DISCOURSE, FIELD-CONFIGURING EVENTS, AND CHANGE IN ORGANIZATIONS AND INSTITUTIONAL FIELDS: NARRATIVES OF DDT AND THE STOCKHOLM CONVENTION

CYNTHIA HARDY University of Melbourne

STEVE MAGUIRE McGill University

We explore the discursive processes through which a field-configuring event can change an institutional field and organizations. Our case study is of the United Nations conference leading to the Stockholm Convention on Persistent Organic Pollutants, which established new global regulations for several dangerous chemicals but excepted the insecticide DDT. Our study highlights how the production, distribution, and consumption of texts in the multiple discursive spaces generated by a field-configuring event allow new narratives to be told, and how, in turn, these narratives can lead to change in an institutional field and in organizations through three mechanisms: domination, interpretation, and translation.

This study examines a particular "field-configuring event" (Lampel & Meyer, 2008): the United Nations (UN) conference that resulted in the Stockholm Convention, an international treaty that established new global rules for the production, use, import, export, release, and disposal of dangerous chemicals classified as persistent organic pollutants (POPs). Such international conferences are important catalysts of change, especially as organizations and governments struggle to develop global solutions to complex problems (e.g., Bernauer, 1995; Betsill & Corell, 2001; Corell & Betsill, 2001). For example, the conference resulting in the 1987 Montreal Protocol on Substances That Deplete the Ozone Layer, considered by many to be the UN's most successful international agreement, led to change in numerous industries as organizations came to grips with bans on ozone-depleting substances (Haas, 1992; Levy, 1997); the 1992 UN Conference on Environment and Development had even wider consequences by initiating the process that led to the Kyoto Protocol to combat climate change (Wijen & Ansari, 2007); and the meetings that led to the 2005 Framework Convention on Tobacco Control introduced a paradigm shift in the regulation of addictive substances by taking into

The authors gratefully acknowledge the financial support of the Social Sciences and Humanities Research Council of Canada (SSHRC award number 410-2008-0360) and the Australian Research Council (Discovery funding scheme, project number DP 0771639).

account demand reduction strategies as well as supply issues (Collin, Lee, & Bissell, 2002).

Despite some studies (e.g., Levy, 1997; Wijen & Ansari, 2007), scholars know relatively little about how such conferences produce institutional effects. Our aim in this study, therefore, was to identify the specific dynamics whereby field-configuring events change institutional fields, while also exploring the implications for the organizations that participate in these fields. Using a discursive perspective (Maguire & Hardy, 2009; Phillips, Lawrence, & Hardy, 2004), we show that, as actors produced, distributed, and consumed texts, contradictory narratives emerged concerning practices for using one particular POP—the insecticide DDT—and that these narratives had significant effects on the field of POPs and organizations in it.

Our study makes a number of contributions. First, we show how field-configuring events generate multiple discursive spaces that are governed by different rules and understandings regarding text production (who may author texts, of which type); distribution (when, where, and how texts may be distributed); and consumption (who is the target audience; who may access and act on texts). Although these rules and understandings may privilege dominant members of a field, our analysis identifies two distinctive characteristics of field-configuring events—the greater accessibility of certain discursive spaces and the ability of texts to flow between discursive spaces—that make

¹ We provide definitions of "institutional field," "discursive perspective," and "discursive space" below.

it possible for actors occupying less powerful positions in the field to influence change. Second, we show how conflicting narratives emerge as participants produce, distribute, and consume texts at a field-configuring event, and we identify three mechanisms whereby new narratives lead to field-level change: (1) the domination by a particular narrative at the conclusion of the field-configuring event of discursive spaces accorded formal authority, which brings about new field-level rules, (2) the interpretation of new narratives by organizations, which brings about modifications to their relational, organizing, and discursive activities, resulting in new field-level positions, and (3) the ongoing translation of these narratives by organizations, which brings about the reproduction of certain key narrative elements, resulting in new field-level understandings. A third contribution of our study concerns the use of narratives in institutional work more generally, which has been linked to identity construction (Lawrence & Suddaby, 2006). Our study illustrates four distinct strategies of constructing identity through narratives, each with different institutional effects.

FIELD-CONFIGURING EVENTS, DISCOURSE, AND CHANGE

UN conferences bring together members of a range of types of organization to interact and exchange information on a given issue, providing a forum for struggles over different visions of the future. As such, they can be considered to be fieldconfiguring events (Lampel & Meyer, 2008); trade shows, professional gatherings, award ceremonies, and other types of conferences are other examples (e.g., Anand & Jones, 2008; Anand & Watson, 2004; McInerery, 2008; Oliver & Montgomery, 2008; Zilber, 2007). Field-configuring events are "temporary social organizations . . . in which people from diverse organizations and with diverse purposes assemble periodically, or on a one-time basis" (Lampel & Meyer, 2008: 1026). They provide arenas in which "disparate constituents" are able to "become aware of their common concerns, join together, share information, coordinate their actions, shape or subvert agendas, and mutually influence field structuration" (Anand & Jones, 2008: 1037). They are bound by time and space insofar as actors are co-located for a fixed duration (Lampel & Meyer, 2008; McInerery, 2008). This temporal and spatial compression (Garud, 2008) provides formal and informal opportunities for face-to-face social interaction, allowing actors to share information, establish patterns of domination, and create mutual awareness of a common enterprise (Anand & Watson, 2004).

Field-Configuring Events and Change in Institutional Fields

Field-configuring events are important mechanisms for bringing about change in institutional fields² (Anand & Watson, 2004; Lampel & Meyer, 2008). An institutional field constitutes "a recognized area of institutional life" (DiMaggio & Powell, 1983: 148) in which "participants interact with one another more frequently and fatefully than with actors outside the field" (Scott, 2001: 56). Although previous work has often examined institutional fields formed around industries or common technologies, attention has recently turned to how fields form around issues (Hoffman, 1999). Such work draws attention to fields as arenas of struggle and conflict (Brint & Karabel, 1991; Wooten & Hoffman, 2008) as they "become centers of debates in which competing interests negotiate over issue interpretation" (Hoffman, 1999: 351).

Institutional fields are comprised of three key components: positions, understandings, and rules (cf. Mazza & Pedersen, 2004). First, fields are "relational spaces that provide an organization with the opportunity to involve itself with other actors" (Wooten & Hoffman, 2008: 138). A field is a structured space of positions (Bourdieu, 1993) occupied by the actors that make up that field (Maguire, Hardy, & Lawrence, 2004). When a field changes, actors gain "a different 'point of view' about it and a different access to resources in the field" (Battilana, 2006: 656). Second, fields comprise meaning systems (Scott, 1994), which are "cultural expectations, shared cognitions and beliefs" (Zilber, 2008: 153) based on "shared conceptions that constitute the nature of social reality and the frames through which meaning is made" (Scott, 2001: 57). These taken-for-granted understandings shape what is considered appropriate behavior (Meyer & Rowan, 1977) and give meaning to actions (Greenwood, Oliver, Sahlin, & Suddaby, 2008). Finally, fields are characterized by formal rules (Scott, 2001), such as laws or professional standards (e.g., Greenwood & Suddaby, 2006; Maguire & Hardy, 2009; Perkmann & Spicer, 2008) to which individual

² Wooten and Hoffman (2008) argued that "organizational field" has replaced the term "institutional field." However, many writers continue to use the latter (e.g., Glynn, 2008; Greenwood, Suddaby, & Hinings, 2002; Oakes, Townley, & Cooper, 1998), including authors within the literature on field-configuring events (e.g., Lampel & Meyer, 2008; McInerney, 2008). Following Davis and Marquis (2005), we consider the two terms to be interchangeable but use only "institutional field" here.

organizations must conform if they are to avoid penalties for noncompliance (Hoffman, 1999).

Field-configuring events have been found to have an impact on all three aspects of institutional fields. First, they influence the relational systems connecting organizational and individual actors (Glynn, 2008) by, for example, altering the distribution of prestige among them (Anand & Watson, 2004), creating new interorganizational networks (Anand & Watson, 2004; Glynn, 2008), and linking previously disparate organizations (Anand & Jones, 2008; Garud, 2008). Second, they are important sites for forging new collective beliefs (Zilber, 2007), producing "conventionalizing" accounts of social life (McInerny, 2008) and developing shared cognitions (Oliver & Montgomery, 2008). In this way, they help shape the understandings that constitute the cultural and symbolic aspects of an institutional field (Glynn, 2008). Third, if given a "strong field mandate," which occurs when "key actors accord the [event] formal authority in specific domains" (Lampel & Meyer, 2008: 1028), a field-configuring event can have a significant impact on the regulation of organizational activities by creating or altering rules and laws that proscribe or prescribe particular practices, establishing membership eligibility, or specifying reporting requirements.

Field-Configuring Events, Discourse, and Narrative

Our interest is in the discursive processes whereby field-configuring events lead to change. Our study therefore examines how texts are produced, distributed, and consumed at field-configuring events. Institutional fields are held in place by structured, coherent discourses that produce widely shared, taken-for-granted meanings (Phillips et al., 2004). Discourses are interrelated bodies of texts that define "who and what is 'normal', standard and acceptable," thereby institutionalizing practices and reproducing behavior (Meriläinen, Tienari, Thomas, & Davies, 2004: 544). Conversely, institutional fields change as a result of struggle between competing discourses (Heracleous & Barrett, 2001; Maguire & Hardy, 2006) in which the "weapons" are texts (Chalaby, 1996: 694). Texts are symbolic expressions that are spoken, written, or depicted in some way (Taylor & Van Every, 1993: 108), making them "accessible to others" (Taylor, Cooren, Giroux, & Robichaud, 1996: 7). They include a wide range of types of written documents, but also forms of talk, such as verbal reports, speeches, and informal communication (Phillips et al., 2004; van Dijk, 1997). Thus, change in institutional fields depends upon the production, distribution, and consumption of texts

that destabilize the discourse supporting existing institutions (Maguire & Hardy, 2009).

A discursive perspective is particularly appropriate for the study of field-configuring events (Zilber, 2007) insofar as these "contentious social spaces" (McInerery, 2008: 1093) are characterized by extensive textual activity. In order to debate the issue around which the field is formed, promote ideas for its future, and persuade each other of the virtues of one approach over another, participants at field-configuring events prepare accounts, circulate reports, give press statements, make speeches, and engage in informal talk. In so doing, they produce and distribute texts, which are then consumed—that is, heard or read, interpreted, reproduced, and acted upon (or not)—by other participants. The production, distribution, and consumption of texts create a discursive space (Hajer, 1995), a physical or virtual space in which actors discuss, debate and dispute "issues they perceive to be of consequence to them and their group" (Hauser, 1999: 64). A discursive space has been defined as "a site of contestation in which competing interest groups seek to impose their definitions of what the main [problems] are and how they should be addressed" (Jacobs, Kemeny, & Manzi, 2004: 442). They are characterized by multiple voices as both dominant and peripheral actors engage in discursive struggle (Belova, King, & Sliwa, 2008). A discursive space can therefore provide opportunities to open up "an alternative interpretation of reality that relaxes taken-for-granted assumptions, thereby creating a place where new things can be said and new social structures envisioned" (Fletcher, Blake-Beard, & Bailvn, 2009: 84).

To date, the term "discursive space" has been used only loosely in the management literature. Organizations have been referred to as generic discursive spaces (Belova et al., 2008; Kornberger & Brown, 2007) in which diverse voices can be heard (Brown & Humphreys, 2006; Fletcher et al., 2009; Livesey, 2001). Similarly, research on environmental and public policy has referred to policy debates occurring in a single, undifferentiated discursive space (Hajer, 1995; Hauser, 1999; Jacobs et al., 2003; Shapiro, 2005). This lack of conceptual clarity is problematic for the study of field-configuring events for two reasons. First, from what is known about field-configuring events it appears that, rather than constitute a single discursive space, they are likely to generate multiple discursive spaces. For example, the otolaryngology conference attended by Garud (2008) included formal presentations, plenary sessions, panel discussions, informal sessions, and private parties. Notably, practices of textual production, distribution, and consumption vary widely in these settings, suggesting they should be treated as different spaces. Similarly, the Grammy

Awards is not comprised solely of the annual show; it also includes the 11 committees of the National Academy of Recording Arts and Sciences that decide categories; the voting system; and articles in generalist music periodicals and specialist genre magazines as well as broader media coverage (Anand & Watson, 2004). What one can say or write in these separate—albeit interlinked—discursive spaces varies considerably, as do the audiences and the ways in which texts are distributed. Failing to account for the multiple and differentiated nature of discursive spaces generated by a field-configuring event is likely to hamper scholars' ability to understand how it brings about change.

A second reason why the lack of conceptual clarity is problematic is that the discursive spaces generated by field-configuring events are distinct from those normally available in a field. By bringing together actors who would not otherwise be co-located (e.g., McInerery, 2008; Oliver & Montgomery, 2008), fieldconfiguring events present opportunities for novel or uncommon interactions among field members. At the same time, the fact that field-configuring events occur only for a fixed duration and at particular intervals (Garud, 2008; Zilber, 2007) means that the discursive spaces they generate are temporary. This mixture of openness and boundedness may well distinguish discursive spaces generated by a field-configuring event in ways that have important implications for how change comes about.

So far, then, very little is known about the discursive spaces generated by field-configuring events or their role in field-level change. To learn more about these dynamics, we therefore posed this first research question: What role do discursive spaces play in the process through which field-configuring events change institutional fields?

It has been suggested that one important way for actors to bring about change through textual activity in a discursive space is by telling narratives or stories³ that provide alternative visions of the future (Fletcher et al., 2009; Hajer, 1995; Hauser, 1999) and that displace established, taken-for-granted narratives (Fischer, 2003; Jacobs et al., 2003). A narrative is a "meaning structure that organizes events and human actions into a whole, thereby attributing significance to individual actions and events according to their effect on the whole" (Polkinghorne, 1988: 18). It consists of "temporal chains of interrelated events or actions" (Gabriel, 2004: 63) that lead to (or fail to lead to) some value-laden outcome (Cobb & Rifkin, 1991) or valued end point (Gergen, 1994) and in which various identities feature, such as heroes, villains,

and victims (Whittle, Mueller, & Mangan, 2009; Zilber, 2007). Actors draw on narratives "to give meaning to specific physical or social phenomena" (Hajer, 1995: 56) and to infuse "large amounts of factual information" with "normative assumptions and value orientations" (Fischer, 2003: 87). Narratives help to make sense of events, create legitimacy, and construct identities (Colomy, 1998; Lounsbury & Glynn, 2001; Martens, Jennings, & Jennings, 2007). In this way, narratives can be performative (Gergen, 1994): to "tell a story is to act upon the world" (Cobb, 1993: 250). They can "predict, empower and even fashion change" (Boje, 1991: 124), depending on how events are sequenced, how motives are attributed, or how moral qualities are assigned (Garcia & Hardy, 2007). They set forth truth claims, provide models of correct behavior, and impart values that affect problem definition (Witten, 1993). Not surprisingly, then, "actors interested in creating, maintaining and disrupting institutions often rely on narrative devices to do so" (Lawrence & Suddaby, 2006: 240).

