundational assumptions.

The above elucidation of the properties of ideological versus non-ideological narratives provides analytical tools to illuminate how narrative properties of ideological texts support (1) coalition coalescence and (2) coalition isolation, posing particular problems for policy implementation.

Characterizing ideological narratives

We now turn to the strategy for analyzing these narrative properties, translating them into analytical rules useful in delineating ideological from non-ideological narratives. The guiding insight, linking narrative analysis to the larger question of explaining the adversarial turn, is that the strong coalescence and self-isolation that characterize a coalition should be evident, in parallel fashion, in ideological properties of its narrative.

The task of constructing a proper analytic poses a few problems. The first is that even the most strongly ideologically framed texts will exhibit some properties of open narratives. Even clearly ideological texts will, at times, exhibit intertextuality (reference to texts outside an ideology's corpus of texts). As an example, a columnist whose allegiances lie on the far right of American conservatism might quote something from a non-conservative political figure like Barack Obama. Of course, such a quotation would most likely involve critique or dismissal, but it displays intertextuality nonetheless. Ideological narrative might incorporate text from outside its own ideology for the purpose of rejecting the latter. Another difficulty is that of the superfluous narrative. How do we know that a narrative is speaking true to the author's real beliefs?

The response to the first issue is that properties of ideological narratives allow better analytical discernment when applied in combination. The response to the second is not to appeal to an external criterion of empirical truthfulness, but instead to employ a weaker criterion based on the objective nature of text itself. As Ricoeur pointed out (1981), text takes on objective form as characters on a page or other medium. In this vein, we subject a narrative's use of text (i.e., its intertextuality) to the test of simple fidelity to the objective nature of the text being referenced.

Based on these responses, we construct some rules of analysis for determining the degree a narrative might be recognized as ideological.

Criterion 1: An ideological narrative tends to not exhibit both intertextuality and plurivocity

An ideological narrative can include text from outside its ideological corpus of texts, but it does so in a way that does not allow outside storylines to be expressed completely or coherently. In such a case, the ideological narrative eschews plurivocity, even though it may exhibit some degree of intertextuality. The opposite case also pertains—i.e., a text may ostensibly give voice to another narrative, but in doing so, it omits or misrepresents the actual text from the latter. This second condition corresponds to the problem of a

passage misquoting (or not properly quoting) another text. It is thus a case wherein the narrative can, on the surface, exhibit some plurivocity but without allowing intertextuality.

Criterion 2: An ideological narrative will display saturation, which is the combination of decontextuality and invariance

The second criterion pertains to the extent to which an ideological narrative creates a comprehensive "system," an all-encompassing view that purports to explain everything in a society or a subset of it. An ideological narrative will display saturation: the system constructed by the narrative pervades all or many aspects, contexts, and instances of social life.

Saturation can appear in the plot or the characterization of a narrative. Saturation in the plot occurs when a narrative pertains to multiple places and times and, in the extreme, is completely universal or non-contextual (applies regardless of time or place). Propp suggested that all good narratives have embedded in them the genetic storyline of classic fables (Propp 1968). However, by universality of plot, we do not mean correspondence in the generic storyline but the actual use of a specific narrative outside its specific contextualization. As an example, we can see how fiscal and social conservatives might take the specific narrative of the book Atlas Shrugged, a libertarian favorite, and assume that it applies to all times, places, and issues. It can form the basic plot upon which particular narratives, such as climate skepticism, build.

Universal plots can display saturation, when characters are not only cast into dichotomous, polar binaries (e.g., good and evil, false prophets and true ones), but when such characterization is absolute—permeating the entire being of the character and extending into all facets of social life. Someone cast as a "liberal" will be so in all aspects of social life, not just one.

This has important implications for the policy realm. First, the all-or-nothing character of ideological thinking mitigates against coexistence with the other. It is, then, no surprise that ideological systems will often ineluctably have a strident political program associated with it. There is a second important implication, to which we will return in the conclusion, and that is the possibility that ideological climate skeptical narratives are based on a more foundational, genetic narrative that addresses issues even more basic than climate (much like Propp's genetic fables). In this case, to address deep skepticism over climate science, it may not be enough to talk about science.

An extended example: climate change

To explore the narrative properties of ideology, we chose a selection of texts about climate change from the Heritage Foundation's blog, the Heartlander. People for the American Way described The Heartland Institute as a pro-corporate organization funded by Exxon Mobil, the Koch Family Foundations, and the Scaife Foundations.[7] In 2009, it led a "climate change denial conference" co-sponsored by the Cornwall Alliance, an organization opposed to the environmental movement and which has successfully reached out to religious right leaders.[8] Establishing the network to which the organization belongs is

[7] http://www.pfaw.org/press-releases/2011/04/'green-dragon'-slayers-how-religious-right-and-corporate-right-are-joining-fo.

