Understanding the pace of deinstitutionalisation: the role and nature of cumulative actions in the case of asbestos in France

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Abstract

Even when accelerated by a jolt, deinstitutionalisation is most often a long process constituted by short timestep and long timestep periods. Little has been said however to explain the pace of deinstitutionalisation and the factors that may accelerate or slow down this process. Not only strategic actions contribute to deinstitutionalisation. Multiple actions are involved and have an impact on the pace of deinstitutionalisation, depending on efforts of maintenance and disruption which may be opposed, isolated or cumulated. Based on Dorado's profiles of institutional change, we draw out some core claims: (1) the pace of deinstitutionalisation is slower when defensive actions are related to leveraging-strategic actions; (2) the interaction between leverage-strategic actions and accumulating-sensemaking actions explains the creation of residues that later become essential in disrupting an institution; (3) long timestep periods of deinstitutionalisation are related to the tendency for disruptive agents to be weakened and dispersed due to their lack of strategic vision. We conclude by presenting "convening" as an efficient form of action to considerably slow down the deinstitutionalisation process. Our case is supported by a longitudinal analysis of the deinstitutionalisation of asbestos in France during the 20th century.

Keywords: deinstitutionalisation, profiles of action, institutional maintenance, asbestos

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Introduction

A lot has been done to account for institutional change over long periods (see for example Chung & Luo, 2008; Greenwood, Suddaby, & Hinings, 2002; Hoffman, 1999; Leblebici, Salancik, Copay, & King, 1991; Tolbert & Zucker, 1983). However, in the case of deinstitutionalisation, studies have tended to focus on jolts and on the final steps of deinstitutionalisation when basic arrangements are shattered, ultimately leading to the rapid collapse of an institution. In this paper, we are interested in the prior actions that create the conditions for the collapse of an institution. To "delegitimate an established organizational practice or procedure" (Oliver, 1992, p. 564), to disrupt taken-for-granted assumptions, and to annihilate logics of maintenance, deinstitutionalisation requires specific work and requires multiple actions that may occur over long periods (Lawrence & Suddaby, 2006; Maguire & Hardy, 2009). New practices, rules, perceptions and problems will emerge and will be collectively assimilated, sorted out and theorised. Relative to this long – and possibly slow – process of deinstitutionalisation, there are issues that are not well understood. In particular, what are the factors that could explain the pace of deinstitutionalisation? Why do some actions lead to rapid and significant changes while others are more closely associated with periods of stability?

To understand the effects of these actions, we draw on the three profiles of institutional change developed by Dorado (2005). Her approach offers an interesting analytical framework to account for the role of actors in institutional change, depending on forms of agency (routine, sensemaking or strategic), resource mobilisation (leveraging, partaking or accumulating) and field opportunity (opaque, transparent or hazy). However, as she recognises, little is known about the relationship between profiles of institutional change and the stability of the resulting institutional arrangements. We will attempt to partially fill this gap. In particular, we divide the deinstitutionalisation process into several periods – with short and long timesteps – and then attempt to explain why certain institutional arrangements have persisted while others have been

ephemeral. This is intended to address important theoretical questions: what is the relationship between profiles of institutional change and the pace of deinstitutionalisation, and how do different types of actions interact to generate stable or ephemeral institutional rearrangements?

Asbestos provides an example of deinstitutionalisation, intially considered as a "magical mineral" and several decades later as "public enemy number one". The study of the French case in particular is interesting for many reasons. The asbestos controversy in France brought about major social struggles and has generated broad coalitions of opponents and defenders of asbestos. In addition, the length of the conflict is typical (asbestos was only banned in France in 1997, whereas in most other industrialised countries a ban had already been in place since the 1980s). Moreover, it was a long deinstitutionalisation process with long timesteps (during which the institutionalised practices of asbestos were mostly stable) and short timesteps during which rapid and significant changes generated far-reaching institutional rearrangements. Finally, it is a well-documented case which provides sufficient sources to understand the series of actions that ultimately led to the ban on asbestos.

We draw on process theory (Van de Ven & Poole, 1990) to constitute and analyse a database of actions that took place from 1970 to 1997. We have compiled a rich corpus based on archival data (press reports, speeches in France's parliament, books, press releases, pamphlets and reports) and on interviews with experts, epidemiologists, workers, trade unions and lawyers. We use this data to analyse the interaction between several profiles of institutional change to explain the pace of deinstitutionalisation, rapid or slow.

1.2. THEORETICAL BACKGROUND

1.2.1. Deinstitutionalisation

Efforts to deinstitutionalise a practice have been studied by many researchers. It is an area in which most scholars explore disruptive efforts as the preliminaries for the emergence of a new institution (e.g. Burns & Wholey, 1993; Leblebici, Salancik, Copay, & King, 1991; Rao, Monin, & Durand, 2003). For these scholars, deinstitutionalisation is approached as one step of a wider process (Schneiberg & Lounsbury, 2008). Few authors have instead explored it as a process *per se* – individuals want to disrupt an existing institution but without trying to promote

or create a new one – and have focused their attention on a detailed exploration of antecedents and mechanisms of deinstitutionalisation. Oliver's seminal work (1992) suggests that an institutionalised practice is subjected to political, functional or social pressures within or in the environment of an organisation. These pressures will eventually disrupt an institutionalised practice. In an empirical study, Davis, Dickman and Tinsley (1994) emphasised the role of external pressures – political, economic and cognitive – to explain the rapid decline of an institutionalised practice. Lawrence and Suddaby (2006) emphasise the direct role of purposive actions in disrupting particular institutionalised arrangements, more than external pressures. Based on a literature review, they identify three categories of efforts in the deinstitutionalisation process: disconnecting sanctions/rewards (Jones, 2001; Leblebici et al., 1991), disassociating moral foundations (Ahmadjian & Robinson, 2011), and undermining assumptions and beliefs (Leblebici et al., 1991; Wicks, 2001).

A review of the literature on deinstitutionalisation shows that it is not necessarily a brutal process. Disruptive efforts are often progressive so as to avoid discontinuity and reduce uncertainty when fundamental elements of an institution are questioned (Hargadon & Douglas, 2001; Lawrence & Suddaby, 2006; Rao et al., 2003). These efforts require all the more time as they may be opposed to efforts of maintenance. In this vein, the study of the deinstitutionalisation of DDT (Maguire & Hardy, 2009) describes the opposition between efforts of maintenance and efforts of disruption, generating struggles to define the future of the institution. It illustrates the relevance of carefully analysing the interaction between considerable efforts and understanding how they interact in a collective and complex process of change.