Telling a story, however, does not guarantee it will generate institutional change. First, narratives affect actors differently: a narrative may be "a world-creating force, but worlds thus created can allow more freedom to some than to others" (Czarniawska, 1997: 24). Thus there is likely to be a struggle between those advantaged and disadvantaged by a particular narrative advanced in support of an institutional change project (Hardy & Phillips, 2004; Maguire & Hardy, 2006) as opponents "articulate counter-narratives to discredit the project and its advocates" (Colomy, 1998: 290). To lead to change, then, a given narrative must displace competing narratives with other versions of events or alternative visions of the future (Hajer, 1995; Jacobs et al., 2003). Second, if a narrative is to endure and displace other narratives, it must be taken up and restated in other texts (Maguire & Hardy, 2009). However, its meaning may change as it is "translated" during this process (Czarniawska & Sevón, 1997; Zilber, 2006). "To translate is to transform, and in the act of transforming a breaking of fidelity towards the original source is necessarily involved" (Brown, 2002: 7). Thus meaning is co-constructed by both the producers and consumers of a text (Hardy & Phillips, 2004); and "tactics of consumption" may be used to resist producers of texts (de Certeau, 1984). Only those meanings that emerge from the process of a narrative's translation are likely to affect an institutional field, and they are not necessarily those intended by the original author of the narrative (Maguire & Hardy, 2009).

Thus the effect of a narrative is not predetermined or unproblematic. Regardless of how skillfully its authors craft a narrative, its impact on an institutional field cannot be guaranteed. Our second research

³ We use the terms "narrative" and "story" interchangeably.

question therefore is: What role do narratives play in the process through which field-configuring events change institutional fields?

METHODS

Our study concerns the UN conference that resulted in the Stockholm Convention on Persistent Organic Pollutants (POPs). As a field-configuring event, it brought together many actors from the institutional field that was emerging around the issue (cf. Hoffman, 1999) of POPs, including a range of government officials from developed and developing states, environmental and public health nongovernmental organizations (NGOs), UN agencies, and industry representatives; and it ultimately resulted in a new global regulatory institution (Maguire & Hardy, 2006). We used a single, exploratory case study (Yin, 2003) to provide a detailed, holistic understanding of organizational and field-level change (cf. Suddaby & Greenwood, 2005; Zilber, 2002). We selected this case because it is well-documented: primary texts produced and distributed by participants are largely in the public domain, as are official records and media accounts. Moreover, the conference format is representative of many multilateral meetings held by the UN and other international agencies and hence has wider significance.

The Case Study

The conference that culminated in the Stockholm Convention was initiated in February 1997, when the United Nations Environment Programme's (UNEP) Governing Council set in motion an intergovernmental negotiating committee (INC) with a mandate, known as UNEP GC 19/13C, to develop an international, legally binding instrument to address POPs.⁴ The resulting convention established global rules for the production, use, import, export, release, and disposal of POPs, which are highly toxic substances that persist for many years before degrading, travel long distances through air and water, and accumulate in the fatty

tissues of humans and wildlife (UNEP, 2002).⁵ This legal text was agreed on in a series of five meetings of the INC between June 1998 and December 2000, was signed in Stockholm in May 2001, came into effect in May 2004, and has over 150 signatories.

This particular conference was similar to those associated with other UN conventions, consisting of a series of INC meetings attended by delegates of participating states and representatives of nonstate actors, such as NGOs, intergovernmental organizations (IGOs) such as the European Commission, and UN agencies such as the World Health Organization. The legal text was negotiated by the state actors: if states agreed on wording for a particular section, it was incorporated into the draft; if not, the wording was "bracketed" and revisited at a later stage. Contentious issues were explored in smaller "contact groups" whose deliberations were reported back to the plenary. Nonstate actors could intervene during plenary sessions, although they did not make formal submissions, and they participated in contact groups. They also set up information booths, where they distributed pamphlets, made presentations, showed films, held information sessions, and lobbied state delegates. The conference was reported in mainstream and specialized media, and participants held news conferences and issued press releases.

Our particular focus is on the struggle during this conference over practices of using one particular chemical—dichlorodiphenyltrichloroethane (DDT). Once the top-selling insecticide in the United States, DDT had been banned in that country in 1972. With other countries also imposing bans, by 1998 primarily only African countries used it, for the control of mosquitoes that spread malaria.6 We chose to focus on DDT because discussion of this chemical was a prominent feature of the conference and distinct from the discussions of other POPs. At the beginning of the conference, it appeared that DDT would be treated like other POPs and, yet, when the legal text was finally agreed upon, DDT was the only intentionally produced chemical whose use was "restricted" subject to certain conditions, rather than "eliminated." Table 1, which summarizes the discussion of DDT in the five INC meetings, documents this outcome. In

⁴ INCs are made up of representatives of all states participating in the process of negotiating the international, legally binding document. States send delegations that range from a handful of delegates to as many as 40 members to meetings. Typically, delegations include topic experts from various ministries, in this case foreign affairs, environment, and health. The composition of delegations can vary from meeting to meeting as new issues arise, although a core group of individuals from a given country usually attends all meetings to ensure continuity.

⁵ The Stockholm Convention covers an initial list of 12 chemicals known as the "dirty dozen": ten intentionally produced chemicals (aldrin, chlordane, DDT, dieldrin, endrin, HCB, heptachlor, hexachlorobenzene, mirex, and toxaphene) and two unintentional by-products of industrial processes (dioxins and furans).

⁶ DDT was also used in Mexico; however, Mexico had already expressed an intention to abandon its use by 2007.

TABLE 1 Chronology of INC Meetings

Meeting	Summary of Discussion of DDT	
INC-1 June 29–July 3, 1998, Montreal	The executive director of UNEP called for international action on POPs. DDT was rarely mentioned except as one in the list of POPs. There was no discussion in plenary of DDT being a candidate for special treatment apart from one mention by the World Health Organization (WHO) which "acknowledged the need to use DDT in particular cases" related to malaria. The Worldwide Fund for Nature (WWF) proposed a target deadline of 2007 for the elimination of DDT. No malaria NGOs attended. The meeting "enjoyed a smooth and relatively trouble-free start. Delegates met with a clear spirit of cooperation, mutual purpose, shared responsibility and voiced their determination to tackle what is universally acknowledged as a very real and serious threat to human health and the environment [i.e., POPs]." (ENB [Earth Negotiations Bulletin], 1998: 1)	
INC-2 January 25–29, 1999, Nairobi	DDT was rarely mentioned except as one in the list of POPs. When it was mentioned in plenary, the discussion was about the provision of alternatives. There was no discussion of a special status for DDT apart from Physicians for Social Responsibility (PSR) saying the phase out of DDT should not compromise malaria control. No malaria NGOs attended. The meeting was characterized by much cooperation and consensus: "Overall, many delegates characterized INC-2 as a success." (ENB, 1999a: 1)	
INC-3 September 6–11, 1999, Geneva	In the opening of the meeting, the possibility of exempting DDT in the case of malaria was specifically mentioned. In plenary, a representative from the Malaria Project (MP) referred to an open letter, signed by doctors, scientists and health economists, which urged that DDT use be permitted to fight malaria and argued against the WWF deadline for the elimination of DDT. Other environmental NGOs continued to argue for elimination but without a fixed timeline. Developing countries were divided—some argued for the need for alternatives to DDT and funding to facilitate its elimination, others suggested a delay on its prohibition. WWF withdrew its global DDT phase-out date of 2007 in plenary. The US proposed specific language restricting DDT use to vector control according to WHO guidelines in a contact group. MP and the Malaria Foundation International (MFI) attended INC-3 (as well as INC-4 and INC-5). The lack of consensus resulted in DDT's status (i.e., to be eliminated or restricted, along with any special rules which may apply) being bracketed in the legal text: "negotiations haven't really begun yet and the issues are still being framed." (ENB, 1999b: 13)	
INC-4 March 20–25, 2000, Bonn	DDT was considered in a contact group but the lack of consensus endured. South Africa proposed language (Conference Room Paper 26) similar to that of the US in INC-3 which would place DDT in Annex B (i.e., to be restricted) rather than Annex A (where it would be eliminated) but the wording on DDT remained bracketed. Environmental NGOs continued to advocate placing DDT in Annex A. "While it succeeded in drafting articles on technical assistance and financial resources and mechanisms," the draft legal text, including articles addressing DDT, remained "heavily bracketed and developed and developing country positions [were] deeply divided." (ENB, 2000a: 1)	
INC-5 December 4–9, 2000, Johannesburg	Environmental NGOs continued to advocate placing DDT in Annex A. South Africa and the EU proposed language similar to that of South Africa at INC-4, keeping DDT in Annex B but clarifying that DDT production and use would be eliminated by all states except those registering with the Convention Secretariat. This proposal was adopted in plenary. The legal text of the Convention was agreed, and DDT was the only chemical scheduled for restriction (Annex B) rather than elimination (Annex A), permitting DDT's "continued production and use subject to a number of constraints" (ENB, 2000b: 17)	

being treated differently from other POPs, DDT was a "transparent" case (Eisenhardt, 1989) that allowed us to separate texts addressing DDT from the larger body of texts to yield a more manageable and clearly defined corpus for analysis. Also important was the highly contested nature of DDT, which meant many texts were produced by actors participating in the conference to persuade others of their visions for the future of the field of POPs and, in particular, whether it should include continued use of DDT. These texts

could be used to identify distinct narratives of DDT (cf. McInerney, 2008).

Data Collection

We started by collecting documents related to the POPs issue, including technical and scientific reports, official UNEP documentation, and the legal texts of other international environmental treaties to establish the background of the Stockholm Convention. We then collected the following texts from each INC meeting: (1) the official draft versions of the evolving legal text of the Convention published by UNEP, (2) conference room papers, which contained formal submissions proposing modifications to the evolving legal text, (3) daily meeting reports in the Earth Negotiations Bulletin (ENB),7 (4) the closing summary report produced by UNEP and agreed upon by state actors at the end of each INC meeting, and (5) materials distributed at the information booths set up in the corridor at the INC meetings, including pamphlets, position papers, scientific articles, and media reports. Finally, we collected key texts addressing the Stockholm meetings and the DDT issue that had been produced and distributed outside of the meetings, such as scientific articles on DDT, letters to the editors of journals and newspapers, media accounts of the POPs meetings, and a range of organizational documents. These texts had the following sources (1) binders containing media coverage of each of the meetings that UNEP compiled and made available, (2) a systematic search of ABI-Inform for the period 1997-2000 in which we used "POPs" and "DDT" as keywords, (3) references by interviewees, and (4) provision by organizations in the field.

One of the authors observed meetings of the INC and took notes on actors' interventions addressing DDT and reactions to them, as well as on information sessions on DDT held in the corridors. This author also conducted a series of 40 interviews between 1998 and 2001 with members of state delegations, UN agencies, NGOs, and industry. These interviews consisted of semistructured questions in which interviewees were asked to recount the debate around DDT and, if they had attended the pertinent meetings, to describe them. Questions were also asked about the organization they represented, in particular about how the organization was handling the DDT issue and whether and how this changed as the debate

evolved during the meetings. The interviews lasted between one and two hours and were taped and transcribed.

Data Analysis

In the first stage of analysis, we developed an overall chronology of the Stockholm Convention that drew on the multiple primary sources described above, as well as secondary sources (e.g., Lallas, 2001; Walker, Riccardione, & Jensen, 2003; Yoder, 2003). We constructed an event history database (Van de Ven & Poole, 1990) by chronologically ordering descriptions of "who did what, when" during the process that led to the agreement on the legal text. We also created a discursive event history database (Maguire, 2004) by ordering texts, identifying authorship, and classifying content to ascertain who said what, and when, in relation to the fate of DDT during this process.

In the second stage of analysis, we explored the data for evidence of specific discursive spaces generated as a result of the UN conference. Our observations of the conference made it clear that it co-located actors in formal plenary sessions in which the legal text was decided, contact groups in which actors congregated to discuss contentious issues, closed meetings limited to regional groupings of delegations, the corridors that surrounded the assembly halls, and elsewhere. It was also clear to us that the practices of text production, consumption, and distribution related to each of these locations were quite different. We therefore undertook a more systematic analysis of these discursive practices. We classified the texts in our database and noted a wide range of different types, such as speeches, verbal interventions, meeting summaries, press releases, and brochures. We then examined whether these texts could be clustered in meaningful ways in terms of different patterns of production, distribution, and consumption. In this way, we distinguished three relatively stable sets of conventions (cf. Fairclough, 1992) through which we identified three distinct discursive spaces referred to here as "plenary speak," "corridor talk," and "external communication."

Third, we conducted a narrative analysis of texts in our database. We started by examining texts produced in preparation for and during INC-1 (the first INC meeting; see Table 1). We grouped them according to discursive space and author, then coded them according to their visions for the future of the POPs field and noted convergence concerning the elimination of all POPs, including DDT. We then conducted a systematic narrative analysis, drawing on the work of Gergen (1994), Boje (2001), Martens et al. (2007), and Zilber (2007) to analyze whether and how the

⁷ The Earth Negotiations Bulletin is considered to provide "objective" daily and summary reports of UN negotiations on environment and development issues for both state and nonstate actors (Chasek, 2001: 172). Its "information is of high quality, reliable, independent, and technical" and "considered invaluable by policy makers who require up-to-date, detailed information on international meetings" (United Nations Association in Canada, 2009). It is a two-sided, double-column, single sheet of paper, available daily during meetings, that summarizes the previous day's proceedings—both formal and informal meetings—and lists the current day's events. It is published by the International Institute for Sustainable Development, Canada, and has provided coverage of UN negotiations since 1992.

texts constructed: (1) coherent identities, (2) a desired end point or ultimate goal, and (3) enabling forces that contributed to movement toward that end point. In this way, we identified a convergent initial narrative of "DDT as evil threat" from a wide range of texts produced by different authors and associated with all three discursive spaces. We repeated the exercise for the later INCs and identified a "counternarrative" (Zilber, 2007) from texts primarily associated with external communication prior to and during INC-3, which we refer to as "DDT as hero." Finally, in INC-5, we identified a third narrative from texts associated with plenary speak, referred to as "DDT as necessary evil."