[8] http://www.pfaw.org/press-releases/2011/04/'green-dragon'-slayers-how-religious-right-and-corporate-right-are-joining-fo.

important in determining what the corpus of texts is, to which its texts belong, and as importantly, what texts lie outside it.

We selected texts from the Heritage Foundation's blog[9]: three written by Alan Caruba about the authors' opinions on climate change science and policy, and one written by Paul Driessen on President Obama's Clean Power Plan.[10] Since the essays/columns are usually short, we selected several to create a more substantial body of text to analyze.

Criterion 1: Not (intertextuality and plurivocity)

There is considerable intertextuality in all texts by Caruba, at least to the extent that it references other texts outside of its own narrative (which we will refer to as the "other"). Caruba alternately refers to President Obama's notion that climate change is based on "settled science," Al Gore's notion that "Earth has a fever," and NOAA and NASA's statement about a "pause" in the earth's temperature that occurred in 2013,[11] among others. All of these paradigmatic indices, in Barthes' terms, refer to the broadly accepted narrative on climate change as a scientific and environmental phenomenon.

Consistent with our notion of ideological narratives, we note two features of this intertextuality. The first is the inclusion of partial sequences of text from the other, but incompletely rendered such that the message of the other is not voiced. Here is a passage from one of the articles:

> On February 1st, NOAA and NASA held a joint press conference in which they released data about 2013s global surface temperature. They made reference to a "pause" in the temperature that began in 1997. Dr. David Whitehouse, science editor for the BBC, noted: "When asked for an explanation for the 'pause' by reporters, Dr. Gavin Schmidt of NASA and Dr. Thomas Karl of NOAA spoke of contributions from volcanoes, pollution, a quiet Sun, and natural variability. In other words, they don't know."

This parsing of text is an indicator of the ideological narrative because it leaves out the actual message/text of the other. While formally intertextual, it lacks plurivocity (i.e., the other's voice is not to be heard). The parsing of text leaves out the scientists' real message, which was:

> Those longer trends show the world has seen "fairly dramatic warming" since the 1960s with "a smaller rate of warming over the last decade or so," said Thomas Karl, director of NOAA's National Climatic Data Center in Asheville, N.C.[12]

Another example of this selective intertextuality is seen in the text where Caruba quotes an irate email he received from an environmentalist outraged by Caruba's prior commentary on the Sierra Club. The text begins by stating that the author merely "pointed out that it [the Sierra Club] opposes traditional forms of energy." But in return he received this "rude" and "ignorant" response:

[9] Due to space constraints, we analyze a conservative text, but could equally have chosen a progressive one. Our task is not to show how one side of an issue is right or wrong, but to highlight the narrative properties found in any ideological text. Future analysis may compare competing texts.

[10] (1) http://news.heartland.org/editorial/2014/02/15/there-no-global-warming-and-will-be-none-decades, (2) http://news.heartland.org/editorial/2014/12/30/people-i-don't, and (3) http://news.heartland.org/editorial/2014/02/19/obama-wants-waste-billion-climate-change, (4) http://blog.heartland.org/2015/08/epas-punitive-fraudulent-clean-power-plan/.

[11] It is not clear what this means within the text, however.

[12] Seth Borenstein, an Associated Press reporter, quoting Dr. Thomas Karl: http://theadvocate.com/news/8162122-123/noaa-world-in-2013-was.

> lol you are a f***ing idiot. You don't believe there is global warming going on? You need to let your prejudices go and stop basing your views on what your political stance is… do you[r] research you f***ing f**got

Caruba acknowledges that not all subscribers to the climate change narrative are the same, but does not provide any texts from "reasonable" adherents that would provide a more balanced view. The text implies that the rude and ignorant email exemplifies, or perhaps typifies, the other narrative. This is essentially a type of intertextual parsing that leaves out the message and voice of the other. This is intertextuality without plurivocity.

A similar type of parsing, one unique to climate debates, pertains to invoking the mean global temperature graph (which is indeed a text) over the last 17 years, but parsing away from this narrative the major part of the same graph spanning the preceding decades. Parsing is related to what Rayner (2012) has described as the ideology-driven expunging of "uncomfortable knowledge."

A second feature of ideological texts is nonconcurrence of plurivocity and intertextuality. Plurivocity is present when the text interweaves multiple perspectives and voices, rendering the "other's" storyline in a way that makes it intelligible. While exhibiting (limited) intertextuality, the statements about President Obama and NASA/NOAA do not exhibit plurivocity. The author does not represent the perspective of adherents to the climate change narrative with any degree of detail or fidelity. Instead, a general narrator presents a unified (autopoietic) perspective that puts forward a caricature of his opponent's narrative.