1.2.2. Institutional change and deinstitutionalisation: disruptive versus maintenance efforts

Since the 1990s, following a "theoretical turn" in the neo-institutional literature, a growing number of scholars have focused their attention on how individuals and organisations may strategically contribute to change (Holm, 1995; Leblebici, Salancik, Copay, & King, 1991), are able to innovate (Hargadon & Douglas, 2001; Lawrence & Phillips, 2004; Rao, Morrill, & Zald, 2000) and achieve their own interests (DiMaggio, 1988; Oliver, 1991) in spite of structural pressures. Lawrence and Suddaby (2006) suggest the notion of *institutional work* to account for individuals who strategically act upon institutions, creating, changing or disrupting some fundamental arrangements. In this vein, we need to recognise that these efforts usually take place in a complex arena, with struggles and contests, where actors are endowed with different levels of resources. The case of deinstitutionalisation in a highly institutionalised environment appears as the most problematic. In order to annihilate the maintenance mindset and unveil taken-for-granted assumptions, institutional disruption requires the accumulation of many actions that gradually shake the pillars of an institution and resist efforts of maintenance. Our understanding of the deinstitutionalisation process also therefore implies taking into account counter-actions and efforts of maintenance.

While a growing number of studies have sought to deipher these efforts of maintenance, little is known about how they interact with disruptive efforts on a long-term basis. These interactions may contribute to a specific trajectory for institutional change and may call into question the impact of an isolated action on an institution. As Lawrence, Suddaby and Leca (2009, p. 11) put it, "the study of institutional work offers an invitation to move beyond a linear view of institutional processes [...]. Because it points to the study of activities rather than accomplishment, success as well as failure, acts of resistance and of transformation, the concept of institutional work may contribute to a move away from a concentrated, heroic, and successful conception of institutional agency". In the same vein, we argue that the deinstitutionalisation

process is a juxtaposition of actions, achieved by various actors, with different intentions and resources, and so view it as the product of a long and slow interaction.

1.2.3. Profiles of institutional change and the pace of deinstitutionalisation: a missing link

Dorado (2005) recognises that only in rare situations do powerful actors possess enough resources to impose change in an institutional field. In most cases, institutional change implies an aggregation of resources coming from various individuals, with different interests and values. Dorado offers a very interesting theoretical model to account for processes of change, based on previous studies in the institutional literature. Her model defines processes of change based on three factors: agency, resource mobilisation and institutional opportunities.

Agency is indeed one of the most prominent concepts in institutional theories (Heugens & Lander, 2009; Hirsch & Lounsbury, 1997). In an effort to move beyond the opposition between a pure entrepreneur and an entirely constrained individual, and to better explain institutional dynamics, several scholars have encouraged a deeper understanding of the concept of agency (Battilana & D'Aunno, 2009; Lawrence, Suddaby, & Leca, 2009; Lawrence & Suddaby, 2006). Drawing on the classic approach of Emirbayer and Mische (1998), Dorado considers three forms of agency depending on the dominant temporal orientation of an action. When an effort is oriented towards the past in an attempt to reactivate past patterns of thought and action, the agency implied is *routine.* When an actor is oriented towards the present and mostly makes practical judgements to solve dilemmas or ambiguities in a present situation, the form of agency involved is *sensemaking*. Finally, some efforts are primarily oriented towards the future, relying on the creative generation or understanding of different trajectories of action. Actors endowed with this type of agency are likely to strategically act guided by their desired finalities. In this case, the dominant form of agency is *strategic.*

Dorado also puts forward a basic factor to account for institutional change: the type of resource mobilisation. To act upon an institution requires a significant amount of resources of different kinds, whether cognitive, social or material. An individual rarely possesses enough resources to directly generate change. Thus institutional change implies the accumulation of resources, whether it is purposive (e.g. Fligstein, 1997) or mostly probabilistically-driven (Van de Ven &

Garud, 1994). Dorado identifies three forms of resource mobilisation: leveraging, accumulating and convening.

Leveraging is a common form of resource mobilisation involving strategic skills. An individual has a project or a vision of desirable institutional arrangements and then enrols backers who will help promote these arrangements. Leveraging refers to actors who are good at convincing others and reflective enough to rally others around specific institutional trajectories (Fligstein, 1996, 1997).

Accumulating refers to cases where efforts directed at institutional change are not coordinated by a single actor or by converging motives. Efforts are produced independently, most often over long periods, by multiple individuals with various interests and objectives. This series of actions and their interaction will ultimately effect change. As Dorado puts it: "these actions and interactions accumulate probabilistically and, over time, result in a dominant design which is then diffused and replicated" (p. 390).

Finally, in a context where existing institutional arrangements are questioned and cannot provide any shared answers to complex problems, it may be extremely difficult for actors to leverage support. In that case, convening may be an efficient type of resource mobilisation. It relies on the creation of new inter-organisational arrangements, whether an international network, a new committee or a multiparty organisation, etc. which can then structure a process of change. Contrary to leveraging resources, convening does not follow any clear strategic trajectory. The purpose is to collectively generate solutions to complex problems that will be the basis of future institutional arrangements. Actors who initiate this convening process are supposed to convince others about the desirability of collaborative efforts to come up with a relevant solution to existing problems.

The third aspect of institutional change in Dorado's model relates to institutional opportunities. Drawing on two streams of literature, entrepreneurship and social movement theory, she defines an institutional opportunity as "the likelihood that an organizational field will permit actors to identify and introduce a novel institutional combination and facilitate the mobilization of the resources required to make it enduring". As has been argued by Seo and Creed (2002), the first dimension that creates opportunities is the intersection between multiple opportunities. The more institutional fields are overlapping, or conflicting, the more space there will be to perceive contradictions and interests in new institutional arrangements. Thus, institutional fields differ on their openness to ideas from other fields. A high level of porousness in an institutional field

will facilitate creative action, based on multiple institutional referents. However, if the institutional field is too open, it may also increase complexity and hinder the process of institutional change.

To account for institutional opportunities, Dorado also emphasises the link between individuals' capacity for strategic action and the degree of institutionalisation, as was suggested earlier in the institutional literature (Tolbert & Zucker, 1996). An extremely high degree of institutionalisation implies that patterns of behaviour are taken for granted to such an extent that very few actors will be able to question existing institutional arrangements. In such cases, actions to maintain institutions are not even necessary, and existing patterns of behaviour tend to be self-reproduced (Jepperson, 1991). Only an accumulation of imperceptible variations will bring about change on a long-term basis (Garfinkel, 1984). In the case of a low degree of institutionalisation, existing arrangements do not provide actors with sufficient certainty to produce creative actions. On the contrary, there is a tendency either to rely on pragmatic reasoning (sensemaking) or adopt past routines to limit uncertainty. Finally, it is in organisational fields with a moderate level of institutionalisation that creative action is the most likely (Beckert, 1999), since the field is both relatively stable – facilitating means-ends calculations – and also not opaque enough to imprison actors in taken-for-granted cognitive and normative patterns.