In the fourth stage of analysis, we identified five organizations engaged in the DDT debate and most often named in: (1) notes taken while observing meetings, (2) interviewees' accounts, (3) UNEP and ENB summaries of plenary interventions, and (4) journalists' accounts. The organizations included two malaria NGOs, the Malaria Foundation International (MFI) and the Malaria Project (MP); two environmental NGOs, the International POPs Elimination Network (IPEN), and the Worldwide Fund for Nature (WWF); and the World Health Organization (WHO), a UN agency with expertise in malaria control and DDT.8 We then examined interviews and texts related to these organizations to see if we could find evidence of changes occurring as a result of the conference. We found that changes converged around three sets of activities: (1) relational activities, i.e., new or modified interactions with other organizations; (2) organizing activities, i.e., modifications to how an organization was structured internally, such as the distribution of responsibilities, allocation of resources, and development of expertise in relation to DDT; and (3) discursive activities, i.e., notable shifts in an organization's production and distribution of texts. We then examined the data for evidence of when and why these changes had occurred and found that they were responses to different narratives.

Finally, we revisited the data to document the changes in the institutional field resulting from the conference. We systematically compared the situation at the beginning of INC-1 with that at the end of INC-5 in terms of the positions of key organizations in the field, as well as understandings and formal rules concerning DDT.

FINDINGS

We first present our findings regarding three discursive spaces generated by the conference. We then present the three narratives that we identified and examine how key organizations responded to them. Finally, we summarize the changes in the institutional field. We conclude by integrating these findings to describe the roles played by discursive spaces and narratives in the processes whereby field-configuring events lead to change.

Discursive Spaces

Our analysis identified three distinct discursive spaces generated by the meetings associated with the Stockholm Convention, each of which was associated with different rules and understandings regarding appropriate forms of text production, distribution, and consumption, which, in turn, constrained or enabled access and discursive activity of individual actors. Table 2 summarizes the characteristics of the three spaces, which we labeled "plenary speak," "corridor talk," and "external communication." Plenary speak encompassed the talk that occurred in the plenary, in which state and nonstate actors could participate but in different ways, as well as the documents that were introduced into plenary session. Corridor talk included the materials that mainly nonstate actors displayed and distributed for informational and lobbying purposes in the hallways outside of the plenary auditorium. External communication refers to texts that circulated beyond the conference itself.

The rules and understandings regarding plenary speak were highly formalized and codified, as illustrated in the ten-page discussion "Rules of Procedure" in the report from INC-1 (UNEP, 1998: 15-25). Only state delegates could propose wording for the various sections of the legal text in the plenary sessions, via a written submission known as a "conference room paper," to which other state delegates then reacted verbally, in the order they were recognized by the chairperson. If states agreed to a proposed wording, the legal text was (re)written to reflect this agreement; if not, the wording was "bracketed," meaning that subsequent texts (further conference room papers and verbal interventions) were required to change the wording and secure agreement. As a wording was changed and agreement was reached, the brackets disappeared. In this way, state actors proposed, agreed upon, and ultimately adopted the specific language contained in the various articles and annexes of the legal text of the Stockholm Convention.

These rules and understandings were widely shared. Governments held preparatory sessions in

⁸ Our analysis showed that chemical companies and chemical industry associations were not often mentioned in meetings and accounts of meeting, possibly because only a small number of organizations in China and India were manufacturing DDT.

TABLE 2 Summary of Characteristics of the Three Discursive Spaces

Characteristic	Plenary Speak	Corridor Talk	External Communication
Description	Text production, distribution and consumption in the plenary sessions of the INC meetings.	Text production, distribution and consumption in the corridors during the INC meetings.	Text production, distribution and consumption concerning the INC meetings for external audiences.
Rules and understandings regarding access and discursive activity	State delegates are recognized to speak before NGOs; can suggest amendments to the legal text; do not reopen discussions on agreed (unbracketed) text. Accredited NGO representatives speak after states; make statements but do not suggest amendments; do not directly refer to state interventions positively or negatively; cannot distribute materials by placing them on seats; and can have privileges removed if they break these rules.	Accredited NGOs can set up tables, kiosks, etc., outside of plenary to distribute materials; can hand materials directly to and talk with delegates in the corridors.	Rules and understandings vary according to medium (e.g., scientific journals vs. newspapers): scientific articles are authored by scientists and must submit to peer review; press conferences are given by state delegations, NGOs, IGOs, UNEP, and other UN agencies and are typically accompanied by written press summaries; NGOs often engage in media stunts which contain dramatic, emotional images.
Text producers	State delegates, as negotiators; accredited NGO, IGO and UN agency representatives, as observers.	Mostly accredited NGO representatives; less commonly, accredited IGO and UN agency representatives.	Diverse actors: UNEP officials; conference participants (state delegations, NGOs, IGOs, UN agencies); as well as outsiders such as journalists.
Types of texts produced and distributed	Verbal interventions; conference room papers.	Position papers, often with specific suggestions for the wording of the legal text; scientific reports; brochures and pamphlets; slide shows; advocacy videos; informal conversations.	Letters to editors; press releases; scientific journal articles; media reports; and websites.
Text consumers	Plenary participants; UNEP secretariat which maintains evolving legal text.	State delegates.	The public; scientists; policy makers (both state delegates but also those who are not part of state delegations).
Main purpose of text production	To formally amend the evolving legal text.	To inform and/or influence state delegates.	To publicize positions; to attract publicity; to inform and/or mobilize actors beyond the INC meetings.
Primary data sources for narrative analysis	Observations of plenary; conference room papers.	Materials collected from the information booths; observations of lobbying activities.	Letters, press releases; media reports; scientific journal articles.
Secondary data sources for narrative analysis	UNEP meeting summary reports; <i>ENB</i> meeting reports; interviewee accounts.	"In the corridor" sections of <i>ENB</i> meeting reports; interviewee accounts.	Interviewee accounts.

which they distributed information describing the procedural rules, routines, and norms of the meetings. Environmental NGOs also held training sessions and distributed instructions for their members. IPEN

(2000b) produced a 62-page book, the *Manual for NGO Participants in the POPs INC Process*, containing descriptions of what was "customary" and "permitted" or "not permitted" in plenary. This docu-

ment noted restrictions placed on nonstate actors: NGOs "usually occupy seats in the rear of the meeting room behind the seats of government delegates"; "should not directly refer to previous interventions by specific governments or voting blocs, either positively or negatively" when making an intervention; and "are not allowed to distribute documents by placing them at every seat/desk" (IPEN, 2000b: 11, 14–15).

NGOs enjoyed far greater access to corridor talk. If accredited by UNEP, which was a relatively simple matter of registering prior to the meetings, they could set up tables and information kiosks from which they could distribute texts to any participant, and they could lobby state delegates in person. IPEN advised its members to "personally hand copies of your material to the key delegations you want to influence" (2000b: 17). A wide range of texts were distributed: reports, pamphlets, and position papers, and other media such as slide shows and advocacy videos. The materials often had evocative pictures, pithy slogans, and distinctive logos, and the booths had eye-catching posters.

The rules and understandings governing external communication ensured wide access in that a range of actors could participate in the DDT debate by writing opinion editorials, holding press conferences, or publishing scientific journal articles. Even so, we found that specific rules and understandings governed this discursive space: particular types of texts (e.g., press releases) were produced by certain types of actors (e.g., NGOs), distributed in relatively stable, predictable ways (e.g., via e-mail from hired media consultants to journalists), and consumed according to particular norms and routines (e.g., journalists paraphrased most of the press releases' content but quoted particularly strong or emotional wording).

In sum, the UN conference generated three discursive spaces not normally available in the field, each of which was governed by shared rules and understandings that enabled or constrained the participation of various actors. As the next set of findings shows, different narratives were told in these discursive spaces during the course of the conference.

Narratives and Organizational Responses

In this section, we identify three narratives from texts produced during the conference; see Table 3 for a summary. We also examine how five key organizations responded to each of the narratives. These findings are presented chronologically to convey the temporal dynamics of the discursive activity and organizational responses.

The initial narrative: "DDT as evil threat."

An evil threat endangers humans—particularly women and children—and wildlife across the entire world: the "dirty dozen" POPs, including DDT. To protect these victims, the countries of the world must join together and agree on an international, legally binding instrument that prevents POPs from being produced and used; and developed countries must act as good global citizens by providing financial and technical resources to assist less fortunate countries. (author summary of the initial narrative)

We identified a clear narrative, summarized above, from texts produced around June 1998, at the start of the first meeting of the intergovernmental negotiating committee (INC-1). A wide range of actors produced these texts, which were associated with all three discursive spaces. A particularly coherent identity was constructed for POPs: they were unequivocally portrayed as an evil threat. This identity was discerned in plenary speak, when UNEP's executive director stressed that "POPs represented a truly global threat" (UNEP, 1998: 3). It was echoed in corridor talk and external communication, when brochures and press releases produced by environmental NGOs argued that POPs were of "global concern because they travel via wind, water and bioaccumulation in animals ... these highly toxic compounds are not only dangerous where they're produced and used, but are reintroduced into other far-away countries where their use has been curtailed or nonexistent" (IPEN,

DDT did not have a distinct identity in this narrative insofar it was rarely singled out for special attention. Texts distributed in plenary speak did not distinguish DDT from the 11 other POPs comprising the "dirty dozen." WHO was the only organization to note "the need to use DDT in particular cases," that is, in the "struggle against malaria," but WHO also stressed the need "to reduce reliance on DDT" (ENB, 1998: 4). In corridor talk and external communications, most environmental NGOs produced texts that highlighted the dangers of POPs without singling out DDT for special mention. IPEN's (1998a) prominent Background Statement and POPS Elimination Platform made only one oblique reference to DDT, when it stated that no country "must be asked or required to take action under a POPs agreement that is substantively harmful to the health or to the well-being of its people or environment." Texts that mentioned DDT specifically appeared to do so to draw attention to the broader POPs issue. For example, in a press release (WWF, 1998b), DDT was called "the poster

TABLE 3 Summary of Narratives^a

"DDT as Evil Threat" (initial narrative, circa June 1998)	"DDT as Hero" (counternarrative, from 1999)	"DDT as Necessary Evil" (concluding narrative, circa December 2000)
	Coherent Identities Constructed in the Na	rrative
POPs are the evil threat.	Malaria is the evil threat.	POPs are an evil threat; malaria is another evil threat.
DDT is a POP and, therefore, an evil threat.	DDT is the hero.	DDT is a necessary evil.
Women, children, and wildlife in all countries are the victims.	African women and children are the victims.	Women, children and wildlife in all countries are victims of POPs; African women and children are also victims of malaria.
Developed states are expected to act as good global citizens.	Developed states are expected to act as good global citizens. Environmental NGOs are villains.	Developed states are expected to act as good global citizens. WHO is a <i>sage</i> whose special knowledge on appropriate DDT use will protect victims of both evil threats in a balanced manner.
	Valued End Point Constructed in the Nar	rrative
Elimination of POPS.	Malaria control.	Elimination of POPs without compromising malaria control.
	Enabling Forces Constructed in the Narr	rative
International legally binding instrument on POPs. Financial and technical assistance from developed countries to developing countries and countries with economies in transition, for POPs elimination.	Any international legally binding instrument on POPs must have exemptions allowing continued access to DDT for malaria control. Financial and technical assistance from developed countries to developing countries, for research, design, and delivery of alternatives to DDT. Rejection by states of claims by environmental NGOs re, DDT's impacts on human health and on need for fixed phase-out date.	International legally binding instrument on POPs with exemptions allowing continued access to DDT for malaria control. Financial and technical assistance from developed countries to developing countries and countries with economies in transition for POPs elimination; and the promotion of research and development of alternatives to DDT.

child" for all POPs because it was still "menacing the environment."

Another coherent identity discerned in this narrative was that of the victim: while referring to a general threat to human health and the environment, texts singled out women, children, and wildlife as specific victims. For example, women and children were at risk from "long-term exposure to even low levels of POPs," which caused "birth defects, fertility problems, greater susceptibility to disease, developmental disorders in children and certain cancers" (UNEP,

1998: 3). Moreover, "injury caused by exposure to POPs is often expressed, not in the exposed adult population, but in the offspring generation" because "maternal body burdens of POPs are transferred through the placenta to the developing fetus and through breast milk to the nursing infant" (IPEN, 1998a). Wildlife also suffered adverse impacts, including "birth defects, reproductive problems, and immune system dysfunction severe enough to be implicated in large population declines" (UNEP, 1998: 3).

The valued end point in this narrative was therefore the eradication of all POPs. The "ultimate goal must be the elimination of POPs releases, not simply their better management" (UNEP, 1998: 3). The only organization to single out DDT was the WWF, which proposed 2007 as a phase-out date specifically for DDT. The main enabling force that would bring about this outcome was an international, legally binding instrument on POPs: "The world's governments . . . must establish a legally binding global Programme of Action designed to eliminate POPs" (IPEN, 1998a). In addition, developed countries were expected to act as good global citizens by assisting less developed countries with "adequate financial and technical resources" (WWF, 1998c).

Many [state] representatives underlined the need to provide developing countries and countries with economies in transition with technical and financial assistance to meet the obligations arising from the international legally binding instrument on POPs. (UNEP, 1998: 7)

By acting in this way, developed countries could further the initiative to eliminate all POPs.

Responses to the narrative of "DDT as evil threat." This initial narrative, which dominated all three discursive spaces during the first two meetings, eventually provoked a series of responses on the part of two malaria NGOs, the Malaria Foundation International (MFI) and the Malaria Project (MP). Set up to address malaria, not POPs, neither was represented at the first two INC meetings. The director of MP learned about the meetings and the story being told about DDT as a result of personal ties to an IPEN member organization and subsequently contacted MFI. Both organizations interpreted the narrative as a threat because DDT—"a critical tool in the fight against malaria" (MFI, 1999)—was "at risk even for malaria control" (president of MFI, cited in AAAS [2000]).