Similarly in the article about the Sierra Club post, there are no quotes or text from the other narrative (in which climate change is portrayed as real) aside from the "rude" email. While one might interpret the email excerpt from the outraged environmentalist as an attempt to integrate the opposition's voice, it is a selectively extreme and hostile voice, not reflecting more thoughtful arguments articulated within the climate change narrative. And, so, there is an "other voice" in the article but, the scant intertextuality accomplishes a caricature of the other narrative.

This text also brings in the voices of a nameless group of climate deniers:

> People in the U.S., England, Europe and other areas of the world who do not possess Ph.Ds in meteorology, climatology, geology, astronomy, and chemistry have begun to suspect that everything they have been told about global warming is false.

This statement generalizes the perspective of people beginning to doubt the science without allowing "text" from the other into the discussion so they can speak for themselves. This is another example of a semblance of plurivocity that is voided by insufficient intertextuality.

An ideological practice is that of hybrid intertextuality, where text from the other merges with a third text, which seemingly belongs to the other (but does not). For example, the author writes,

> Anyone familiar with my writings knows that a lot of research is involved. In my case, it dates back to the late 1980s when the global warming hoax began to be embraced by politicians like Al Gore who made millions selling worthless "carbon credits" while warning that "Earth has a fever."

Al Gore is positioned as a politician who embraced "the global warming hoax" and "who made millions selling worthless 'carbon credits' while warning the 'Earth has a fever.'" The implication is that Al Gore was not motivated by the public interest, but

personal gain and, so, his claims are not to be trusted. This is partly accomplished by a hybrid text combining quotes presumably from Gore himself ("carbon credits," "Earth has a fever"), with other text which is not from Gore ("the global warming hoax," "who made millions"). The critique in Caruba's text of notable adherents to the climate change narrative—where he calls Obama's statement a lie, interprets NOAA and NASA's statement as an indication that "they don't know," and positions Gore as embracing a hoax—casts doubt not only on the truth claims of these individuals but all those maintaining the climate change narrative. This practice of caricature is enabled by hybrid or selective intertextuality.

This combination of (limited or hybrid) intertextuality and univocity is typical of ideological narratives. The effect of these joint properties in an ideological narrative is a particular way of positioning "other" texts—or texts outside of the ideological narrative—that serves to deny the truth claims of the other, and uphold the truth claims climate skeptics. When including a limited (and caricaturish) text that essentially denies the other a legitimate voice, the ideological text accomplishes a weak sort of autopoiesis. The result is that while the climate denial narrative refers to "other" texts, the underlying integrity and internal coherence of its own narrative remains undisturbed.

It is clear how these narrative properties support coalition coalescence and isolation. First, they establish the group as enclosed, which is manifested in the self-referential, autopoietic properties of their narrative. More practically, the lack of intertextuality (i.e., the refusal to acknowledge or allow other voices or ideas) fosters an unwillingness to engage in dialogue.

Criterion 2: Decontextuality and invariance

The second criterion examines other salient features of ideological texts, namely decontextuality, which describes insulation from material conditions or empirical evidence, and invariance, which speaks to a universal storyline that applies to all situations. The combination of these features produces saturation, the extent to which a narrative creates a comprehensive system of thought.

In this case, the degree to which the text is decontextual or contextual relates largely to the author's use of scientific evidence to support claims that climate change is a hoax.[13] For example, in responding to the critique that climate deniers beliefs derive from their "political stance," the author says, "in fact, our views are based on science." But the text does not actually present any scientific evidence, or emplot elements of an accepted scientific narrative, and there is no text from the empirical body of knowledge consulted by scientists. The essay presents two pieces of empirical information. First, Caruba writes:

> A few days after the email arrived [from the outraged environmentalist], two-thirds of the contiguous U.S.A. was covered by snow. As this is being written, Lake Superior is 92 percent frozen, setting a new record. As of February 5, the entire Great Lakes system was, according to the Great Lakes Environmental Research Laboratory, 77 percent covered with ice.

But the essay does not mention whether or not these conditions are normal in winter for these places (the article was written in February), which would put the facts in context

[13] In other cases, or even with respect to the climate change debate, contextuality could relate to a reference to other forms of empirical evidence such as local or experiential knowledge of impacted communities, professional knowledge of various practitioners and so on.

(with or without reference to scientific standards). Furthermore, this information is presented without relation to the state of knowledge in the field and is selective about the conditions in the material world it introduces. We call these features decontextuality because the narrative omits the scientific evidence it claims to refer to.