Based on these two dimensions, Dorado suggests three forms that an institutional field can take: "opportunity opaque", "opportunity transparent" and "opportunity hazy". The first refers to a field with a low level of openness and a high degree of institutionalisation. In the second, the openness of the institution and the degree of institutionalisation are moderate. The third refers to situations where multiple institutional fields are intertwined and the degree of institutionalisation is low.

Combining these three factors and eliminating irrelevant cases, Dorado ends up with 10 possible combinations (see Table 1).

Profile	Resource mobilisation	Agency	Institutional opportunities
Entrepreneurship	Leverage	Strategic	Opportunity opaque
			Opportunity transparent
			Opportunity hazy
Partaking	Accumulate	Routine	Opportunity opaque
			Opportunity transparent
			Opportunity hazy
		Sensemaking	Opportunity transparent
			Opportunity hazy
		Strategic	Opportunity transparent
Conveners	Convening	Strategic	Opportunity hazy

Table 1: Profiles of institutional change

Dorado's model is particularly useful as a description of the types of actions involved in a process of institutional change. However, as she herself recognises, we still know very little about the impact of these profiles on the resulting institutional arrangements. Lawrence et al. (2001) attempt to conceptualise the impact of certain actions on the pace of institutionalisation, but focus their analysis on strategic actors with an entrepreneurship profile. We also need to understand the extent to which other profiles, with convening and accumulating resource mobilization processes, can have an impact on the pace of institutionalisation. This model could provide more in-depth analysis of a long deinstitutionalisation process, where multiple actions are involved and which may explain the changing pace of institutional evolution, depending on the interaction between actions of maintenance and disruption. Research in deinstitutionalisation has emphasised the role of entrepreneurs who try to leverage support, but little is known about other profiles, in particular those with accumulating and convening resource mobilisation processes. We aim to address this gap by answering two theoretical questions: what is the relationship between profiles of institutional change and the pace of deinstitutionalisation, and how do different types of actions interact to generate stable or ephemeral institutional rearrangements?

2. METHODS AND DATA

2.1. Methods

Although the phenomenon of institutional deinstitutionalisation has been analysed by several researchers, some basic aspects of this process are still poorly understood, such as the pace of deinstitutionalisation. Given the paucity of knowledge on this topic, a single case study appears to be an ideal approach (Eisenhardt 1989 ; Yin 1994). From a "magical mineral" to "the public enemy number one", asbestos was gradually delegitimised and was suddenly banned in 1997 in France. Several reasons underpin our decision to study this long process of institutional change. First, the controversy in France brought about major social struggles and generated broad coalitions of opponents and defenders of asbestos. Second, this case is made unique by the very long delay in deinstitutionalising practices relating to asbestos: France only banned asbestos in 1997, whereas most other industrialised countries did so in the 1980s. The French case raises the question of the interplay of diverging institutional efforts and requires a parsimonious approach if we are to understand how actors collectively interact and contribute to institutional change.

2.2. Research design

To understand the profiles of institutional disruption and their impact on the pace of deinstitutionalisation, we explore the case of asbestos in France, and in particular the institutional actions between 1970 and 1997 relative to asbestos. The case is well-documented, which allows us to constitute a rich corpus of secondary data. This corpus is analysed in different ways to identify and explain the efforts involved in deinstitutionalisation. We began by collecting data in the form of secondary accounts (Lear, 1997) to ensure convergence and triangulation on actions. We relied mainly on archival data (press coverage of the asbestos scandal in France, public reports, pamphlets, books, etc.). We then interviewed key actors from the field. 27 interviews took place with workers, politicians, doctors, lawyers, executives, trade union representatives, etc. Secondary data and interviews were used to reconstitute the story of asbestos in France. We then identified the main actions (55) in this qualitative case in order to draw a timeline from 1970 to 1997 illustrating the relationship between these actions and their possible impact on the institutional evolution of asbestos. One difficulty of this approach is to identify the qualitative datum that accurately represents the action that participated in the process of institutional change. We selected actions that were widely diffused in archival data

and whose relevance was also confirmed in our interviews. Repetitive actions and routines were excluded from our chronology, and actions not reported in books, press articles or interviews were not included in our analysis.

In addition, we studied institutional change at a macro level. To do this, we relied on archival data analysis. We compiled a corpus of texts from press coverage, parliamentary proceedings, books and press releases to identify the main issues relating to asbestos at different times. It represents more than 1500 pages of text. These texts were then analysed to decipher the most notable changes in the core values with regard to asbestos.

	1970-1977	1978-1992	1992-1997
~~**Authors of texts in corpus**~~	- Asbestos Union (press release) - Media (press, radio, TV) - Workers' Union (pamphlet) - CIRC (public institution)	- INSERM (public institution, report) - Asbestos Union (white paper, press release) -Government (decree) - Workers' Union (archives) - Professors (letter to the government) - CPA (archives) - Press	- INSERM - Senate (rapports et compte rendus des débats) - *Collectif de Jussieu* (archives) - Academy of Medecine (official reports) - CPA - Press

Table 2: Source texts

This analysis was conducted using Prospéro (Chateauraynaud, 2003), a software program that is particularly well adapted to longitudinal textual analysis. Through an interactive process between the researchers and the program, we identified periods during which there was significant inflexion in the words used. Also, for each period, we evaluated the extent to which there was an institutional decline in asbestos. This involved identifying the core values associated with asbestos at the peak of its "glory" in 1970. For each of these values, we assess whether they were reinforced, slightly questioned, disrupted or even annihilated (see Table 12 for an overview). Based on this, we provide scores of institutional change. This makes it easier to represent the pace of deinstitutionalisation over a long period, although it should not be considered as a positive quantitative measure of institutional change.

We then attempted to understand the relationship between the macro evolution of values around asbestos and the actions which took place during that period. We coded these actions using Dorado's model (see Table 3) and then positioned each action on a timeline (see Figure 1). For

practical reasons, we focused on two dimensions of Dorado's model (resource mobilisation and type of agency). Due to the limits of historical data, for several actions there is a lack of data that would help us understand how institutional opportunities were perceived. More specifically, the boundary between "hazy" and "transparent" is in many cases too fuzzy to integrate this dimension in our analytical framework.

Table 3 explains the criteria used to categorise actions. As explained above, the actions we selected are not routines, so this type of agency is not analysed herein.

	Resource mobilisation	**Type of agency**
Criteria	Leverage (L): -An actor attempts to find support -There are meetings to promote an idea/project Convene (C): -Efforts to create an organisation to debate existing problems Accumulate (A): -Efforts to achieve one's own goals, without seeking support	Strategic (St): -Long-term objectives -Desire to act upon specific institutional arrangements -Reflection on the institutional impact of personal efforts Sensemaking (Se) -Short-term objectives -Efforts intended to address a complex situation, possibly with creativity -The institution is considered a given (or can be slightly adapted), not an object to act upon

Table 3: Criteria used to code profiles

In the case of strategic actions, we also identified whether actors sought to maintain dominant institutional arrangements or disrupt them. This gives us a total of six categories:

- Three related to strategic actions targeting institutional maintenance: Leverage-Strategic (LSt), Convene-Strategic (CSt) and Accumulate-Strategic (ASt).
- Two categories related to strategic actions targeting institutional change or disruption: LSt and ASt
- One category related to Accumulate-Sensemaking (ASe)

In our case, there is no Convene-Strategic action targeting institutional disruption or change.