The two organizations engaged in new relational activities by forging a close collaboration as they entered the field by participating in the UN meetings and launching a high-profile campaign against the elimination of DDT. As the MFI website later described.

In 1999,¹⁰ the United Nations Environment Program began negotiating a treaty to eliminate the use of 12 persistent organic pollutants (POPs), including

DDT. Over 300 environmental groups... advocated a total DDT ban to be effected as early as 2007. The Malaria Foundation International and the Malaria Project... initiated a campaign to make sure that DDT was still available for use in malaria vector control. (MFI, 2008)

As the campaign against the elimination of DDT became a priority for both NGOs, organizing activities changed. Resources were found for representatives to attend the POPs meetings. Expertise on POPs and the UN conference format was developed by putting the board at MFI "through a very rigorous process reviewing and studying the issues" (president of MFI, cited in AAAS [2000]). Knowledge and expertise were transferred between the organizations: the director of MP "briefed all the members on MFI's board on what to do if they were contacted by the press" and provided updates on the INC meetings, and MFI's network of scientists was mobilized and their expertise used to "verify the science" (MP interviewee). The collaboration thus combined the organizations' communication capabilities, medical knowledge, and networks.

Particularly important were the two organizations' discursive activities, especially the preparation of an open letter (MFI, 1999) that acknowledged DDT's negative impacts on the environment but challenged claims regarding DDT's negative impacts on human health and argued strongly against a phase-out date. MP's director wrote the letter just prior to INC-3. It was distributed through MFI's networks to malariologists, public health experts, and physicians, who were asked to sign it, and posted on a website. 12 Attention was drawn to the letter by, for example, correspondence published in the British Medical Journal (Attaran & Maharaj, 2000) and on "listservs" addressing malaria. It was eventually signed by over 400 doctors and scientists, including three Nobel prize-winners, enhancing the credibility of the two organizations and their argument for continued access to DDT. An MP interviewee told us that the signed letter was distributed to "all the delegates from developing countries" and circulated to "the wider media" where it got "a lot of coverage" as a result of "strategies of getting it into the press."

⁹ WWF proposed this date because of Mexico's intention to phase out its use of DDT by 2007.

 $^{^{10}}$ The negotiations actually began in 1998; MFI became involved in 1999.

¹¹ A "vector" is an organism that does not itself cause disease but nonetheless is a pathway of disease transmission by transporting disease-causing organisms from one person to another, as in the case of the mosquito that carries the malaria parasite.

¹² http://www.malaria.org/ddtcover_english.html (last visited December 6, 2009).

The counternarrative: "DDT as hero."

Malaria is a more urgent evil threat than POPs. Its victims—African women and children—are dying in large numbers. DDT is the hero that can save them; it has vanguished malaria in many countries and is still desperately needed as the only effective and affordable method of control. The environmental NGOs are callous villains; not only are they oblivious to the needs of the world's most vulnerable people, but their claims about DDT's dangers are untrue and must be ignored. Instead, DDT must continue to be available for malaria control, as an exception in any legally binding instrument to eliminate POPs, while developed states, to be truly good global citizens, should help their impoverished neighbors to fight malaria by providing financial and technical resources for alternatives to DDT. (author summary of the counternarrative current circa 1999).

The letter formed the basis of a counternarrative we have labeled "DDT as hero," which eclipsed the story "DDT as evil threat" in external communications from INC-3 as it was taken up in a wide range of media texts. It clashed with the initial narrative in the corridor talk of INC-3 and was introduced into plenary by a representative of MP (*ENB*, 1999b: 3). The counternarrative introduced a new evil threat, malaria, describing it as plaguing "hundreds of millions of the world's poorest people; and worse [being] on the rise," condemning "millions to misery or death from a preventable disease" (Economist, 1999: 25). Malaria caused "500 million clinical cases of disease and about 2.7 million deaths a year" (MFI, 1999); and its victims were mainly African women and children. According to a malaria expert from the Harvard School of Public Health (quoted in the New York Times, August 29, 1999), malaria killed a child "every 12 seconds." It meant "sure death for several million children every year" (Economist, 1999: 25) and was "a scourge of much of the developing world . . . most of them children under five and pregnant women" (Boseley, 1999). DDT was therefore a hero—the "only effective defence" (Economist, 1999: 25). Not only was it a "legitimate," "critical," and "useful" tool of malaria control, it was the "insecticide of choice" on the grounds of its low cost and effectiveness (MFI, 1999) and had saved millions of lives (Boseley, 1999).

In addition to recasting DDT as the hero, the counternarrative introduced a villain: environmental NGOs that placed more value on the environment than they did on human health. One newspaper's headline stated "green ideal clashes with third world need," and a state delegate said, "You got lovers of

birds and bunnies trying to kill babies." On Radio National Australia, April 19, 1999, the MFI's Dr. Annette Gero, said that WWF's proposal for a phase-out date of 2007 for DDT "unacceptably" endangered "health in countries with malaria." As a result, environmental NGOs were "not only wrong but outrageously unethical" since "the public health benefits of DDT amply outweigh its health risks—if, indeed, such risks exist at all" (Attaran & Maharaj, 2000: 1404).

The valued end point of this narrative was malaria control, which depended upon several enabling factors. First, if POPs were going to be regulated globally, malaria control could only be achieved if the international legally binding instrument contained exemptions allowing continued access to DDT. The Economist stated: "Banning DDT is a great idea whose time has not yet come" (1999: 25). Second, if developed countries were truly to be good global citizens, they should provide financial and technical assistance to developing countries for researching and implementing alternatives to DDT, as well as for malaria control more generally. The "hardest step" was "for rich countries to put some cash on the table" (Economist, 1999: 25), despite the fact that "if you try to get rid of DDT without guaranteeing that money will be available for alternatives, you will kill people" (director of MP, quoted in UN Wire [1999]):

Developing countries should consider that Western countries have an ethical duty to research and implement these alternatives.... Western countries want a DDT ban.... They should, accordingly, pay for it. (MFI, 1999)

A final enabling factor in achieving malaria control was for states to ignore the "exaggerated" claims of the villainous environmental NGOs:

A report distributed by World Wildlife Fund ... shows how the science of DDT and health can be misrepresented ... to protect wildlife. The report appears well researched and credible, in part because it cites a long list of scientific studies. But when one reads these studies, it becomes clear that WWF has inaccurately conveyed the conclusions of some studies to discredit DDT. (MFI, 1999)

Responses to the counternarrative of "DDT as hero." In this section, we examine the responses of three organizations, WHO, IPEN, and WWF, to the counternarrative. WHO interpreted the counternarrative as an opportunity to secure additional funding for reducing reliance on DDT at the same time as enhancing malaria control.

An interviewee from WHO said "There will be so much funding coming to support the POPs, so we should have a win/win situation of ... getting this huge fund for malaria control. We will reduce maybe DDT but, in the meantime, we will have a huge amount of funding." And a WHO document stated that there was "an opportunity to redirect and strengthen malaria vector control programmes," especially through WHO's Roll Back Malaria (RBM) program (WHO, 2001: 24).

To achieve this outcome, WHO engaged in new relational activities, forming "new and highly effective 'partnerships' or 'working relations' with the United Nations Environment Programme (UNEP), the US Environmental Protection Agency, the environmental policy apparatus of core RBM partners, as well as a variety of health and environmental NGOs" (WHO, 2002: 15). The organization emphasized "a close collaborative effort between WHO and UNEP" (WHO, 2000). It started to work closely with other organizations to mobilize resources for reducing reliance on DDT; with U.S. and South African state delegates to develop specific wording for the Stockholm Convention; and with African states in a "Regional Consultation for Preparing African Countries to Reduce Reliance on DDT for Malaria Control" (UNEP, 2000a: 4). WHO also tried to increase the number of African disease control officials at later meetings on the grounds that their earlier lack of representation had led to an initial focus "on chemical safety rather than on concerns of malaria control" (WHO, 2001: 25).

WHO made changes in its organizing activities. The POPs file had initially been handled by departments responsible for chemical safety and environmental health, but following INC-3, WHO designated the RBM program as the new "focal point for DDT and malaria issues within WHO" (UNEP, 2000a: 4). Consequently, instead of WHO being represented by environmental health experts from the head office in Geneva, as at the first three meetings, it sent three malaria experts (including one from its regional office for Africa) and a single environmental health representative to the fourth meeting. Malaria experts exclusively represented WHO at INC-5. WHO also established a "WHO-wide Work Group on DDT" whose primary purpose was "to get a global agreement that DDT ... must be treated specially, with regard to preserving its use for short-term malaria control" (WHO interviewee). It drafted a "WHO-wide DDT Work Plan" to secure funding (UNEP, 2000a: 4) and reallocated funds "to assist Member Countries in reducing reliance on DDT" (UNEP, 2000b: 2).

WHO changed its *discursive* activities, placing more emphasis on both external communication and corridor talk. At the first two INC meetings, WHO issued no press releases or "notes for the press" but, caught on the back foot by the controversy at INC-3, it issued a press note (no. 20) on the second last day of

the meeting (September 10, 1999) in which it argued for a "balanced position on DDT" that reflected "concern over the often insidious health impacts of DDT's ecotoxicity and the important, sometimes vital, role DDT continues to play in malaria control." At INC-4, WHO issued its only press release of the meetings (no. 15, March 17, 2000), and the project manager for RBM held a high-profile "pre-meeting DDT briefing for delegates and reporters," where he distributed a "delegates' report from the regional consultation to prepare African countries towards reduction of reliance on DDT for malaria control" (WHO, 2000). The report unanimously supported the inclusion of "a general exemption on DDT production and use limited to vector control" (WHO, 2000). A pamphlet on "a balanced approach" for "reducing reliance on DDT" (WHO, 2000) was distributed at the last two meetings, and a glossy information pack with a new press note (no. 15, November 28, 2000) reiterated WHO's support for the special treatment of DDT.

IPEN was a network of 58 environmental and public health NGOs launched just prior to INC-1 to lobby for the elimination of all POPs. In contrast to WHO, IPEN interpreted the counternarrative as a threat insofar as it endangered the reputation of IPEN and potentially jeopardized hopes of achieving a treaty. As an IPEN interviewee said, "I was out with the delegate from [a developing country] and he said to me exactly those words: 'Well, this treaty could still go down because you NGOs are opposed to a DDT exception.'"

In response, IPEN altered its relational activities with other organizations. First, it took steps to distinguish itself from WWF, despite the latter being one of its founders because, as one IPEN interviewee put it, by this point, "If anything comes from WWF, it is not going to be credible." At the first two INC meetings, IPEN had designated WWF representatives as the only "contact points" for the DDT issue, but at the last two INC meetings, it listed two additional representatives from other member organizations. Second, IPEN began to build new relations with officials of African countries and gained access to African health policy networks through the active recruitment of Africa-based NGOs as members. Whereas only one of the initial IPEN 58 member organizations had been African, by 2000, 34 of 266 member organizations were African—an increase of from less than 2 percent to over 12 percent.

IPEN made changes to its *organizing activities* to place far greater emphasis on DDT. It drew upon the new members from African NGOs to increase its region-based knowledge and, in particular, its expertise in relation to DDT and malaria. An interviewee said, "We tried to be very strategic about making sure that we had good geographic representation and a good

range of people who had expertise on various issues. And making sure that we had some people . . . from African countries who could really talk about DDT and malaria [and] making sure that we had people who really knew their stuff."

Other internal organizational changes supported this initiative: a dedicated e-mail listserv was established for "in-depth discussion of regional POPs issues and strategies" (IPEN, 1999); grant funds were reallocated to facilitate the travel of African members to attend INC meetings and POPs workshops; and meetings were set up to bring members together to broaden the base of expertise on DDT. As one IPEN interviewee put it, "You would have all the Africans in one room coming back and bringing each other up to speed" on DDT. IPEN also held "a set of intensive preparatory workshops" for INC-4, in which members met "in small groups formed around specific treaty issues and geographic regions," with "Pesticides and DDT" one of five issue groups and "Africa" one of six regions (IPEN, 2000b).

Additionally, IPEN modified its discursive activities. As the counternarrative emerged, its pamphlet, Background Statement and POPs Elimination Platform (IPEN, 1998a), which had not singled out DDT, was complemented by texts explicitly acknowledging that DDT warranted special treatment: "DDT should be phased out gradually as new and existing alternatives become more readily available and affordable, with the ultimate aim of complete elimination" (IPEN, 2000b). In the last two meetings, a new approach was adopted for corridor talk. Instead of focusing on "informational, academic-type conferences," IPEN focused its "strategy on how to prepare people to go fan out and ... know which positions they were following, which issues they were going to be talking about, and also which countries needed to be monitored," according to an IPEN interviewee. The organization's African members were integral to these new discursive activities: "African NGOs were particularly effective at communicating with their countries' delegations . . . collectively, they presented joint statements to the African caucus of delegates on the feasibility of phasing out DDT" (IPEN, 1999).

WWF also interpreted the counternarrative as a threat to the entire environmental movement. The portrayal of environmental NGOs as villains not only undermined their credibility at the UN meetings, but also provided fodder for "right-wing and conservative" antienvironmentalists, who used it to "brand the environmental community as a bunch of uncaring tree-huggers who didn't care about humans . . . saying, you know, all these millions of black babies are going to be killed," said a WWF interviewee.

WWF's response was to change its *relational activities*, particularly with WHO. Initially, WWF had di-

rectly challenged WHO's stance on human health hazards of DDT. For example, WWF had argued that "much disturbing information about the hazards of DDT to human health and global biodiversity has emerged since the WHO's last major assessment of DDT in 1993" (WWF, 1998a: 43). It had also accused WHO of "using outdated data to justify the continued use of DDT" (WWF spokesperson for its Global Toxic Chemicals Initiative, quoted in Kirby [1999]). After the emergence of the counternarrative, however, WWF took a more conciliatory approach and eventually dropped the claim. In addition, WWF indicated its support for a central role for WHO by encouraging countries "to make specially earmarked donations immediately to the Roll Back Malaria campaign" (WWF, 2000c).