Second, decontextualization is present in the author's discussion of "mini ice ages" in the earth's past—between 1300 and 1850, and between 1645 and 1715—the latter of which, he notes, caused the Thames and Dutch canals to freeze over. There is no contextualization of this evidence, and readers are left without information about whether or not these are normal occurrences for these places. The author emphasizes the cyclical nature of the global climate, which has an empirical basis, but parses out the text (and data) about increasing variability contrary to what would appear in a scientifically based climate change narrative.

Along these lines, the author's reference to the evidence includes what Stone (1989) has labeled a "causal story" that adherents to a particular narrative will deploy to weave empirical facts into a (more or less) convincing story about the causes of a problem—here, climate change—often with the aim of placing blame and thus responsibility for action on a particular person, organization, social group or the like. Take the following passage from Caruba's essay:

> So, yes, there was a global warming, but it was a natural cycle, not something caused by human beings. Nature doesn't care what we do. It is far more powerful than most of us can comprehend…. The sun, too, goes through cycles, generally about eleven years long. When it is generating a lot of heat, its surface is filled with sunspots, magnetic storms.
>
> When there are few sunspots, solar radiation diminishes and we get cold. Scientists who study the sun believe it may encounter another 'Maunder minimum,' [a mini ice age]….
>
> There is no global warming and scientists like Henrik Svensmark, the director of the Center for Sun-Climate Research at Denmark's Natural Space Institute, believes that 'world temperatures may end up a lot cooler than now for 50 years or more.

This causal story denies that climate change is a result of human action, and is instead the result of natural cycles. Stone calls this an "accidental" causal story because it highlights natural forces not humanly controllable, thus marking it as something about which humans can do nothing. Situating climate changes within cycles of mini ice ages and global warming, the author explains the earth's cooling as having "nothing to do with carbon dioxide… and everything to do with *the sun*" (italics original). These claims are not consistent with a scientific narrative, although they purport to be.

The author uses "global warming" to describe the climate change narrative because it positions adherents as uninformed or deceitful, as he alludes to evidence that the Earth is actually cooling. The "climate change" narrative encompasses temperature fluctuations between hot *and* cold, while "global warming" only describes changes in a warming direction. By insisting on calling the climate change narrative by its old name, "global warming," the author positions the other as conveniently changing the narrative to suit its political purposes despite the facts, without actually bringing in contrary facts, or rather bringing in only convenient facts.

In the texts, we do not see a total absence of reference to the state of the world or of scientific evidence one might expect from a completely autopoietic or closed narrative. What we do see is a more nuanced decontextualization that integrates selective evidence and material conditions that serve to support the ideological narrative. There is no

weighing of evidence that would allow for what Popper referred to as the testable and verifiable hypothesis characterizing science (Popper 1959). Criteria of the scientific method assume that changes to the state of evidence can potentially change a narrative. There is some emplotment of the evidence in the narrative, but it is highly selective. We will refer to properties corresponding to Popper's dictum as "reflexivity."

We see in the above passages considerable invariance in the storyline. The main agent and protagonist, nature, carry out its will undisturbed by human influence, not just now but also in two earlier time periods: 1300–1850 and 1645–1715. This is literally a universal, eternal storyline—the author's implied message is that this story does not ever change. The author's interpretation of the cycles of the sun and thus of the climate—especially what he calls "mini ice ages"—are universal across time and place.

When selective contextuality is combined with invariance, one can still observe in the narrative "saturation," a characteristic of ideological narratives that gives them the appearance and effect of a complete system of thought. In these cases, assumptions within the narrative—about evidence, people, and places—apply across time and place.

Saturation, in terms of plot, occurs when the narrative does not limit itself to one specific context but other dimensions, as well. Take the following passage:

> In a world threatened by the rise of radical Islamism, by the outbreak of diseases like Ebola, and other actual problems to be addressed, the notion that thousands would March in the belief that they and the entire rest of the Earth's population have any effect on the climate is appalling.

It would not be untoward for an ideological narrative to allude to other, seemingly non-sequitur, issues (e.g., Islamism, Ebola) outside the specific domain under discussion, since the narrative saturates all facets of society.

Saturation also applies when characterizations of rightness and wrongness and good and bad are not limited to the specific issue but to all other issues. Binaries are articulated—such as "us" versus "them" or "truth" versus "lies"—that take on an absolute rather than reflexive quality. Thus, in the narrative Al Gore is not only wrong in the specific dimension of climate science, but is also remiss in the ethical dimension (embracing the hoax and making millions selling worthless carbon credits).

Instead of weighing the scientific evidence as it claims to do, the narrative draws boundaries between "us" and "them," making victims out of climate deniers—who prefer to be called "skeptics"—and liars out of believers in "global warming." It uses words like "hoax," "conjured," and "dubious" to describe the science that supports the climate change narrative without providing a serious critique of it. And it uses "real" to describe the empirical information that supports the climate denial narrative. This is done in a totalizing way such that people and places take on an archetypal quality.