Finally, this timeline was debated with other researchers and asbestos experts and in case of

divergence was discussed to reach agreement.

The following section details the case of asbestos in France between 1970 and 1997 and analyses how different actions interact and may influence institutional change. To summarise these complex interactions, to develop theory based on the data processed, and to facilitate sensemaking, we rely on a visual mapping strategy (Langley, 1999) and aggregate our data in the form of a timeline (Figure 1).

3. ANALYSIS OF THE HISTORY OF ASBESTOS IN FRANCE

3.1 Preamble (1945-1970)

The period between 1945 and 1970 can be seen as a 'golden age' for the international asbestos industry. Asbestos was seen as a "magic" substance which served all kinds of interests at a very low cost. Against the backdrop of demographic upheaval in France, and following the large-scale disasters of the Second World War, asbestos proved useful for the construction of safe and modern buildings. In the 1970s, 3000 different products in France (e.g. cigarettes, wine, buildings and cars) were made with asbestos. The construction industry and car manufacturing were the main users.[1] The first victims of asbestos appeared at the end of the 1960s. Because they were professionals, the consequences were considered anecdotal and associated with occupational hazards. Since 1945, asbestosis[2] has been officially recognised as an industrial disease in France. From the 1950s, evidence compiled through the publication of medical studies showed the link between asbestos and cancer. Two core beliefs were associated with institutionalised asbestos practices: controllability and efficiency. As such, it was praised for saving hundreds of lives and for contributing to economic growth in France and in developed countries.

Core beliefs	Underlying assumptions
Efficiency	Best insulating material Best price Multi-purpose
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless

Table 4: Core beliefs about asbestos in 1970

[1] In 1974, the industrial use of asbestos reached its peak with 178,000 tons of imported asbestos (source: *Ministère du Commerce Extérieur*, France).

[2] Asbestosis is a specific pulmonary pathology.

3.2.Period 1 (1970-1974): Initial questions raised (Actions 1 to 9 – Figure 1)

In 1971, asbestos producers from Europe and English-speaking countries held an international conference on asbestos in London **(1)**. The real aim of this event was to draw up guidelines to avoid legal proceedings. Then, in the European and American markets, a handful of experts began to lobby on behalf of asbestos firms. Asbestos producers now began to actually admit and anticipate that they may be criticised and questioned. They acted with an awareness of institutional pressure. Their efforts were strategic and they had a clear vision of the situation. This conference led to the creation of the COFREBA in France **(2)**, France's first lobbying organisation.

As with Ferodo, workers went on strike and sought better work environments **(3)**. This kind of strike was not a way for the workers to contest the use of asbestos. Asbestos producers, such as Ferodo or Eternit, used these actions to prove their goodwill. In 1973, Ferodo's managers set up an extraordinary committee to monitor safety and the work environment **(8)**. However, public institutes such as the IARC (International Agency for Research on Cancer) and the INRS (a French institute in charge of health protection) organised conferences and published guidelines about asbestos **(4)(5)**. The main challenge was to define ways of using it safely. At the same time, there was an increase in the number of professional victims. Many former employees of the Johns Manville firm, one of the main producers of asbestos in the USA, initiated a class action against the company for asbestos-induced occupational disease **(6)**. In the USA, complaints by Johns Manville workers[3] led to the bankruptcy of America's main asbestos producer.

In 1973, the ILO (International Labour Organization) and the IARC published scientific reports claiming that the risks linked to the use of asbestos could be controlled **(7)(9)**, an idea that came to be widely accepted.

Public agencies considered asbestos to be as harmful as any other industrial dusts, and their role was limited to establishing appropriate threshold levels for exposure. Some common beliefs remained deeply anchored among stakeholders in this industry: asbestos is necessary, under control and natural. Finally, during this period, problems or conflicts over asbestos in France

[3] They demanded compensation for the diseases contracted through exposure to asbestos at work. Millions of dollars were at stake.

were limited to local events in factories where workers were calling for better working environments.

Core beliefs	Underlying assumptions	Development of these assumptions
Efficiency	Best insulating material Best price Multi-purpose	Reinforced Reinforced Reinforced
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	Slightly questioned Disrupted (asbestos requires specific measures to be controlled) Not questioned

Table 5: Core beliefs about asbestos in 1974

Overall, the two core beliefs about asbestos were maintained. They took on board some marginal criticisms, but without changing core elements of the institutionalised asbestos practices. Some other actors (such as the INRS or IARC) had no strategic vision but attempted to make sense out of a complex environment. They drew on the ideas that strategic actors had put forward (the control of asbestos risks) and thus contributed to a state of relative continuity in the use of asbestos.

3.3.Period 2 (1974-1975): Emergence of the first crisis (Actions 10 to 14 – Figure 1)

In 1974, a strike began at Amisol **(10)**, a French asbestos producer. Ironically, it was not caused by the fear of asbestos but because the company was closing. Workers – most of them women – went on strike in an attempt to avoid unemployment. In the case of Ferodo **(3)**, this collective action was not a way for workers to contest the use of asbestos. Amisol's workers knew little about the economic and medical issues related to asbestos. During the conflict, their situation took a tragic turn. Ten Amisol workers died during the first months of the strike. These workers did not condemn asbestos and acceptd their fate as the result of professional hazards. At the same time, some professors from Jussieu, a renowned university in France, pointed out the presence of asbestos dust in their own offices. Worried by the potential harmful effects, some researchers decide to investigate. They created an action group, led by the charismatic Professor Henri Pézerat **(11)**. They understood that asbestos was dangerous for their health. They then realised the power of asbestos lobbying in the industry in France. During their investigation, they learned about a small factory in the centre of France called Amisol. Henri Pézerat and his colleagues decided to visit the company, informing employees about asbestos risks. They asked

journalists to accompany them and visit the Amisol factory **(12)**. They used their knowledge and their legitimacy to warn workers and create a jolt in public opinion. A real social movement emerged. Many famous French intellectuals also signed a petition in sympathy with the workers **(13)**. Amisol's workers began new negotiations **(14)**. They now refused to go back to work in the factory and demanded financial compensation. This industrial controversy revolved around certain questions: What were the real dangers of asbestos? Were workers and others in great danger? How could further asbestos-related deaths be avoided? Was asbestos a controllable substance?