WWF also changed its organizing activities. Initially WWF's Global Toxic Chemicals Initiative, responsible for spearheading the fight to eliminate all POPs, devoted considerable resources to developing specialist knowledge in relation to DDT with a view to advocating its elimination. It had allocated resources and personnel to a major review of the scientific literature in order to summarize "the current state of knowledge regarding health and environmental effects of DDT" (WWF, 1999a: i). Case studies "of vector control programs around the world that meet both health and conservation goals," including those that were "discontinuing application of DDT," had been documented (WWF, 1999b: 1.3). As a result, WWF had built up considerable expertise on DDT. Following the emergence of the counternarrative, however, WWF redirected attention away from DDT and toward other POPs issues, such as the "precautionary principle" (which asserts that lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to protect the environment and human health) and criteria for adding new chemicals to the list of POPs. Notably, DDT was not one of WWF's "core issues" during INC-4 and INC-5 (WWF, 2000d, 2000e).

Finally, WWF modified its *discursive* activities. Its initial texts had highlighted the threats DDT posed to human health and biodiversity. For example, two technical reports, released to coincide with the first two INC meetings (WWF, 1998a, 1999a), had referred to research on DDT's human health and ecological impacts. They argued that DDT elimination was paramount: "DDT is such a potent chemical that as long as it is used anywhere in the world, nobody is safe" (director of WWF's Global Toxic Chemicals Initiative, quoted in Kirby [1999]). The report for INC-3 was different: whereas the first two made no mention of exceptions for DDT, the third report stated that the Convention "could include exemptions for continued use of DDT after 2007 should this prove necessary"

(WWF, 1999b: xvi). In addition, pictures of both birds and babies appeared on the covers of the first two reports, but the third report featured only a baby, downplaying the environment and emphasizing human health. In issue papers prepared for INC-4 and INC-5 (WWF, 2000a, 2000b, 2000c), the organization conceded that DDT should not be eliminated according to a fixed schedule, having publicly withdrawn its proposed 2007 phase-out date in the plenary at INC-3.

The concluding narrative: "DDT as necessary evil."

The world faces two evil threats—POPs and malaria. If victims of malaria are to be protected, POPs must be eliminated without compromising malaria control. So DDT is a necessary evil. An international legally binding instrument on POPs is still required to protect the world from POPs, but it must contain exemptions for DDT. Developed countries should be good global citizens by providing financial and technical resources to less fortunate countries and also researching alternatives to DDT. Until such alternatives exist, the world must seek guidance from WHO, a *sage* whose special knowledge about appropriate DDT use will protect victims of both evil threats in a balanced manner. (author summary of the final narrative current circa December 2000)

At INC-5, the narrative summarized above dominated plenary speak to become embedded in the legal text of the Stockholm Convention. Notably, certain elements of the initial and counternarratives survived translation to feature in this narrative, but others did not. POPs still had a coherent identity as a global evil threat to women, children, and wildlife; however, POPs were now joined by another evil threat, malaria, the victims of which were women and children in the developing world, particularly Africa. "Representatives of health nongovernmental organizations pointed out that malaria constituted the greatest threat to health in a large number of developing countries" and "Africa currently accounted for 90 per cent of the world's malaria cases" (UNEP, 2000c: 53). Although not a hero, DDT was nonetheless a necessary evil; its use should be permitted under certain circumstances. "When thousands of human lives are at risk you can't throw away something that works just because a few people think it's evil" (Rajendra Maharaj, South Africa Department of Health, quoted in Dyson [2000]). As a result, UNEP's executive director "acknowledged necessary use of DDT" (ENB, 2000b: 3).

The valued end point was still "to protect human health and the environment from persistent organic pollutants" (legal text of the Stockholm Convention) but, additionally, the importance "of malaria control should not be overlooked" (UNEP, 2000c: 7). In other words, POPs elimination should not compromise malaria control. This outcome depended upon two enabling factors. First, a legally binding instrument was required that contained exemptions for DDT, the use of which "for malaria control should remain permitted because it saved millions of lives" (UNEP, 2000c: 53). However, such usage had to be carefully controlled, "in accordance with the World Health Organization recommendations and guidelines" and reevaluated every three years "in consultation with the World Health Organization" (legal text of the Stockholm Convention). Accordingly, WHO acquired a new identity, that of a sage whose special knowledge about the appropriate use of DDT would help to enable the valued end point by protecting victims of both malaria and POPs in a balanced manner. The second enabling factor was good global citizenship on the part of developed countries, which involved not only providing financial and technical resources for POPs elimination, but also promoting "research and development of safe alternative chemical and nonchemical products [to DDT] ... with the goal of decreasing the human and economic burden of disease" (legal text of the Stockholm Convention).

Changes in the Institutional Field

Table 4 summarizes the changes in the positions, understandings, and rules comprising the field that resulted from the meetings. First, one can see changes in the way organizations were positioned in the field: MFI and MP, not present at the early meetings, entered it; WHO took up a more central position; IPEN, new to the field in 1998, became more firmly established; and WWF, which had initially assumed a leadership role on DDT, retreated. Second, understandings in the field changed: DDT was no longer considered just another one of the "dirty dozen"; it was now an exceptional POP. Further, POPs were no longer a matter only of chemical safety but also of public health, and countries started to send disease control officials to the later meetings. Also, although it was always widely understood that POPs elimination would require financial and technical assistance, by the end of the meetings it was also understood that additional resources were needed specifically to develop alternatives to DDT. Finally, new global regulations articulated clear rules for POPs, with DDT the only intentionally produced POP to be restricted rather than eliminated.

TABLE 4 Changes in the Institutional Field

Institutional Characteristics	Circa June 1998	Circa December 2000ª
Positions	MFI and MP are not in the field and do not participate in the first (or second) meeting of the UN conference. WHO is in the field, but its role is ambiguous.	MFI and MP are active in the field by the third meeting; they collaborate with each other and malaria experts; they are in conflict with environmental NGOs. WHO is in the field and more central; is engaged in new collaborations with other actors, including UNEP; has a clear and formally mandated role in the implementation of the Stockholm Convention.
	IPEN is recently founded and new to the field; is largely North American—based with 58 member NGOs; has no particular expertise on DDT; is not active on DDT.	IPEN is well established in the field with more than 300 member NGOs from 70 countries; has developed expertise on DDT; assumes a leadership role in the implementation of the Stockholm Convention, including DDT.
	WWF is in the field; helps to found IPEN; has built expertise on DDT; assumes leadership role on DDT among environmental NGOs by proposing 2007 as a phase-out date for DDT.	WWF is clearly distinguished from IPEN in the field; has had its credibility on DDT challenged, leading it to publicly withdraw its proposed phase-out date; no longer occupies sole leadership role on DDT among environmental NGOs.
Understandings	DDT is understood to be one of the "dirty dozen," like other intentionally produced POPs.	DDT is understood to be an exceptional POP, unlike other intentionally produced POPs.
	Government officials responsible for the environment and for chemical safety are understood to be relevant to POPs.	Government officials responsible for disease control, especially from African states, are understood to be relevant to POPs, in addition to government officials responsible for the environment and for chemical safety.
	POPs elimination is understood to require developed countries to provide financial and technical assistance to developing countries and countries with economies in transition.	POPs elimination is understood to require developed countries to provide financial and technical assistance to developing countries and countries with economies in transition; and to promote research on alternatives to DDT.
Rules	No global regulations address intentionally produced POPS, including DDT.	Global regulations address intentionally produced POPs, including DDT: all are to be eliminated except DDT, production and use of which is restricted to disease vector control.
	International markets in DDT are unrestricted, except via heterogeneous import/export rules. Domestic regulations addressing DDT are heterogeneous.	International markets in DDT are restricted through harmonized import/export rules. Domestic regulations addressing DDT are harmonized: DDT production and use is eliminated in all states except those having notified the Secretariat, and doing so according to
	States using DDT have no reporting obligations.	WHO guidelines. States using DDT must report quantities, with a rationale, to the Secretariat and WHO.
	No periodic review of global DDT use occurs.	Review of global DDT use occurs at least every three years, in consultation with WHO.

^a Note that the rules agreed on at INC-5 only came into effect in May 2004.

FIELD-CONFIGURING EVENTS AND CHANGE

In this section, we integrate our findings to show the roles discursive spaces and narratives play in the processes whereby field-configuring events lead to change in an institutional field. We first explain how field-configuring events generate multiple discursive spaces that provide actors with opportunities to influence a field and then discuss mechanisms through which narratives told in these spaces contribute to changes in positions, understandings, and rules in the field.

Field-Configuring Events and Discursive Spaces

Our study shows how field-configuring events generate multiple discursive spaces governed by particular rules and understandings concerning text production, distribution, and consumption. Our study also highlights two characteristics of field-configuring events that provide actors occupying less powerful positions with opportunities to influence the field: (1) differential access to different spaces and (2) the time-space compression of field-configuring events.

Field-configuring events generate multiple discursive spaces in which texts are produced, distributed, and consumed. These discursive spaces are not normally available in the field; they open up as a result of the field-configuring event taking place. Since discursive spaces are institutionally embedded (Hajer & Wagenaar, 2003), the rules and understandings governing them tend to reproduce existing power relations. This appears to be especially so in the discursive space most closely aligned with the rule-making function of a field-configuring event: plenary speak was governed by precise rules and shared understandings that privileged state over nonstate actors, as with other multilateral agreements (cf. Corell & Betsill, 2001; He & Murphy, 2007). Such control of rule-making discursive spaces is also true of other types of field-configuring events. For example, annual meetings of professional associations typically have clear guidelines about who can participate in meetings at which professional codes are revised (Greenwood et al., 2002). Similarly, as Anand and Watson (2004) observed, the process for reviewing award categories at the Grammys was controlled by the Awards and Nominations Committee, resulting in delays in the inclusion of categories for newer genres despite strong external support for them.

Not all actors warrant equal voice (Potter & Wetherell, 1987) in a discursive space as a result of the particular sets of rules and understandings regarding text production (who may author texts, of which type); distribution (when, where, and how texts may be distributed); and consumption (who is the target audience; who may access and act on texts). In this way, our study sheds light on one mechanism through which field-configuring events "facilitate structures of dominance in social hierarchies" (Anand & Jones, 2008: 1038)—that is, through the mobilization of bias (Bachrach & Baratz, 1962) embedded in the rules and understandings governing discursive spaces, particularly those with rule-making functions.

This is not to say that actors occupying less powerful positions have no chance of influencing the outcomes of a field-configuring event. In fact, our study shows that such actors (in our case, NGOs that, unlike state actors, could not directly amend the legal text of the Convention) were nonetheless able to influence the positions, understandings, and rules as-

sociated with the field because of two particular features of field-configuring events. First, these events generate multiple discursive spaces, some of which are more accessible to peripheral actors or even outsiders to the field than are others. As a result, a heterogeneous set of actors, including those less vested in existing practices, gains the opportunity to produce, distribute, and consume diverse texts advocating particular changes to the field, such as the malaria NGOs were able to do in external communications. Second, the combination of temporal and spatial compression of interactions at a field-configuring event provides opportunities for texts produced in these more accessible discursive space(s) to flow relatively quickly into other discursive spaces and to be consumed by participants concerned with rule making. Thus, for example, the letter produced by the malaria NGOs for external communication was also distributed in the corridors and introduced into plenary, to be consumed by state delegates responsible for agreeing the new global regulation.

Narratives and Change in Institutional Fields and Organizations

Our study shows how narratives told in the discursive spaces generated by a field-configuring event can lead to institutional change through three mechanisms: (1) their domination of discursive space(s) accorded formal authority at the conclusion of the field-configuring event, resulting in new field-level rules, (2) their interpretation by organizations in ways that lead to the modification of relational, organizing, and discursive activities, resulting in new field-level positions, and (3), their ongoing translation in ways that reproduce (or transform) key narrative elements, resulting in new field-level understandings.

First, a narrative that dominates the discursive space most closely aligned to rule making at the conclusion of the field-configuring event can lead to new field-level rules. Its impact is contingent not only on domination of the rule-making discursive space but also on timing. It is not enough simply to craft a story that dominates a particular discursive space (cf. Hajer, 1995), because as long as the field-configuring event continues, there are opportunities for alternative stories to be told. Even a widely held narrative that dominates multiple discursive spaces—as was the case with the initial narrative, "DDT as evil threat"—is vulnerable to contradiction or displacement by subsequent narratives as long as the fieldconfiguring event continues. In contrast, a narrative is far more likely to endure when opportunities to tell alternative narratives are restricted by discursive spaces closing down at the conclusion of the event.

Second, the way in which individual organizations interpret a narrative may lead them to modify their activities in such a way that field-level positions are changed. For example, the malaria NGOs interpreted the initial narrative as a threat, responding with a series of new relational, organizing, and discursive activities that were the basis of a new coalition, developing skills relevant to POPs, and producing the letter that formed the basis of the counternarrative and thereby entering the field. It is important to note, however, that a narrative may be interpreted differently, as in the case of the counternarrative. WHO interpreted it as an opportunity, as a result of which it developed new collaborations, reallocated internal responsibilities, and produced texts advocating a "balanced approach" to DDT, enabling it to take up a more central position in the field. In contrast, IPEN and WWF both interpreted the counternarrative as a threat but, even here, the two organizations responded differently. IPEN took steps to move into a more central position, while WWF retreated. Collectively, such changes by individual organizations result in a new set of field-level positions as patterns of conflict or collaboration are altered, new actors enter the field, and existing actors assume or relinquish leadership roles.

Finally, the way in which narratives at a fieldconfiguring event are translated can lead to new fieldlevel understandings. Narratives are translated as they are successively taken up in other texts and retold, and during retelling key elements of the narratives are reproduced, altered, or erased. For example, the identity of African women and children as victims, introduced in the counternarrative, survived the translation process to become part of the concluding narrative, contributing to new understandings concerning the relevance of African disease control officials to the POPs issue. The identity of DDT was transformed as narratives were told and translated, changing from evil threat to hero to necessary evil, and contributing to the new understanding of DDT as an exceptional POP. In contrast, the characterization of environmental NGOs as villains, introduced in the counternarrative, did not survive, even in amended form, to appear in the concluding narrative.