Saturation can be seen in another essay by the same author:

> I do not like people crying "racism" every time the commission of a crime goes badly for a black perpetrator[. These] are people I do not like. People in high office who use these events to exacerbate racial divisions are high on my list of those I don't like… While I see no practical or even moral way to deport the eleven million illegal aliens among us, that doesn't make them any less illegal… A group of people I have not liked for decades are the environmentalists. The reason is very simple. They lie about everything they champion in the name of "global warming" or "climate change"….

In ideological texts, characterization can take on all-encompassing (or binary) qualities: environmentalists not only "lie" but "lie about everything they champion in the name of 'global warming' or climate change.'" They are also likened to those people "crying 'racism' every time the commission of a crime goes badly for a black perpetrator." This all-encompassing quality lumps together, in one text, otherwise diverse issue domains. Producing absolutes is aided by techniques of caricature discussed earlier because the multiple 'others'—those "I do not like"—are not represented in the text beyond overly simplified references.

The absolutist nature of a group's narrative reflects corollary properties in the group itself. Its construction of the world as "us" versus "them" parallels a belief that the group's narrative is absolutely right and other's narrative is absolutely wrong. We can then study how an adversarial turn can result, at least in part, from a group's discourse.

The narrative properties of ideological texts are similarly reflected in a text referring to the President Obama's Clean Power Plan (CPP). Paul Driessen, the author of the text, claims that implementation of the CPP will:

> …hammer everything we make, grow, shop, eat and do. It will impair our livelihoods, living standards, liberties and life spans….
> Under the CPP, everything business owners, workers families and communities strived for their entire lives will be at risk. Millions of workers will lose their jobs, leaving more families destitute and welfare dependent, their sense of self-worth destroyed. Many will have to choose between buying food and gasoline, paying the rent or mortgage, and going to the doctor, giving to their church, or saving for retirement….

We see in this text the property of saturation in which the claims of the climate denying narrative apply across domains (invariance), not only with respect to the effects of climate and its consequences but simply to "everything" for businesses, families, and communities. Furthermore, any contingencies—e.g., varying capacity to adapt to worsening conditions—are omitted (decontextuality).

Likewise, while referencing the Clean Power Plan (intertextuality), Driessen omits the voice of its authors by neglecting, for example, to quote Obama or staff at the Environmental Protection Agency (EPA) in reference to the plan or to quote or summarize the plan itself (univocity):

> Instead of acknowledging any of this [costs to businesses, families and communities], EPA employs a 'social cost of carbon' scheme that places arbitrary inflated costs on damages it claims result from alleged climate risks from using carbon-based fuels. It includes every imaginable and imaginary *cost* of using fossil fuels—even absurd claims that its anti-energy plan will reduce asthma rates, which have been *increasing* while pollution rates are going *down* (italics original).

Finally Driessen calls on opponents of climate change policy to take oppositional action, tying his claims to an appeal to identity:

> …if we wish to remain who we are in the face of threats and declamations meant to force us to honor intellectual and moral falsehoods, we have no alternative but clearly and loudly to distinguish between true and false, and fully make the case for what we believe is right.
> We must not mince words regarding the evils that energy and climate totalitarianism inflict on families, industries, communities and nations. We must confront the deceit

> and deceivers, abuses and abusers—and present the hard, ugly realities of what life would be under conditions imposed by eco-extremists.
>
> Right now we have too many taxes and regulations, too much secrecy and fraud, too many extremist, and far too little accountability in EPA. There is too much eco-religious fervor, too little science and humanity. Poor and minority families are hurt most of all. Our governors, state and federal legislators, attorneys general, courts, next president, and citizen, industry and scientific groups need to take action.

These statements are followed by a call to "Refuse to comply with the CPP…, Gain access to thus far secret EPA, NOAA, ICPP and other data, computer codes, models and studies—and subject them to full review by independent experts…, [and] suspend and defund implementation of regulations and programs…," among others. In this text, the properties of the climate denial narrative translate into adversarial implementation that pits the "we"—who we are—against the abusers and deceivers, whose plan threatens the "we" and its core beliefs.

The preceding example illustrates how ideological properties in a group narrative can be analyzed to deepen our understanding of the role of narrative in policy impasse. While we apply this approach to climate skeptical narratives, we could as readily apply it to the narratives of proponents of climate change science, and of scientists themselves.