Core beliefs	Underlying assumptions	Development of these assumptions
Efficiency	Best insulating material Best price Multi-purpose	Not questioned Not questioned Not questioned
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	Disrupted Disrupted Disrupted

Table 6: Core beliefs about asbestos in 1975

In a few months, two actions converged to open up a wide debate on asbestos. This meeting represented the first disruptive action which led to notions of industrial danger related to asbestos. This period marked an acceleration in the pace of deinstitutionalisation.

3.4. Period 3 (January – May 1976): First political reactions (Actions 10 to 14 – Figure 1)

The INRS suggested limited exposure **(15)**. Based on this proposal, a law was adopted to lower the acceptable limits on exposure **(17)**. Another law was adopted to protect workers under 18 **(16)**, and changes were made in the official recognition of industrial asbestos-related diseases in France **(18)**.

These actions were consequences of those that took place during periods 1 and 2 and marked an acknowledgment of the risks. These actions slowed down the pace of deinstitutionalisation: previous criticisms were now taken on board and absorbed in the idea that the harmful effects of asbestos could be controlled with a proper system of control and appropriate exposure levels.

Moreover, a scientific debate had begun, discussing how asbestos hazards could be controlled. This debate also slowed down the pace of deinstitutionalisation. Nothing was to change until it became clear that asbestos should be banned.

However, these actions did not contain the climate of fear caused by asbestos. While deinstitutionalisation had slowed, asbestos was now recognised as dangerous if not controlled. It came to be associated with death.

This period is interesting as it shows why strategic disruptive actions during the previous period failed to have a persistent impact on deinstitutionalisation. Without a clear intention to ban asbestos, tensions arose between antagonistic elements: efficiency, controllability and fear. Finally, a fragile consensus emerged.

Core beliefs	Underlying assumptions	Development of these assumptions
Efficiency	Best insulating material Best price Multi-purpose	Slightly questioned (some alternatives emerge) Not questioned Not questioned
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	Slightly questioned (proper regulation is necessary) Completely disrupted Disrupted
Fear/death	Asbestos can kill	New assumption

Table 7: Core beliefs about asbestos in 1976

3.5. Period 4 (August 1976 – June 1977): The first asbestos crisis in France (Actions 19 to 29 – Figure 1)

The distress of Amisol's workers received national coverage when the *Comité de Jussieu* met with them for the first time. The meeting between poor female workers and intellectuals from a renowned university had a strong symbolic effect. Press articles and debates on TV/radio made people aware of the asbestos issue and the work environment in asbestos factories **(19)**. To a certain extent, the focus was not on asbestos but on the distress of the working classes. This coverage led to an increase in the number of reports on asbestos in the press. The link between asbestos and death was now undeniable. The CIRC also organised a conference on the risks linked to asbestos **(20)**. All these actions constituted responses to the movement fostered by the *Comité de Jussieu* and Amisol workers. As a public institute, the INRS used its resources to adapt to this new situation. There was no intention on the part of the INRS or the authorities

to promote the ban of asbestos. Their decisions were influenced by the asbestos companies. In the mid-1970s, the asbestos firms had considerable resources and a central position in the industry. They promoted asbestos in two ways. First, they published booklets or advertisements to promote the use of asbestos and its benefits. Second, they sought to delegitimise the Jussieu movement in the eyes of the authorities **(21)**. The struggles and work disruptions raised many questions about the "magic mineral". This meant that challenges were made against institutionalised asbestos practices on a larger scale. The French consumer association *60 millions de consommateurs* investigated and published a study revealing the use of asbestos in wine and other consumer goods. This association was part of a disruptive strategy aimed at securing the ban on asbestos.

Asbestos could now no longer be considered a "magic mineral" and its dark side was brought to the fore. Debates increasingly took place all over France. Like a few years earlier, the unions representing asbestos producers organised a conference to defend their product **(22)**. Meanwhile, one of France's main TV channels decided to broadcast three programmes depicting asbestos in a negative light **(23)**, with a dramatic tone, sensationalism and polemical interviews. Broadcasters deployed various tactics to highlight the risks associated with asbestos use. They called for an explanation from the authorities and asbestos companies and challenged the foundations of institutionalised asbestos practices. It was clear from their position that they opposed the continued use of asbestos and the lack of information. Maintaining their strategy, the asbestos producers' union published a book to defend asbestos **(26)** and promote its many advantages: protection against fire, productivity of the French industry, and employment in the asbestos sector. Their defensive strategy was quite effective and was based on the core beliefs about asbestos. Another tactic in the defensive efforts by asbestos firms was to delegitimise the main actors of the movement. Above all, they harshly criticised Professor Bignon **(25)**, who had no option but to publish an aggressive response to the asbestos companies in a letter addressed to the government **(27)**. Professor Bignon emerged as an important stakeholder in the asbestos industry after the meeting between Amisol and Professor Pézerat. He was one of most virulent participants in the TV programmes attacking asbestos **(25)**. As a scientist, he had the legitimacy to criticise the use of asbestos in light of research findings at the time. He suggested that international researchers contested the "magic mineral" status of asbestos while French asbestos companies continued its promotion. The questions he raised had such important repercussions that public institutes like the CIRC launched a new series of studies **(24)**. Little

was known about the real risks related to the use of asbestos. These studies supplied the public authorities with data to adapt regulatory norms. As an independent institute, the CIRC recognised all types of asbestos as carcinogenic **(29)**. Their decision made the relationship between asbestos and cancer official. In 1977, the *Collectif de Jussieu* published a pamphlet entitled "*Danger, Asbestos*" **(28)** which became a reference on asbestos. Industrial and domestic controversies took on such importance that politicians decided to strictly regulate the use of asbestos in France but refused to ban its use. The government put forward economic reasons focusing on the profitability of asbestos, thus implicitly supporting the requests of asbestos companies.

Core beliefs	Underlying assumptions	Development of these assumptions
Efficiency	Best insulating material Best price Multi-purpose	Slightly questioned (some alternatives emerge) Not questioned Not questioned
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	Disrupted (everyone is in contact with asbestos) Completely disrupted Completely disrupted
Fear/death	Asbestos can kill	Reinforced (anyone can be killed by asbestos)

Table 8: Core beliefs about asbestos in 1977

Within a very short time, the institutionalised practices of asbestos were fundamentally challenged. This was the first significant crisis. There were fierce struggles between defensive and disruptive efforts. Disruptive strategic actions brought about real changes. The deinstitutionalisation process accelerated, but this was also because these disruptive actions raised new ideas and new problems that encouraged other actors to incorporate these issues into their decisions.

3.6 Period 5 (June 1977 – 1982): Preparing for silence (Actions 30 to 35 – Figure 1)

Four laws were introduced: flocking banned in housing in France **(30)**, worker exposure limited **(31)**, protective measures to transport asbestos **(32),** and flocking banned in all kinds of buildings **(33)**. The aim was to protect workers without jeopardising the industry. These measures were adopted under the supervisory control of the asbestos lobby. It had become politically imperative to restrict certain uses of asbestos, but there was no appetite for radical measures. In 1979, asbestos defenders held conferences in Paris to promote asbestos **(34)** and changed their name to become an association **(35)**. This cannot be seen as a mere name change.