This finding allows us to extend the work on translation (Czarniawska & Sevón, 1996: Zilber, 2002, 2006) by showing how translation influences the rules and understandings governing the discursive spaces in which it occurs. For example, the rules and understandings governing external communication facilitated the appearance of the identity of villain in the counternarrative. They allowed the malaria organizations to produce texts in which a dramatic portrayal of environmental NGOs as baby-killers was extremely appealing to media outlets. In contrast,

state actors were the main text producers in plenary speak; and they were unlikely to translate the counternarrative in any way that retained the identity of villains since such a hostile depiction would transgress rules and understandings concerning the use of diplomatic language. In this way, we show how the context in which they are translated influences the fate of particular narrative elements: the rules and understandings governing the discursive space in which translation occurs constrain and enable who translates, how, and for whom. Moreover, as a given narrative travels in space and time via texts, translation is likely to take place in diverse discursive spaces governed by different rules and understandings, each of which can thus reshape the narrative differently.

In sum, our study makes a number of contributions to the existing work on field-configuring events by identifying the discursive dynamics whereby they result in field-level change—that is, through discursive spaces and narrative. It shows that they can lead to organizational as well as institutional change as organizations modify their relational, organizing, and discursive activities in response to narratives told in particular discursive spaces, and it illustrates that such changes can occur during a field-configuring event and not only in response to it, as is commonly assumed (cf. Glynn, 2008). Finally, our research highlights the nondeterministic nature of these discursive processes as narratives are interpreted differently and are edited and combined in unforeseen ways through translation processes. It also shows how narratives that dominate in the early stages of a field-configuring event may not do so at its conclusion.

DISCUSSION AND CONCLUSION

The Concept of Discursive Space

Our conceptualization of distinct discursive spaces governed by different sets of rules and understanding regarding text production, distribution, and consumption represents an important contribution to understanding of not only field-configuring events, but also institutional fields and organizations.

First, the literature on field-configuring events has tended to emphasize their role in bringing about change, but an analysis of the discursive spaces they generate shows how they can also be used to prevent or delay change. Take the example of public inquiries: they ostensibly provide a public platform wherein dominant discourses can be questioned and contested but, at the same time, they are often criticized for reproducing existing power relations (Harrison, Munton, & Collins, 2004; Topal, 2009). Existing research has tended to focus on how dominant actors

exercise authority and manage the inquiry process to maintain the status quo (Brown, 2004; Gephart, 1993; Topal, 2009), but revisiting a study of a public inquiry on unemployed older workers (Ainsworth & Hardy, 2009) in light of our findings suggests that other dynamics related to discursive spaces may also be at work.

Hearings represent an important discursive space generated by this type of field-configuring event because they provide a forum for a range of different actors affected by and interested in the subject of the inquiry to be heard. In this particular inquiry, the hearings were governed by shared understandings that required older workers to give testimony to committee members individually and serially (i.e., one after another) and to tell their personal stories of job loss, as well as the difficulties they had encountered in finding or retaining employment. However, this storytelling produced unintended effects insofar as individual older workers, in concentrating on their personal experiences, found it difficult to make more fundamental critiques of service providers. These stories also served to construct an identity for older workers as helpless victims who needed the professional support of service providers. Thus, the privatized system of service provision introduced by the government was never challenged in any fundamental way, making significant field-level change unlikely. In addition, the discursive spaces generated by this inquiry were spatially and temporally disconnected: written submissions were made, hearings were then held and concluded, and after the hearings a report was written and passed on to decision makers. Such linearity appears to afford those actors already occupying powerful positions in the field (in this case, the committee members) considerably more agency in translation processes than did the concurrent discursive spaces found in our study, which proved advantageous for actors in less powerful positions. Thus, our findings from the UN conference on POPs, in pointing to the importance of understanding the nature of the rules and understandings governing particular discursive spaces and the relationship between discursive spaces, help to shed light on how different field-configuring events can both produce and inhibit field-level change.

Second, our conceptualization of discursive spaces makes an important contribution to the work on institutional fields. Institutional fields are not the same as discursive spaces: the rules and understandings governing discursive spaces refer to *discursive* practices—the production, distribution, and consumption of texts—whereas the rules and understandings of a field refer to a far broader set of practices. There is considerable analytical merit in distinguishing discursive practices insofar as they are an important

means through which institutional change occurs (Maguire & Hardy, 2009; Phillips et al., 2004). In addition, in the same way as a field-configuring event is associated with multiple discursive spaces so, too, is a field. For example, in the field of POPs, texts about DDT were produced, distributed, and consumed in discursive spaces that existed prior to and following the UN conference, ranging from the "blogosphere" to mainstream media to scientific conferences. Studies of other fields also indicate the applicability of this concept. For example, U.S. corporations' adoption of the multidivisional form in the 1960s has been linked to business school programs in which senior executives learned about the new form, board meetings that brought directors from different companies together, and meetings between banks and corporations at which the former pressured firms to adopt the M-form (Palmer, Jennings, & Zhou, 1993). Each element represented a distinct discursive space in which texts about new practices were produced, distributed, and consumed. Similarly, Hoffman (1999: 354) indicated that courts and trade journals were important discursive spaces in the field that formed around the issue of "chemical industry environmentalism."

An understanding of discursive spaces is also helpful in understanding field-level stability and change. The convergence of meanings in key discursive spaces in a field seems likely to bring about and stabilize new logics in the institutional field in question. For example, Lounsbury (2002) discussed the role played by an emerging abstract body of financial knowledge published in the Journal of Finance in bringing about change from a regulatory to a market logic in the field of U.S. finance. A conceptualization of this journal as a discursive space suggests that this particular body of knowledge came into being as a result of new rules and understandings emerging in the 1960s that privileged articles written by academics and drawing on abstract mathematical modeling. These new rules and understandings, which are still in place today, helped to reproduce and reinforce a market logic.

It is, however, also possible that multiple, distinct discursive spaces, because they are governed by different rules and understandings, can contribute to "the multiplicity of the institutional order" that occurs when fields encompass "multiple meaning systems" as well as "multiple actors who hold multiple interests and who work in relation to multiple contexts" (Zilber, 2008: 159). In such cases, a field is likely to be characterized by conflicting logics as, for example, in the struggle between the "medical professionalism" and "business-like health care" logics in Alberta. Discursive spaces with rules and understandings that privileged physicians featured texts

promoting the former, but spaces in the field that privileged other actors featured texts promoting the latter (see Reay & Hinings, 2005).

Third, the concept of discursive space is also relevant to organizational settings. In our study, we can see indications of a range of discursive spaces being set up inside organizations as a result of the struggle over DDT. For example, organizational texts were produced, distributed, and consumed in the WHOwide Work Group on DDT, a unique discursive space, that was, according to an interviewee from WHO, governed by rules and understandings allowing "interested parties that dealt with either malaria control, pesticides management, chemical safety and ... the full set of issues that needed to be represented at the table" to come together to "synthesize a uniform technical position" on DDT. IPEN also created a unique discursive space when it set up its listsery for POPs, enabling its new African members to access and contribute to the set of texts addressing DDT that were produced, distributed, and consumed in this space. These discursive spaces played an important role in influencing the way in which these organizations interpreted and responded to the field-level issues. In the case of WHO, the generation of a discursive space that was firmly focused on DDT and linked to the RBM program, and that replaced the initial one located within departments responsible for chemical safety and environmental health, increased the likelihood that organization members would interpret the counternarrative as an opportunity. Similarly, IPEN's listsery helped it develop and share expertise on DDT use in Africa, which helped it to assume a leadership role in the implementation of the Stockholm Convention.

It therefore appears likely that a wide range of distinct discursive spaces can be created in organizations, in which different types of texts can be produced, distributed, and consumed and in which various narratives can be told. These discursive spaces may help or hinder organizational efforts to realize particular priorities and strategies. For example, recent attempts by organizations to engage middle managers more directly in change initiatives (e.g., Lüscher & Lewis, 2008) suggest that, for such engagement to occur, appropriate discursive spaces need to exist or be created in an organization: they should be governed by rules and understandings whereby middle managers can participate and feel comfortable producing texts that challenge existing meanings supporting the organizational status quo (cf. Thomas, Sargent, & Hardy, in press). This situation apparently occurred in Jack Welch's celebrated "work out" sessions at General Electric, in which lower-level organization members were able to voice suggestions that challenged existing bureaucratic practices (Ulrich,

Kerr, & Askenas, 2002). However, other studies have shown how middle managers are often excluded from discursive spaces in which strategic conversations occur, or silenced when they are granted access, both of which make change problematic (e.g., Westley, 1990). Thus, multiple strands of research have suggested that a more explicit consideration of the discursive spaces generated in organizational settings could be helpful to understanding the success and failure of organizational change.

In sum, elaboration of the concept of discursive space is an important contribution and relevant to multiple levels of analysis. To understand this concept, however, researchers need to move away from conceptualizing field-configuring events, fields, and organizations as single undifferentiated spaces and, instead, look for variation in patterns of text production, distribution, and consumption that characterize distinct discursive spaces. In this way, it becomes possible to examine how different actors are included in (or excluded from) discursive activity that gives meaning to practices, and to identify the discursive activity (or chains of discursive activities) that are consequential in bringing about change or, conversely, maintaining continuity.

The Role of Narratives in Institutional Work

Our study also contributes to theorizations of institutional work according to which narratives play an important role through identity construction (Lawrence & Suddaby, 2006). Our study provides empirical support for this argument and, further, identifies four distinct strategies of identity construction through narrative.

First, narratives can be told that construct identities for specific actors in a field and are imbued with moral character; that is, "good guys" and "bad guys" are constructed (Cobb & Rifkin, 1991). This occurs through valorizing and demonizing particular actors (Lawrence & Suddaby, 2006) and involves attempts to directly confer or undermine discursive legitimacy (Hardy & Phillips, 1998) and credibility (Maguire, 2002), each of which affects actors' ability to produce influential texts (Hardy & Phillips, 2004). Thus, environmental NGOs were demonized as villains in the DDT counternarrative in a direct attack on their discursive legitimacy and credibility that served as a premise for urging other actors to discount their texts. At the same time, WHO was valorized as a sage in the concluding narrative, justifying its more central role in the field and making its texts on the appropriate use of DDT particularly consequential. In this way, valorizing and demonizing are not limited to actions taken simply to "identify and evaluate the moral status of participants in the field" (Lawrence & Suddaby,

2006: 232), but include attempts to use narratives to actively *construct* moral status.

Second, the strategy whereby an identity was constructed for developed countries—as good global citizens, in all three narratives—was somewhat different from both valorizing and demonizing. It was a conditional identity; states would be seen as good global citizens if they provided the enabling force by agreeing on the legally binding instrument and providing financial and technical resources. They were not valorized because the enabling forces had not yet been provided; nor were they demonized because, without their cooperation, the valued end point would never be achieved. We suggest that this form of identity construction is distinct from those noted by Lawrence and Suddaby (2006) and refer to it as idealizing: attempted construction of an actor's identity as conditional on carrying out desired, ideal behaviors.

Third, narratives not only construct identities, but also construct relationships among identities: by telling stories, actors promote "a particular understanding of social and political relations" (Feldman, Sköldberg, Brown, & Horner, 2004: 148). Our study illustrates how discursive legitimacy can be conferred on actors indirectly, by for instance, authorizing them to take up a position in a field in order to speak on behalf of others. The identity of wildlife as victims in the initial narrative indirectly conferred discursive legitimacy on WWF because it claimed to be defending those species adversely affected by POPs. Similarly, the introduction of a new and particularly vulnerable victim in the counternarrative (African women and children) provided the malaria NGOs with discursive legitimacy because they claimed to be representing these victims. In this case, the narratives did not construct an identity for the malaria NGOs or WWF directly but, in constructing the identity of victims, these actors were authorized to take up a position in the field in order to speak on their behalf.

Finally, our study shows that identities can be constructed for objects such as chemicals and diseases (POPs, DDT, and malaria). We refer to this form of identity construction as problematizing (cf. Maguire & Hardy, 2009) insofar as, in our case, these identities—some negative (e.g., evil threat) and some positive (e.g., hero)—were constructed to establish a specific problem to which the valued end point of the narrative represented a solution: that is, whether to allow continued access to DDT or not. As Blumer pointed out, social problems are not the result of "intrinsic malfunctioning"; they emerge from "a process of definition in which a given condition is picked out and identified as a social problem" by actors with "divergent and conflicting interests, intentions and objectives" (1971: 301). Problematization through the construction of particular identities can redefine the issue around which a field is formed, with important implications for the field's subsequent direction (Maguire & Hardy, 2009). It is thus a particularly important strategy in undermining the legitimacy of the institutional status quo and justifying change to a particular vision for a field.

In sum, our study makes a contribution by showing why narrative is such an effective form of institutional work: it is a compelling means of constructing identities that define "the relationship between an actor and the field in which that actor operates" (Lawrence & Suddaby, 2006: 221). As such, narratives may lead organizations to respond in ways that affirm or repudiate identities. Our study extends extant work by showing how identities can be constructed not only for different types of actor but also for different types of entity (e.g., chemicals and diseases) and by identifying four distinct strategies of identity construction that produce a range of institutional effects.

Final Words

Our study does have certain limitations. First, the use of a single exploratory case study means that caution is required in generalizing the findings-although, as we argue above, the concept of discursive space is relevant to other field-configuring events, as well as to understanding change and continuity in institutional fields and organizations more generally. Second, our study involved a somewhat unusual field-configuring event, one that it occurred over a period of two and a half years, unlike most conferences, meetings, and ceremonies, often held over shorter periods (e.g., Garud, 2008; Oliver & Montgomery, 2008; Zilber, 2007). However, this characteristic helped to render the dynamics of change more transparent, allowing us to shed light on processes that may also occur, albeit less visibly, in other types of fieldconfiguring events. More research on different types of field-configuring events varying in duration and the discursive spaces they generate would further develop understanding of these dynamics.

A third limitation concerns our focus on three discursive spaces. We acknowledge that the UN conference also generated other spaces, such as closed strategizing meetings of delegates from regions that negotiated as a bloc and contact groups set up to deal with particular wordings of the legal text. We excluded certain discursive spaces from our analysis for one of two reasons. The first reason was the need to draw boundaries around a manageable research project. So, for example, although we observed contact groups in which texts on DDT were produced, distributed, and consumed, we did not include them

as a discursive space on the grounds that it would have complicated and extended the analysis and, in any event, texts from these contact groups were introduced into plenary. The second reason for certain exclusions was our reliance on formal written texts: our analysis was not targeted toward spaces in which no minutes or reports were produced and in which texts took the form of talk. Although our research design precluded exploration of such spaces, they could be explored in future studies in which methods such as participant observation or ethnography could be used to access them.