Discussion and conclusion

A considerable literature seeks to illuminate how ideas (discourses, narratives, frames, or storylines) affect social awareness and action around climate change (Detraz and Betsill 2009; Fletcher 2009; Pettinger 2007). Another literature demonstrates how ideological differences profoundly shape public opinion on climate change (McCright et al. 2016; Dunlap et al. 2016), including attitudes about evidence that would support climate action. Our account of the climate change debate in the USA adds to this work by focusing on the narrative properties of ideology and how they support the coalescence and isolation of particular groups, enabling them to create an adversarial turn that prohibits the emergence of a consensus or compromise view, thus stalling effective action.

While the literature on echo chambers suggests that ideological differences related to climate change are reinforced and protected from outside, moderating influences by a highly coordinated media strategy (Jamieson and Cappella 2008), the logic of our research emphasizes the features of ideology itself. Ideological narratives support group coalescence and self-isolation, which can lead to adversarial intergroup dynamics and impede dialogue and action. A coalition tends toward coalescence/isolation when its narrative takes on ideological properties. These properties are reflected in parallel properties in the group itself.

From a purely theoretical perspective, we can characterize an ideology as a system representational narrative that strongly exhibits autopoiesis, decontextuality, invariance, and univocity (or the absence of their opposites: intertextuality, contextuality, contingency, and plurivocity). We theorized that ideological narrative will emphasize either *intertextuality or plurivocity but not both*. In practice, the climate change denying narrative accomplished this through *selective intertextuality* or *hybrid intertextuality* that calls the other's narrative into question. We also theorized that an ideological narrative will display saturation (decontextuality plus invariance). In practice, an ideological narrative can be

selectively contextual by referencing only convenient facts/empirical information and/or by omitting contrary facts, or presents people, places, or events in absolute terms.

The qualities of a group's discourse can hinder communicative exchange with other discourses. The propensity of a coalition to self-exclude and, moreover vilify the other, can be directly traced to textual-linguistic properties of the group's narrative. The influence is not on the beliefs of the group per se, but the relations between coalitions. As ideological groups cohere and isolate themselves, they resist influence. They also gain power to influence the discussion by remaining steadfast while non-ideological coalitions seek compromise or exchange. In the climate change debate, the consequences are significant: ideological coalitions do not need to form a "winning" coalition to gain influence (Sabatier 1988); they merely need to preserve a closed, ideological narrative that galvanizes sufficient supporters to block the potential formation of a dominant coalition.

Thus, an analysis of the narrative properties of ideological policy texts alerts us to certain constraints on public discourse relevant for understanding why we might observe an adversarial turn in policymaking. When ideological narratives violate the principles of reciprocity, inclusion and reflexivity, they create oppositional relations rather than mutual ones directed toward greater understanding. And while ideological narratives may help galvanize policy networks needed to govern, they may also create gridlock as adherents remain committed to basic principles that contradict evidence of what works. These dynamics create barriers to pragmatic problem-solving. Furthermore, as the climate skepticism example amply shows, what is at issue goes beyond such concerns as temperature rise and the like, to include more fundamental beliefs about social organization. The intransigence in the climate change debate centers on more fundamental social polarization.

Our analysis of the climate denial narrative suggests that the roots of policy impasse can be found in the narratives of the groups themselves. The implications are that productive engagement is more likely when policy narratives take on greater openness—i.e., when they exhibit greater degrees of intertextuality, contextuality, contingency, and plurivocity. The question of how to structure interaction in the public sphere so as to discern and counter the tendency of group discourse to devolve into ideological narrative, is an important theme for future inquiry.

Future work involves going deeper into the roots of the climate skeptical narrative, perhaps uncovering a more elemental, genetic narrative on which it is founded. While we can only speculate on this at this time, the property of issue saturation may suggest that climate science skepticism is, in its core, about issues that go beyond climate, such as the protection of the industrial social order and those who benefit from it (Jacques 2009; McCright and Dunlap 2010). As such, it may make it easier to understand how current efforts at trying to convince the public of the strengths of climate science seem to have little effect—i.e., it was never about the science, to begin with. Ultimately, we hope that this line of research can lead to new strategies for fostering dialogue where there is, hitherto, only intransigence.

References

Bakhtin, M. (1981). *The dialogic imagination* (C. Emerson & M. Holquist, Trans.). Austin: University of Texas Press.

Barthes, R. (1974). *S/Z: An essay* (R. Miller, Trans.). New York: Hill and Wang.