It was the first step in a new strategy adopted by producers and users of asbestos in France. They developed a new position: they did not want to be seen as blind supporters of asbestos anymore, but rather as objective experts. They claimed they had good intentions to protect workers and users.

Core beliefs	Underlying assumptions	Development of these assumptions
Efficiency	Best insulating material Best price Multi-purpose	Slightly questioned (some alternatives emerge) Not questioned Not questioned
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	Reinforced (many efforts to limit risks) Completely disrupted Only dust is dangerous (not asbestos generally)
Fear/death	Asbestos can kill (not only industrial workers)	Marginalised (not relevant when controlled)

Table 9: Core beliefs about asbestos in 1982

The French government now had to deal with the asbestos issue. Yet the ambivalence was maintained: asbestos was considered as a risky necessity. The consensus was perceived as temporary by the disruptive actors. They believed that the ban was in progress and would soon be adopted. Defensive actors used this period to lead strategic actions in leveraging political support.

3.7 Period 6 (1982 – 1994): Silence (Actions 36 to 41 – Figure 1)

The end of the first crisis actually heralded a new era for the advocators of asbestos. They managed to focus the debate only on exposure thresholds and the specific dangers of asbestos dust. Asbestos industrial unions held a conference session to promote asbestos **(34)**. This allowed them to share their ideas and allay fears and protests. The defensive work led by the asbestos companies resulted in the creation of a new committee: the CPA (*Comité Permanent Amiante*) **(36)**. This committee was responsible for all questions connected with asbestos. It brought together asbestos firms, researchers and workers' representatives. Funds came from the asbestos industry through a consultancy firm. The CPA was now the central entity in the industry. It was its main actor, which explains the persistence of institutionalised asbestos practices during that period. It bridged economic interests and the protection of workers, forging a new principle: "the controlled use of asbestos". The main issue for asbestos companies was how to implement this new principle in France through the CPA. During this period, the CPA

was willing to legitimise asbestos use provided there was a central entity that could control, prescribe and ensure its safe use. The creation of the CPA radically shifted the boundaries of the institutional field of asbestos and the definition of this institution. The controlled use of asbestos amounted to recognition that the negative consequences of asbestos could be controlled. At the beginning of the 1980s, laws that had been adopted by parliament began to be implemented. Schools arranged for the removal of asbestos **(37)**. However, the law was applied in a very restrictive way, suggesting that the French government was very careful in its dealings with the new producers' association, limiting changes to the asbestos regulations – essentially for economic reasons. The CPA organised a worldwide symposium in Montreal **(38)**. It managed to convince other countries (e.g. Canada and Brazil) to adopt the principle of "controlled use of asbestos". This principle now became central to the way asbestos use was understood. With regard to other actions during this period, it is interesting to note that none were designed to put an end to the use of asbestos. The only dimension that remained from previous subversive actions was the use of scientific studies to define proper asbestos usage. This normative constraint ultimately resulted in asbestos practices underpinned by scientific recommendations. This meant there was a long period (5 years) of inaction. The struggles in the field were concentrated within a closed organisation (CPA). Divergences were therefore confined to a private sphere and were not covered by the media. At the end of the 1980s, the French government had no choice but to apply European directives. It reluctantly decided to limit exposure **(39)**, all kinds of asbestos (except chrysotile, the most commonly used variety) were banned **(40)**, and lower limits were imposed on exposure **(41)**. The aim of these measures was to limit pressure from the European authorities without abandoning the "controlled use of asbestos".

This silent period is a specific feature of the French case: ten years of official consensus to establish and spread the new dogma of "controlled use of asbestos". By bringing together actors who wanted to maintain or put an end to the use of asbestos, the CPA eroded the capacity of disruptive actors to challenge the field. All debates were confined within a hegemonic structure, whose aim was to maintain the institution.

Core beliefs	**Underlying assumptions**	**Development of these assumptions**
Efficiency	Best insulating material Best price Multi-purpose	No longer questioned Not questioned Not questioned

Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	No longer questioned Completely disrupted (highly specific) Only dust is dangerous (not asbestos generally)
Fear/death	Asbestos can kill (not only industrial workers)	Marginalised (not relevant when controlled)

Table 10: Core beliefs about asbestos in 1994

3.8 Period 7 (1994 – 1997): From the scandal to the ban (Actions 42 to 58 – Figure 1)

While the government and the CPA argued that the use of asbestos should be controlled, some political parties took a more critical view. However, as noted above, their views could not be heard due to the central role of the CPA. Peripheral actors finally reopened the controversy at the beginning of the 1990s, beginning with widows of teachers in 1992 **(42)**. Their husbands had been teachers in a school flocked with asbestos. These men were not workers from the asbestos industry. One of the main differences between the first and second crises was the appearance of "real visible victims" of asbestos. These women were alone. They were the first to break the consensus surrounding the dangers of environmental exposure. They clearly linked the deaths of their husbands to the presence of asbestos through the flocking used in the schools. This action was crucial in the re-emergence of public protest against asbestos. Journalists re-opened the asbestos debate (**43) (44**). At the same time, British scientist Julian Peto published the results of his epidemiological study, forecasting hundreds of deaths over the years to come in the United Kingdom, where restrictions and protection were higher. These findings encouraged Henri Pézerat to break his silence. A conference was held in Jussieu to present Julian Peto's research **(45)**. It aimed to rally supporters and break down the taboo surrounding asbestos in France. They denounced the silence of the CPA about the real risks of asbestos. The scientific evidence from the UK provided a decisive argument for further legitimacy. The conference radically challenged the use of asbestos. This time, Pézerat was willing to call for a complete ban. Julian Peto's research was the starting point for the examination of other international studies. After the conference in Jussieu, scientists decided to study the existing research and objectively recognised the consequences of asbestos on health **(46)**. Pézerat created a group of scientists and lawyers to implement a legal strategy to obtain a ban on asbestos. The renewed challenges generated further interest and led to the reopening of