Finally, work on narrative analysis counsels the importance of being reflexive about the role of narratives in research and how we, as researchers, construct meaning through our own linguistic practices. As Czarniawska argued, it is "not enough just to tell stories. It is necessary to establish the provenience of the story" (1998: 17). In the same way that narratives are used in research settings—instrumentally, as political devices—so, too, are narratives used in research accounts (Rhodes & Brown, 2005). The narratives in this article are etic renditions based on retrospective "sensemaking" and intertextual analysis of multiple, naturally occurring texts. Each narrative theorized here is part of a "network of fragments that refer to still other narrative texts" and connected through "a dynamic network of production, distribution and consumption" (Boje, 2001: 75). Our data (texts produced by a range of actors with different interests and presenting competing narratives of DDT) enabled us to link language, in the form of narratives, to action—in the form of organizational responses leading to changes in field of POPs (cf. Fischer, 2003). The data also allowed us to explore the political consequences of different narratives (Boje, 2001), particularly those told by and affecting nonstate actors.

It is also important to acknowledge that the narratives presented here focus attention on specific NGOs in the field of POPs and attribute particular meanings to their actions. They are narratives that we interpreted from our data collection, which consisted of formal written texts and interviews with a range of representatives from different organizations participating in the Stockholm Convention, and from our data analysis, which identified the three discursive spaces on which we focused. The collection of different data or a focus on different discursive spaces might have led to alternative narratives being told. For example, a greater emphasis on interviews with state delegates coupled with access to private meetings might have produced an alternative narrative that could be termed "DDT as dilemma." It would feature state actors such as the United States and South Africa more prominently and construct them

as collaborative problem solvers engaged in "a cooperative process that used science to inform policymaking" with "an international consensus on DDT" as its valued end point (Walker et al., 2003: 423). In contrast, greater use of interviews with a wider range of environmental groups coupled with access to a different set of private meetings might have led to another alternative narrative told by the environmental NGOs. It could be termed "DDT as weapon" insofar as DDT was being used not just against malaria, but also against the environmental movement. This narrative would feature certain malaria NGOs as villains, intent on pitting "potential allies in regulatory efforts, especially environmentalists and public health advocates, against each other in an effort to draw their fire away from regulated industries" (Sarvana, 2009). These villains were exploiting the DDT issue and manipulating the science to discredit the environmental movement while, at the same time, accessing resources through purported links to right wing think tanks and large corporations and disseminating their views through sympathetic, conservative news media. The valued end point of this narrative would be the adequate regulation of DDT and salvaging the reputation of the environmental movement.

It is important to recognize that any narrative inevitably privileges some actors and promotes certain meanings, while ignoring and obscuring others. Even acknowledging possible alternatives does nothing to render use of narrative less political; one merely highlights the possibility of "multiple readings" (cf. Putnam, 1996). None of these readings can be considered to be neutral since all have political effects stemming from the meanings they construct. Our study therefore serves as a useful reminder that, in conducting research, moral and methodological issues are inextricably entwined.

These limitations notwithstanding, the narratives that we present are helpful in explaining significant changes in the field of POPs that go beyond new regulations to encompass shifts in positions and revised understandings of DDT. They illuminate the field-level effects of actions taken by nonstate actors not directly involved in the official UN negotiations, thereby complementing studies that focus more directly on bargaining among state actors. They also highlight how changes in a field can occur during a field-configuring event and in response to discursive activity, and not only after an event in response to new rules. Finally, in drawing attention to contested meanings and changes in understandings of DDT that occurred during the conference, our narratives of DDT also help to explain why DDT use doubled between 2000 and 2006 (Secretariat of the Stockholm Convention [SSC], 2007: 8) despite implementation

of the Stockholm Convention with its objective of POPs elimination. Clearly, narratives shape field-level outcomes, and this is an important point as actors are increasingly brought together to (re)configure fields around global environmental issues, including that of climate change—indeed, it does not seem a stretch to say that narratives of CO_2 told in discursive spaces generated by UN conferences will be consequential for us all.

REFERENCES

- AAAS. 2000. International management of DDT: Understanding the benefits and risks in malaria control. Paper presented at the Annual Meeting and Science Innovation Exposition of the American Association for the Advancement of Science (tape recording, obtained by author). Washington, DC: AAAS.
- Ainsworth, S. A., & Hardy, C. 2009. Mind over body: Physical and psychotherapeutic discourses and the regulation of the older worker. *Human Relations*, 62: 1199–1229
- Anand, N., & Watson, M. R. 2004. Tournament rituals in the evolution of fields: The case of the Grammy Awards. *Academy of Management Journal*, 47: 59–80.
- Anand, N., & Jones, B. C. 2008. Tournament rituals, category dynamics, and field configuration: The case of the Booker prize. *Journal of Management Studies*, 45: 1036–1060.
- Attaran, A., & Maharaj, R. 2000. DDT for malaria control should not be banned. *British Medical Journal*, 321: 1403–1405.
- Bachrach, P., & Baratz, M. S. 1962. The two faces of power. *American Political Science Review*, 56: 947–952.
- Battilana, J. 2006. Agency and institutions: The enabling role of individuals' social position. *Organization*, 13: 653–676
- Belova, O., King, I., & Sliwa, M. 2008. Introduction: Polyphony and organization studies: Mikhail Bakhtin and beyond. *Organization Studies*, 29: 493–500.
- Bernauer, T. 1995. The effect of international environmental institutions: How we might learn more. *International Organization*, 49: 351–377.
- Betsill, M., & Corell, E. 2001. NGO influence in international environmental negotiations: A framework for analysis. *Global Environmental Politics*, 1(4): 65–85.
- Blumer, H. 1971. Social problems as collective behavior. *Social Problems*, 18: 298–306.
- Boje, D. M. 1991. The storytelling organization: A study of story performance in an office-supply firm. *Administrative Science Quarterly:* 36: 106–126.
- Boje, D. M. 2001. *Narrative methods for organizational* and communication research. London: Sage.
- Boseley, S. 1999. Green ideal clashes with third world

- need. *Guardian*, August 30. http://www.guardian.co.uk/world/1999/aug/30/sarahboseley, retrieved July 6, 2008.
- Bourdieu, P. 1993. Some properties of fields. In P. Bourdieu (R. Nice, Trans.). *Sociology in question:* 72–77. London: Sage.
- Boxenbaum, E., & Jonsson, S. 2008. Isomorphism, diffusion and decoupling. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersen (Eds.), *Handbook of organizational institutionalism:* 78–98. London: Sage.
- Brint, S., & Karabel, J. 1991. Institutional origins and transformations: The case of American community colleges. In P. J. DiMaggio & W. W. Powell. *The new institutionalism in organizational analysis:* 337–360. Chicago: University of Chicago Press.
- Brown, A. D. 2004. Authoritative sensemaking in a public inquiry report. *Organization Studies* 25: 95–112.
- Brown, A. D., & Humphreys, M. 2006. Organizational identity and place: A discursive exploration of hegemony and resistance. *Journal of Management Studies*, 43: 231–257.
- Brown, S. D. 2002. Michel Serres: Science, translation and the logic of the parasite. *Theory Culture & Society*, 19(3): 1–27.
- Chasek, P. S. 2001. NGOs and state capacity in international environmental negotiations: The experience of the Earth Negotiations Bulletin. *RECIEL*, 10(2): 168–176.
- Cobb, S. 1993. Empowerment and mediation: A narrative perspective. *Negotiation Journal*, 9: 245–259.
- Cobb, S., & Rifkin, J. 1991. Practice and paradox: Deconstructing neutrality in mediation. *Law & Social Inquiry*, 16(1): 35–62.
- Collin, J., Lee, K., & Bissell, K. 2002. The Framework Convention on Tobacco Control: The politics of global health governance. *Third World Quarterly*, 23: 265–282
- Colomy, P. 1998. Neofunctionalism and neoinstitutionalism: Human agency and interest in institutional change. *Sociological Forum*, 13: 265–300.
- Corell, E., & Betsill, M. 2001. A comparative look at NGO influence in international environmental negotiations: Desertification and climate change. *Global Environmental Politics*, 1(4): 86–107.
- Czarniawska, B. 1997. Narrating the organization: Dramas of institutional identity. Chicago: University of Chicago Press.
- Czarniawska, B. 1998. *A narrative approach to organization studies.* Thousand Oaks, CA: Sage.
- Czarniawska, B., & Sevón, G. 1996. Introduction. In B. Czarniawska & G. Sevón (Eds.). *Translating organizational change:* 13–48. Berlin: de Gruyter.
- Davis, G. F., & Marquis, C. 2005. Prospects for organization theory in the early twenty-first century: Institutional fields and mechanisms. *Organization Science*, 16: 332–343.

- de Certeau, M. 1984. *The practice of everyday life.* Berkelev: University of California Press.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147–160.
- Dyson, J. 2000. DDT should not be banned. **South Africa Readers Digest**, December, [http://www.cid.harvard.
 edu/cidinthenews/articles/
 SA_Readers_Digest_1200.html, retrieved July 6, 2008.
- Economist. 1999. Silent sting. 352(8135): 25.
- Eisenhardt, K. M. 1989. Building theories from case study research. *Academy of Management Review*, 14: 532– 550
- ENB. 1998. July 6. http://www.iisd.ca/download/pdf/enb1510e.pdf, retrieved October 25, 2009.
- ENB. 1999a. February 1. http://www.iisd.ca/download/pdf/enb1518e.pdf, retrieved October 25, 2009.
- ENB. 1999b. September 13. http://www.iisd.ca/download/pdf/enb1527e.pdf, retrieved October 25, 2009.
- ENB. 2000a. March 27. http://www.iisd.ca/download/pdf/enb1534e.pdf, retrieved October 25, 2009.
- *ENB.* 2000b. December 12. http://www.iisd.ca/download/pdf/enb1554e.pdf, retrieved October 25, 2009.
- Fairclough, N. 1992. *Discourse and social change*. Cambridge, U.K.: Polity Press.
- Farjoun, M. 2002. The dialectics of institutional development in emerging and turbulent fields: The history of pricing conventions in the online database industry. *Academy of Management Journal*, 45: 848–874.
- Feldman, M., Sköldberg, K., Brown, R. N., & Horner, D. 2004. Making sense of stories: A rhetorical approach to narrative analysis. *Journal of Public Administration Research and Theory*, 14(2): 147–170.
- Fischer, F. 2003. *Reframing public policy: Discursive politics and deliberative practices.* Oxford, U.K.: Oxford University Press.
- Fletcher, J. K., Bailyn, L., & Blake-Beard, S. 2009. Practical pushing: Creating discursive space in organizational narratives. In J. W. Cox, T. G. LeTrent-Jones, M. Voronov, & D. Weir (Eds.), *Critical management studies at work: Multidisciplinary approaches to negotiating tensions between theory and practice:* 82–93. Cheltenham, U.K.: Edward Elgar.
- Gabriel, Y. 2004. Narratives, stories and texts. In D. Grant, C. Hardy, C. Oswick, & L. Putnam (Eds.), *The hand-book of organizational discourse*: 61–78. London: Sage.
- Garcia, P., & Hardy, C. 2007. Positioning, similarity, and difference: Narratives of individual and organizational identities in an Australian university. *Scandinavian Journal of Management*, 23: 363–383.
- Garud, R. 2008. Conferences as venues for the configuration of emerging organizational fields: The case of cochlear

- implants. *Journal of Management Studies*, 45: 1061–1088.
- Gephart, R. P. 1993. The textual approach: Risk and blame in disaster sensemaking. Academy of Management Iournal, 38: 1465–1514.
- Gergen, K. J. 1994. Realities and relationships: Soundings in social construction. Cambridge, MA: Harvard University Press.
- Glynn, M. A. 2008. Configuring the field of play: How hosting the Olympic games impacts civic community. *Journal of Management Studies*, 45: 1117–1146.
- Greenwood, R., Oliver, C., Sahlin, K., & Suddaby, R. 2008.
 Introduction. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism:* 1–46. London: Sage.
- Greenwood, R., & Suddaby, R. 2006. Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, 49: 27–48.
- Greenwood, R., Suddaby, R., & Hinings, C. R. 2002. Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45: 58–80.
- Haas, P. M. 1992. Banning chloroflurocarbons: Epistemic community efforts to protect stratospheric ozone. *International Organization*, 46(1): 187–224.
- Hajer, M. A. 1995. The politics of environmental discourse. Oxford, U.K.: Oxford University Press.
- Hajer, M. A., & Wagenaar, H. 2003. Deliberative policy analysis: Understanding governance in the network society. Cambridge, U.K.: Cambridge University Press.
- Hardy, C., & Phillips, N. 1998. Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. *Organization Science*, 9(2): 217–230.
- Hardy, C., & Phillips, N. 2004. Discourse and power. In D. Grant, C. Hardy, C. Oswick, & L. Putnam (Eds.), *The handbook of organizational discourse*: 299–316. London: Sage.
- Harrison, C. M., Munton, R. J. C., & Collins, K. 2004. Experimental discursive spaces: Policy processes, public participation and the Greater London Authority. *Urban Studies*, 41: 903–917.
- Heracleous, L., & Barrett, M. 2001. Organizational change as discourse: Communicative actions and deep structures in the context of information technology implementation. Academy of Management Journal, 44: 755–778.
- Hauser, G. A. 1999. Vernacular voices: The rhetoric of publics and public spheres. Columbia: University of South Carolina Press.
- He, B., & Murphy, H. 2007. Global social justice at the WTO? The role of NGOs in constructing global social contracts. *International Affairs*, 83: 707–727.
- Hoffman, A. J. 1999. Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Academy of Management Journal*, 42: 351–371.