Bohr, J. (2016). The 'climatism' cartel: Why climate change deniers oppose market-based mitigation policy. *Environmental Politics, 25,* 812–830.
Boswell, J. (2013). Why and how narrative matters in deliberative systems. *Political Studies, 61*(3), 620–636.
Bousallis, C., & Coan, T. G. (2016). Text-mining the signals of climate change doubt. *Global Environmental Change, 36*(2016), 89–100.
Busenberg, G. J. (1999). Collaborative and adversarial analysis in environmental policy. *Policy Sciences, 32*(1), 1–11.
Chandler, D. (2007). *Semiotics for beginners* (2nd ed.). New York: Routledge.
Detraz, N., & Betsill, M. M. (2009). Climate change and environmental security: For whom the discourse shifts. *International Studies Perspectives, 10*(3), 303–320.
Dodge, J., & Lee, J. (2015). Framing dynamics and political gridlock: The curious case of hydraulic fracturing in New York. *Journal of Environmental Policy & Planning*. doi:10.1080/1523908X.2015.1116378.
Dryzek, J. S., & Stevenson, H. (2014). *Democratizing global climate governance*. Cambridge: Cambridge University Press.
Dunlap, E. E., & McCright, A. M. (2015). Challenging climate change: The denial countermovement. In R. E. Dunlap & R. J. Brulle (Eds.), *Climate change and society: Sociological perspectives* (pp. 1–49). Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199356102.003.0010.
Dunlap, R., McCright, A., & Yarosh, J. (2016). The political divide on climate change: Partisan polarization widens in the U.S. *Environment: Science and Policy for Sustainable Development, 58*(5), 4–23.
Enriquez, L. E. (2014). Undocumented and citizen students unite: Building a cross-status coalition through shared ideology. *Social Problems, 61*(2), 155–174.
Farrell, J. (2016). Corporate funding and ideological polarization about climate change. *Proceedings of the National Academy of Sciences of the United States of America (PNAS), 113,* 92–97.
Field, C. B. et al. (2014). Summary for policymakers. Climate change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. *Contribution of working group II to the fifth assessment report of the intergovernmental panel on climate change*, pp. 1–32.
Fletcher, A. L. (2009). Clearing the air: The contribution of frame analysis to understanding climate policy in the United States. *Environmental Politics, 18*(5), 800–816.
Gieve, J., & Provost, C. (2012). Ideas and coordination in policymaking: The financial crisis of 2007–2009. *Governance, 25*(1), 61–77.
Grafton, C., & Permaloff, A. (2005a). The behavioral study of political ideology and public policy formulation. *The Social Science Journal, 42*(2), 201–213.
Grafton, C., & Permaloff, A. (2005b). Liberal and conservative dissensus in areas of domestic public policy other than business and economics. *Policy Sciences, 38*(1), 45–67.
Gubrium, J. F. (2005). Introduction: Narrative environments and social problems. *Social Problems, 52*(4), 525–528.
Hajer, M. A. (1995). *The politics of environmental discourse: ecological modernization and the policy process*. Oxford: Oxford University Press.
Hampton, G. (2009). Narrative policy analysis and the integration of public involvement in decision making. *Policy Sciences, 42*(3), 227–242.
Howlett, M., & Rayner, J. (2006). Understanding the historical turn in the policy sciences: A critique of stochastic, narrative, path dependency and process-sequencing models of policy-making over time. *Policy Sciences, 39*(1), 1–18.
Ingram, M., Ingram, H., & Lejano, R. (2015). Environmental action in the anthropocene: The power of narrative networks. *Journal of Environmental Policy & Planning*. doi:10.1080/1523908X.2015.1113513.
Ingram, H., & Schneider, A. (2015). Making distinctions: The social construction of target populations. In F. Fischer et al. (Eds.), *Handbook of critical policy studies* (pp. 259–273). Cheltenham: Edward Elgar.
Jacques, P. J. (2009). *Environmental skepticism: Ecology, power and public life*. London: Routledge.
Jagers, S. C., & Stripple, J. (2003). Climate governance beyond the State. *Global Governance, 9*(3), 385–400.
Jamieson, K. H., & Cappella, J. N. (2008). *Echo chamber: Rush Limbaugh and the conservative media establishment*. Oxford: Oxford University Press.
Jasny, L., Waggle, J., & Fisher, D. R. (2015). An empirical examination of echo chambers in US climate policy networks. *Nature Climate Change, 5*(2015), 782–786.
Kristeva, J. (1980). *Desire in language: A semiotic approach to literature and art*. New York: Columbia University Press.