investigations. Pézerat and his staff created an association called CAPER **(47)**. The aim of this association was to "find" victims, inform potential victims and help them to prosecute the authorities. This was the first time that an association for victims had been set up. What had changed was that they were now accusing the authorities of endangering workers and consumers. Through the creation of the CAPER, they offered a new perception of victims and a new definition of the responsibilities incumbent on the authorities. This action reflected their capacity to use resources (especially intellectual resources) to change beliefs about asbestos. On 1 June 1995, a journalistic investigation was published (**48**). The CPA was no longer considered credible and broke up **(49)**. This action marked the end of the system. France 2 (public television channel) broadcast a programme attacking asbestos **(50)** in which it denounced the lack of transparency in the use of asbestos in France. This broadcast had important repercussions. Silent victims spoke up; fear and suspicion grew. The ANDEVA was created as part of an initiative by Pézerat and his colleagues to respond to victim's expectations **(51)**. This association was set up to protect victims and launch legal proceedings. This was the first association exclusively devoted to asbestos victims. Disruptive actors used this move to redefine the asbestos industry as a criminal one. The ANDEVA supported the case of five sick men who accused their employers. These men decided to file a formal complaint **(55)**. There was no appetite for radical change in institutionalised asbestos practices. The men struggled to obtain compensation and be recognised as real victims, but their actions reinforced the perception of asbestos as dangerous and uncontrollable. By this time, the "controlled use of asbestos" had been totally delegitimised, and the CPA was dismantled. The government had no choice but to support the ban on asbestos. A law was introduced lowering exposure limits **(52)**. A law was also adopted to protect workers **(53)**, as well as an obligation on property owners to diagnose asbestos in buildings **(54)**. These measures paved the way for the official ban on asbestos and served as an extension of the laws adopted at the end of the 1970s. The final blow came with the publication by the INSERM of an official report confirming the results of international research, and those of Peto's study in particular **(56)**. The status of this supra-national scientific organisation explains why its recommendations were followed. The INSERM report was published on 2 July 1996. On the following day, the French prime minister announced the ban on asbestos. This resulted in asbestos being officially and completely banned in France beginning on 1 January 1997. **(58)**

Core beliefs	Underlying assumptions	Development of these assumptions

Efficiency	Best insulating material Best price Multi-purpose	No longer relevant Not relevant Not relevant
Controllability	The risk can be controlled (as with any professional hazard) No specific risks It is a natural rock and is therefore harmless	Completely disrupted (impossible to control) Completely disrupted (highly specific) Completely disrupted
Fear/death	Asbestos can kill (not only industrial workers)	Reinforced and central dimension (asbestos becomes public enemy number 1)

Table 11: Core beliefs about asbestos in 1996

Within a very short time, just a few months, asbestos was banned in France. Strategic disruptive action led to the ban. The French government faced a complex situation and decided to protect its fragile consensus. Disruptive actors had a very good understanding of the field. They were able to mobilise scientists and international researchers and succeeded through a leveraging strategy. Legal actions also played a significant role, causing an acceleration in the pace of deinstitutionalisation and ultimately precipitating the collapse of institutionalised asbestos practices. The defensive actors were overwhelmed by an accumulation of criticisms and were unable to respond.

Table 12 provides an overview of the changes in core values associated with institutionalised asbestos practices during the entire period between 1970 and 1996.

		WG*	1970	1974	1975	1976	1977	1982	1994	1996
Efficiency	Best insulating material	2	3	3	3	2	2	3	3	2
	Best price	2	3	3	3	3	3	3	3	1
	Multi-purpose	2	3	3	3	3	3	3	3	1
Controllability	Controllability of the risk	4	3	2	1	2	1	2	3	0
	No specific risks	1	3	1	1	0	0	1	0	0
	Natural rock (limited danger)	1	3	3	1	1	0	2	2	0
	Disruption score *		3	2.5	2	2.08	1.67	2.42	2.67	0.67

Table 12: Development of assumptions about institutionalised asbestos practices

*weighting factor: efficiency and controllability have an equal weight in the institutional disruption score
3: stable (or reinforced) assumption; 2: questioned assumption; 1: strongly questioned assumption; 0: totally rejected assumption.

Insert figure 1 About Here

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4. DISCUSSION

What is the impact of the interaction between different action profiles on the pace of deinstitutionalisation? This question points to certain overlooked aspects of deinstitutionalisation processes, in particular in environments where many elements are deeply institutionalised. Until now, studies about deinstitutionalisation have emphasised one profile of institutional change – either entrepreneurship or partaking – but have failed to analyse the longitudinal interaction between different action profiles. Moreover, most studies fail to analyse the effects produced by the interaction between maintenance efforts and disruption efforts (for exceptions: Hargadon & Douglas, 2001; Leblebici et al., 1991). This paper attempts to redress this, deciphering a very long deinstitutionalisation process, defining the various action profiles involved in that process, and accounting for the struggles to maintain or change institutional arrangements.

We argue that deinstitutionalisation cannot be understood as a process driven by a single event – most often a jolt. It is a process where certain institutional arrangements are slowly solidified while others are questioned. It is ultimately the capacity to slowly deconstruct a coherent overall view that provokes the disruption of an institution. When sufficient efforts on a long-term basis are accumulated, some core elements of an institution may no longer appear compatible. This de-alignment between institutional elements annihilates the self-reproduction mechanisms of an institution, hinders efforts of maintenance and finally precipitates its collapse.

More specifically, this paper attempts to understand the pace of deinstitutionalisation, depending on different profiles. We offer a more detailed analysis than the classical S-shaped curve presumed by many scholars to account for institutionalisation processes (Lawrence et al., 2001). We have shown that deinstitutionalisation is not a linear process, but rather a set of successive equilibria. Some institutional arrangements are solid and persist over long periods while others evolve or are deeply weakened. Even though some institutional arrangements remain unchanged, some disruptive efforts, maybe unsuccessfully, attempt to act upon these arrangements. Institutional work is not just about success, but also all kinds of actions oriented towards the change of an institution (Lawrence, Suddaby, & Leca, 2009). Thus, we argue that

the process of deinstitutionalisation is not only the period between a jolt and the collapse of an institution but also the previous steps during which efforts are accumulated and later facilitate the collapse of an institution. We draw on Dorado's model to analyse the complex succession of actions involved in deinstitutionalisation and offer important theoretical contributions, underlining the role of agency, resources and institutional opportunities. Based on the case of asbestos, in the next section, we draw out some core claims to explain the interaction between different action profiles and their impact on the pace of deinstitutionalisation: (1) the pace of deinstitutionalisation is slowed down when efforts of maintenance are based on leveraging; (2) the pace of deinstitutionalisation is related to a cyclical evolution of disruptive agency; (3) the interaction between LSt actions and ASe actions leaves residues that later play a crucial role during the acceleration of deinstitutionalisation;

1 - The pace of deinstitutionalisation is slower when defensive actions are associated with a Leveraging-Strategic profile.

Based on the case of asbestos, we have shown that actions of institutional maintenance constitute a determining factor to explain a slow deinstitutionalisation process (see Figure 1). In our study we note that the most effective actions of maintenance are those based on a Leverage-Strategic-Transparent profile. In these actions, leveraging is not only a way of collecting resources, but also of collectively organising resources to defend against disruptive actions and social changes. This concentration of means can be explained by several objectives. First, it generates sufficient resources to struggle against emerging actors. Second, defensive actors appear more organised, more legitimate, and able to obtain a broad consensus in the field. The organisation of defensive resources is all the more efficient as defensive actors are increasingly trusted and considered as credible groups with sufficient political, economic and cognitive resources to maintain optimal efficiency in an organisational field. These defensive actions are achieved by actors who have enough resources to reflect on institutional rules (Stinchcombe, 1968). They are all the more likely to be followed as they herald a bright future for the organisational field. To that extent, these actions have the power to enrol other individuals whose perception of institutional opportunities is rather hazy.