- IPEN. 1998a. Background statement and POPs elimination platform. Pamphlet distributed at INC-1.
- IPEN, 1998b. *Press briefing*, June 29. Distributed at INC-1.
- IPEN. 1999. *IPEN/NGO activities during the third session* of the US intergovernmental negotiating committee on POPs in Geneva, Switzerland, September 4–11, 1999. IPEN internal report, http://www.ipen.org/ipenionc3report.html, retrieved January 15, 2001.
- IPEN. 2000a. Dear IPEN POPS INC4 participant. Letter distributed to IPEN's INC-4 participants, Bonn, March 18.
- IPEN. 2000b. Manual for NGO participants in the POPs INC process. Washington, DC: IPEN.
- Jacobs, K., Kemeny, J., & Manzi, T. 2003. Power, discursive space and institutional practices in the construction of housing problems. *Housing Studies*, 18: 429–446.
- Kirby, A. 1999. Ban DDT says wildlife group. BBC News Online Network, January 27, http://news.bbc.co.uk/2/ hi/science/nature/262698.stm, retrieved June 24, 2008.
- Kornberger, M., & Brown, A. D. 2007. Ethics as a discursive resource for identity work. *Human Relations*, 60: 497– 518.
- Lallas, P. L. 2001. The role of process and participation in the development of effective international environmental agreements: A study of the global treaty on persistent organic pollutants (POPs). UCLA Journal of Environmental Law and Policy, 19: 83–152.
- Lampel, J., & Meyer, A. D. 2008. Field-configuring events as structuring mechanisms: How conferences, ceremonies, and trade shows constitute new technologies, industries, and markets. *Journal of Management Studies*, 45: 1025–1035.
- Lawrence, T., & Suddaby, R. 2006. Institutions and institutional work. In S. Clegg, C. Hardy, T. Lawrence, & W. Nord (Eds.), *Handbook of organization studies:* 215–254. London: Sage.
- Levy, D. 1997. Business and international environmental treaties: Ozone depletion and climate change. *California Management Review*, 39(3): 54–71.
- Livesey, S. M. 2001. Eco-identity as discursive struggle: Royal Dutch/Shell, Brent Spar, and Nigeria. *Journal of Business Communication*, 38(1): 58–91.
- Lounsbury, M., & Glynn, M. A. 2001. Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22: 545– 564.
- Lounsbury, M. 2002. Institutional transformation and status mobility: The professionalization of the field of finance. Academy of Management Journal, 45: 255– 266.
- Lüscher, L. S., & Lewis, M. W. 2008. Organizational change and managerial sensemaking: Working through paradox. Academy of Management Journal, 51: 221–240.
- Maguire, S. 2002. Discourse and adoption of innovations: A

- study of HIV/AIDS treatments. *Health Care Management Review*, 27(3): 74–88.
- Maguire, S. 2004. The coevolution of technology and discourse: A study of substitution processes for the insecticide DDT. *Organization Studies*, 25: 113–134.
- Maguire, S., & Hardy, C. 2006. The emergence of new global institutions: A discursive perspective. *Organization Studies*, 27: 7–29.
- Maguire, S., & Hardy, C. 2009. Discourse and deinstitutionalization: The decline of DDT. *Academy of Management Journal*, 52: 148–178.
- Maguire, S., Hardy, C., & Lawrence, T. 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. Academy of Management Journal, 47: 657–679.
- Martens, M. L., Jennings, J. E., & Jennings, P. D. 2007. Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50: 1107–1132.
- Mazza, C., & Pedersen, J. S. 2004. From press to e-media? The transformation of an organizational field. *Organization Studies*, 25: 875–896.
- McInerney, P. 2008. Showdown at Kykuit: Field-configuring events as loci for conventionalizing accounts. *Journal of Management Studies*, 45: 1089–1116.
- Meriläinen, S., Tienari, J., Thomas, R., & Davies, A. 2004. Management consultant talk: A cross-cultural comparison of normalizing discourse and resistance. *Organization*, 11: 539–564.
- Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83: 340–363.
- MFI. 1999. *Open letter to DDT treaty negotiators, March* **29.** http://www.malaria.org/DDT_open.html, retrieved July 6, 2008.
- MFI. 2008. 1999–2001 DDT campaign, malaria advocacy: The beginnings. http://www.malaria.org/index.php? option=com_content&task=view&id=75&Itemid=75, retrieved July 6, 2008.
- Oakes, L. S., Townley, B., & Cooper, D. J. 1998. Business planning as pedagogy: Language and control in a changing institutional field. Administrative Science Quarterly, 43: 257–292.
- Oliver, A., & Montgomery, K. 2008. Using field-configuring events for sense making: A cognitive network approach. *Journal of Management Studies*, 45: 1147– 1167.
- Palmer, D. A., Jennings, P. D., & Zhou, X. 1993. Late adoption of the multidivisional form by large U.S. corporations: Institutional, political and economic accounts. *Administrative Science Quarterly*, 38: 100–131.
- Perkmann, M., & Spicer, A. 2008. How are management fashions institutionalized? The role of institutional work. *Human Relations*, 61: 811–844.

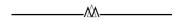
- Phillips, N., Lawrence, T., & Hardy, C. 2004. Discourse and institutions. *Academy of Management Review*, 29: 1–18.
- Polkinghorne, D. 1988. *Narrative knowing and the human sciences*. Albany: State University of New York Press.
- Potter, J., & Wetherell, M. 1987. *Discourse and social psy-chology: Beyond attitudes and behavior.* London: Sage.
- Putnam, L. 1996. Situating the author and text. *Journal of Management Inquiry*, 5: 382–386.
- Reay, T., & Hinings, C. R. 2005. The recomposition of an organizational field: Health care in Alberta. *Organization Studies*, 26: 351–384.
- Rhodes, C., & Brown, A. D. 2005. Narrative, organizations and research. *International Journal of Management Reviews*, 7: 167–188.
- Sarvana, A. 2009. Bate and switch: How a free-market magician manipulated two decades of environmental science. *Natural Resources News Service*, May 28, http://www.nrns.org/index.php?option=com_content&view=article&id=51:bate-and-switch-how-a-free-market-magician-manipulated-two-decades-of-environmental-science-&catid=15:nrns-stories&Itemid=63, retrieved December 1, 2009.
- Scott, W. R. 1994. Institutions and organizations: Towards a theoretical synthesis. In W. R. Scott & J. W. Meyer (Eds.), *Institutional environments and organizations: Structural complexity and individualism:* 55–80. Thousand Oaks, CA: Sage.
- Scott, W. R. 2001. *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Shapiro, M. J. 2005. The discursive spaces of global politics. Journal of Environmental Policy and Planning, 7: 227–238.
- SSC. 2007. Future plans for work on DDT elimination: A Stockholm Convention Secretariat position paper, November, http://chm.pops.int/Portals/0/Repository/DDT-general/UNEP-POPS-DDT-PROP-SSCPP, English PDF retrieved July 6, 2008.
- Suddaby, R., & Greenwood, R. 2005. Rhetorical strategies of legitimacy. Administrative Science Quarterly, 50: 35–68.
- Taylor, J. R., Cooren, F., Giroux, N., & Robichaud, D. 1996.
 The communicational basis of organization: Between the conversation and the text. *Communication Theory*, 6(1): 1–39.
- Taylor, J. R., & Van Every, E. J. 1993. The vulnerable fortress: Bureaucratic organization in the information age. Toronto: University of Toronto.
- Thomas, R., Sargent, L., & Hardy, C. In press. Managing organizational change: Negotiating meaning and power-resistance relations. *Organization Science*, published online before print March 25, 2010. DOI: 10: 1287/orsc.1090.0520. http://orgscijournal.informs.org/papbyrecent.dt/.

- Topal, C. 2009. The construction of general public interest: Risk, legitimacy, and power in a public hearing. *Organization Studies*, 30: 141–164.
- Ulrich, D., Kerr, S., & Askenas, R. 2002. The GE work-out:

 How to implement GE's revolutionary method for
 busting problems and attacking organizational problems—fast! New York: McGraw-Hill.
- UNEP. 1998. Report of the intergovernmental negotiating committee for an international legally binding instrument for implementing international action on certain persistent organic pollutants on the work of its first session (UNEP/POPS/INC.1/7, July 3 1998) http://www.chem.unep.ch/pops/POPs_Inc/INC_1/inc1finalreport-e.htm, retrieved November 21, 2010.
- UNEP. 2000a. Review of ongoing international activities relating to the work of the committee: Information document on the action plan of the World Health Organization for the reduction of reliance on DDT use for public health purposes (UNEP/POPS/INC.4/INF/914, March 14 2000). http://www.pops.int/documents/meetings/inc4/en/inf9/inf9en.pdf, retrieved November 21, 2010.
- UNEP. 2000b. Review of ongoing international activities relating to the work of the committee: Related work on persistent organic pollutants under the World Health Organization (UNEP/POPS/INC.5/INF/9, November 25 2000). http://www.chem.unep.ch/POPs/POPs_Inc/INC_5/inf5-9/inf9.pdf, retrieved November 21, 2010.
- UNEP. 2000c. Report of the intergovernmental negotiating committee for an international legally binding intrument for implementing international action on certain persistent organic pollutants on the work of its fifth session (UNEP/POPS/INC.5/7, December 26 2000) http://www.chem.unep.ch/POPs/POPs_Inc/INC_5/finalreport/en/inc5efinrep.PDF, retrieved November 21, 2010.
- UNEP. 2002. Ridding the world of POPS: A guide to the Stockholm Convention on Persistent Organization Pollutants. Geneva: UNEP.
- United Nations Association in Canada. 2009. *Research links, Earth Negotiations Bulletin,* http://www.unac.org/en/library/research/broad.asp, retrieved October 25, 2009.
- UN Wire, 1999. *Bid to ban DDT draws fire from health experts,* September 7, http://www.unwire.org/unwire/19990907/4655_story.asp, retrieved April 25, 2009.
- Van de Ven, A. H., & Poole, M. S. 1990. Methods for studying innovation development in the Minnesota innovation research program. *Organization Science*, 1: 313–334.
- van Dijk, T. A. 1997. *Discourse as social interaction.* London: Sage.
- Walker, K. R., Riccardione, M.D., & Jensen, J. 2003. Developing an international consensus on DDT: A balance of environmental protection and disease control. *Inter-*

- national Journal of Hygiene and Environmental Health, 206: 423–435.
- Westley, F. R. 1990. Middle managers and strategy: Microdynamics of inclusion. Strategic Management Journal, 11: 337–351.
- Whittle, A., Mueller, F., & Mangan, A. 2009. Storytelling and "character": Victims, villains and heroes in a case of technological change. *Organization*, 16: 425–442.
- WHO. 2000. WHO information pack for 4th meeting of the intergovernmental negotiating committee on persistent organic pollutants, March 20–25, Bonn.
- WHO. 2001. Action plan for the reduction of reliance on DDT in disease vector control, Report WHO/SDE/WDH/01.5. Geneva: WHO.
- WHO. 2002. *Final report of the external evaluation of Roll Back Malaria*, November, http://rbm.who.int/cmc_upload/0/000/015/905/ee_toc.htm, retrieved July 6, 2008.
- Wijen, F., & Ansari, S. 2007. Overcoming inaction through collective institutional entrepreneurship: Insights from regime theory. *Organization Studies*, 28: 1079–1100
- Witten, M. 1993. Narrative and the culture of obedience at the workplace. In D. Mumby (Ed.), *Narrative and so*cial control: Critical perspectives: 97–118. Newbury Park, CA: Sage.
- Wooten, M., & Hoffman, A. J. 2008. Organizational fields: Past, present and future. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism:* 130–148. London: Sage.
- WWF. 1998a. Resolving the DDT dilemma: Protecting biodiversity and human health. Toronto & Washington, DC: WWF-Canada and WWF-US.
- WWF. 1998b. Executive summary—Resolving the DDT dilemma: Protecting biodiversity and human health.
 Toronto & Washington, DC: WWF-Canada and WWF-US.
- WWF. 1998c. Three decades after Silent Spring, DDT still menacing the environment: WWF report details hazards, uses and alternatives. News release distributed at INC-1, June 30.
- WWF. 1999a. *Hazards and exposures associated with DDT and synthetic pyrethroids used for vector control.* Toronto & Washington, DC: WWF-Canada & WWF-US.
- WWF. 1999b. *Disease vector management for public health and conservation.* Washington, DC: WWF-US.
- WWF. 2000a. *Phasing out DDT: WWF position statement,* January. Washington, DC: WWF-US.
- WWF. 2000b. *UNEP global POPs treaty—INC4/Bonn: Eliminating DDT and protecting public health*, March. Washington, DC: WWF-US.

- WWF. 2000c. *UNEP global POPs treaty—INC5/Johannes-burg: Eliminating DDT and protecting public health,* August. Washington, DC: WWF-US.
- WWF. 2000d. *UNEP global POPs treaty—INC4/Bonn: WWF core issues statement,* March. Washington, DC:
 WWF-US.
- WWF. 2000e. *UNEP global POPs Treaty—INC5/Bonn: WWF core issues statement,* June. Washington, DC:
 WWF-US
- Yin, R. K. 2003. *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Yoder, A. J. 2003. Lessons from Stockholm: Evaluating the global convention on persistent organic pollutants. *In*diana Journal of Global Legal Studies, 10(2): 113– 156.
- Zilber, T. B. 2002. Institutionalization as an interplay between actions, meanings and actors: The case of a rape crisis center in Israel. *Academy of Management Journal*, 45: 234–254.
- Zilber, T. B. 2006. The work of the symbolic in institutional processes: Translations of rational myths in Israeli high-tech. *Academy Management Journal*, 49: 281–303.
- Zilber, T. B. 2007. Stories and the discursive dynamics of institutional entrepreneurship: The case of Israeli high-tech after the bubble. *Organization Studies*, 28: 1035–1054.
- Zilber, T. B. 2008. The work of meanings in institutional processes and thinking. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *Handbook of organizational institutionalism:* 150–169. London: Sage.



Cynthia Hardy (chardy@unimelb.edu.au) is a professor of management at the University of Melbourne, codirector of the International Centre for Research on Organizational Discourse, Strategy & Change, and honorary professor at Cardiff Business School. She received her Ph.D. from the University of Warwick. Her research interests include a discursive perspective on institutional entrepreneurship and institutional change, power and politics in organizations, organizational discourse theory, and critical discourse analysis.

Steve Maguire (steve.maguire@mcgill.ca) is an associate professor of strategy and organization in the Desautels Faculty of Management at McGill University. He received his Ph.D. from HEC-Montreal. His research focuses on institutional and technological change resulting when commercial, scientific, and political struggles intersect around social or environmental issues.



Copyright of Academy of Management Journal is the property of Academy of Management and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.