Laws, D., & Forester, J. (2007). Learning in practice: Public policy mediation. *Critical Policy Analysis, 1*(4), 342–370.
Lejano, R., Ingram, M., & Ingram, H. (2013). *The power of narrative in environmental networks*. Cambridge, MA: MIT Press.
Lejano, R., & Leong, C. (2012). A hermeneutic approach to explaining and understanding public controversies. *Journal of Public Administration Research and Theory, 22*(4), 793–814.
Lejano, R., & Park, S. J. (2015). The autopoietic text. In F. Fischer et al. (Eds.), *Handbook of critical policy studies* (pp. 274–296). Cheltenham: Elgar Press.
Lejano, R., & Taufen Wessells, A. (2006). Community and economic development: Seeking common ground in discourse and in practice. *Urban Studies, 43*(9), 1469–1489.
Leong, C. (2015). A quantitative investigation of narratives: Recycled drinking water. *Water Policy, 17*(5), 831–847.
Lutzenhiser, L. (2001). The contours of US climate non-policy. *Society & Natural Resources, 14*(6), 511–523.
Mannheim, K. (1936). *Ideology and Utopia* (L. Wirth & E. Shils, Trans.). San Diego: Harvest-Harcourt Brace, 1985, p. 263.
McCright, A. M., & Dunlap, R. E. (2003). Defeating Kyoto: The conservative movement's impact on US climate change policy. *Social Problems, 50*(3), 348–373.
McCright, A. M., & Dunlap, R. E. (2010). Anti-reflexivity the American conservative movement's success in undermining climate science and policy. *Theory, Culture & Society, 27*(2–3), 100–133.
McCright, M. M., Marquart-Pyatt, S. T., Shwom, R. L., Brechin, S. R., & Allen, S. (2016). Ideology, capitalism, and climate: Explaining public views about climate change in the United States. *Energy Research & Social Science, 21*(2016), 180–189.
Mumby, D. K. (1987). The political function of narrative in organizations. *Communications Monographs, 54*(2), 113–127.
Oels, A. (2005). Rendering climate change governable: From biopower to advanced liberal government?". *Journal of Environmental Policy & Planning, 7*(3), 185–207.
Oreskes, N. (2004). The scientific consensus on climate change. *Science*, *306*(5702), 1686–1686.
Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global Environmental Change, 19,* 354–365.
Pettinger, M. (Ed.). (2007). *Power, knowledge and the social construction of climate change: Power, knowledge, norms, discourses*. Farnham: Ashgate.
Polletta, F. (1998). "It was like a fever…" Narrative and identity in social protest. *Social Problems, 45*(2), 137–159.
Potts, B. H., & Zoppo, D. R. (2014). Is the EPA's proposed Clean Power Plan legal. *Regulation, 37*(Winter), 10.
Popper, K. R. (1959). *The logic of scientific discovery*. London: Hutchinson.
Propp, V. (1968). *Morphology of the folktale* (2nd ed.) (Laurence Scott, Trans.). Austin: University of Texas Press.
Rabe, B. G. (2007). Beyond Kyoto: Climate change policy in multilevel governance systems. *Governance, 20*(3), 423–444.
Rabe, B. G. (2010). *Greenhouse governance: Addressing climate change in America*. Washington, DC: Brookings Institution Press.
Rayner, S. (2012). Uncomfortable knowledge: The social construction of ignorance in science and environmental policy discourses. *Economy and Society, 41*(1), 107–125.
Repetto, R. (2001). The Clean Development Mechanism: Institutional breakthrough or institutional nightmare. *Policy Sciences, 34*(3–4), 303–327.
Rhodes, R. A. W. (1990). Policy networks: A British perspective. *Journal of Theoretical Politics, 2*(1990), 293–317. doi:10.1177/0951692890002003003.
Ricoeur, P. (1981). *Hermeneutics and the human sciences: Essays on language, action and interpretation*. Cambridge: Cambridge University Press.
Rietig, K. (2016). The links among contested knowledge, beliefs, and learning in European climate governance: From consensus to conflict in reforming biofuels policy. *Policy Studies Journal*. doi:10.1111/psj.12169.
Roe, E. (1994). *Narrative policy analysis: Theory and practice*. Durham, NC: Duke University Press.
Sabatier, P. A. (1988). An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences, 21*(2–3), 129–168.
Sargent, L. (2009). *Contemporary political ideologies: A comparative analysis*. Independence, KY: Cengage Learning.
Sartori, G. (1969). Politics, ideology, and belief systems. *American Political Science Review, 63,* 398–411.

Schön, D., & Rein, M. (1994). *Frame reflection: Toward the resolution of intractable policy controversies*. New York: Basic Books.
Stone, D. A. (1989). Causal stories and the formation of policy agendas. *Political Science Quarterly*, *104*(2), 281–300.
Susskind, L., McKearnan, S., & Thomas-Larmer, J. (1999). *The consensus building handbook. A comprehensive guide to reaching agreement*. London: Sage.
Thatchenkery, T. J. (1992). Organizations as 'texts': Hermeneutics as a model for understanding organizational change. *Research in Organizational Change and Development, 6,* 197–233.
Warren, M., & Mansbridge, J. (2013). Deliberative negotiation. In J. Mansbridge & C. Martin (Eds.), *Negotiating agreement in politics* (pp. 86–120). Washington, DC: American Political Science Association.
Weick, K. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.