2 - A deinstitutionalisation process is cadenced by short and long timesteps. Even unsuccessful disruptive actions leave residues that are later essential in disrupting an

institution. The interaction between Leverage-Strategic and Accumulating-Sensemaking actions explains the creation of residues.

While not every disruptive action is capable of provoking the collapse of an institution, little has been done to understand the trajectory of disruptive efforts which are not totally successful. In research which specifically analyses the process of deinstitutionalisation, there is a focus on the period between a jolt and the abandonment of an institutionalised practice (i.e. Maguire & Hardy, 2008). However, there are many actions that precede the jolt and contribute to deinstitutionalisation. In on our empirical study, we observed the succession of several periods, with short and long timesteps. Some actors are endowed with strategic agency and thus are able to be reflective vis-à-vis the institution. This agency is more likely to be possessed by peripheral actors. As Leblebici et al. (1991) pointed out in their well-known longitudinal analysis, radical new practices are more likely to originate in parties from the fringes of an organisational field: "in each historical period, new practices were introduced by the less central parties of the period" (1991, p. 358). Our results suggest the same trend in disruptive actions. Some peripheral actors are endowed with strategic agency and tend to introduce discordance in an organisational field while they attempt to leverage resources to achieve their goals. However, this agency is not enough to explain institutional change. It is through the intermediary of other actors – especially those endowed with a sensemaking form of agency – that disruptive actions may have an impact on the entire organisational field. For instance, the actions of the *Collectif de Jussieu* effected institutional change when different types of actors – without fully espousing the ideas of the *Collectif* – began integrating new issues it had suggested into their daily actions. Thus, disruptive actions indirectly broaden the range of knowledge and possibilities of other actors. When they have to face new problems or relatively complex situations, they will act and make sense of this new situation using both institutionalised beliefs and new ideas provided by disruptive actors. This means that without questioning the institution as a whole, they will incorporate in their sensemaking process new ideas that will, cumulatively, produce change in the entire organisational field. Thus, disruptive actions, even if they do not succeed in destroying institutional arrangements, may leave residues through the intermediary of other actors. Even if these actors do not wish to modify an institution, they will integrate new issues that may end up producing new practices and new ideas.

3 - The slow pace of deinstitutionalisation is due to the tendency of disruptive agency to be weakened and dispersed.

We have noticed that the actors engaged in disruptive efforts end their efforts relatively quickly, compared to actors engaged in maintenance. We explain this phenomenon as the dissolution of disruptive agency. This concept is an important aspect of deinstitutionalisation. Agency not only relates to the achievement of a specific aim but also refers to the power to act, reflecting the same conceptual issues as power, considered both as a capacity and as its exercise (Lawrence, Malhotra, & Morris, 2012). What we call disruptive agency is one form of strategic agency related to the capacity to disrupt institutional arrangements. It requires a relative understanding of existing conditions and structures of power and the detection of problematic elements to be disrupted in an organisational field.

3.1: Disruptive agency is weakened and dispersed due to the new arrangements it tends to produce.

As we have observed, Leveraging-Strategic profiles play an important role in deinstitutionalisation processes. These are represented by actors endowed with disruptive agency who attempt to gain support from other actors to achieve their objectives.

This disruptive agency requires specific skills and is generally possessed by actors at the fringes of an organisational field. Since their resources are not sufficient in themselves to disrupt existing institutional arrangements, they need to gain support from other actors. However, in highly institutionalised environments, the defenders of an institution are often powerful, perceived as highly legitimate and central in an organisational field (Leblebici et al., 1991; Stinchcombe, 1968). To that extent, they are unavoidable actors with whom a compromise needs to be reached in order to bring about institutional change. Thus, highly institutionalised environments have nodal points where disruptive agency meets defensive agency, with asymmetrical resources. Eventually, disruptive agency ends up being absorbed in a compromise framed by defensive actors. Being part of a new institutional arrangement they have helped create, it becomes much more difficult for them to be reflective enough to disrupt other arrangements. The strength to federate actors against an institution is thus progressively weakened.

3.2: Disruptive agency is all the more fragile as actors engaged in deinstitutionalisation lack strategic vision regarding the future arrangements of the institution.

We consider disruptive agency as one type of strategic agency, since it refers to actions which are guided by long-term objectives. However, it clearly differs from the strategic agency involved in institutional creation or institutional maintenance. In the latter two cases, there is a clear vision of the future of the organisational field, a vision that is used as the core claim with which to leverage resources. In the case of disruptive agency, no future for the institution is suggested, which makes it difficult to enrol other actors. Also, the finalities of disruptive actions are often ambiguous and efforts are devoted to destroying specific values or practices, while nothing is suggested as a replacement for disrupted elements. It is fairly easy for defenders of an institution to partially incorporate disruptive ideas and to push disruptive actors to accept only slight changes that will be incorporated in wider institutional arrangements. When there is a high degree of institutionalisation, defensive agents are thus more successful in leveraging resources, because they provide actors in the organisational field with a clear and reassuring vision.

This fragility of disruptive agency is a key factor in explaining the chaotic pace of deinstitutionalisation. Institutional arrangements result from the absorption of disruptive agency, but reflect the persistence of tensions and incompatible elements. These tensions will later facilitate the emergence of new actors who will engage in other disruptive actions. To put it differently, disruptive agency is at the heart of a dialogic process in the case of deinstitutionalisation. An institutional arrangement is not the resolution between different ideologies and positions but rather a construct in which some elements prevail while others remain in the form of latent tensions and conflicts. A deinstitutionalisation process is thus made up of a succession of equilibria, more or less durable, which contain latent conflicts that will re-emerge during the final collapse of the institution.

We can make the hypothesis that disruptive agency is successful when actions are oriented towards the destruction of all fundamental elements of an institution at the same time. It clarifies the strategic vision and gives no place for adapting existing institutional arrangements. It fully delegitimises defensive actors and forces existing practices to be revisited within the organisational field.

3.3: Convening is a powerful type of resource mobilisation that can annihilate disruption efforts.

The literature on institutional change emphasises the leveraging of resources. To explain a slow deinstitutionalisation process, we have also underlined the essential role of convening in the

case of asbestos. This is a type of resource mobilisation that may occur when institutional opportunities appear hazy. In this case, both disruptive and defensive agencies are weakened and the future of the institution is highly unpredictable. Convening goes further than a compromise to gather resources. It reorganises relationships within an organisational field and brings together different agencies in a single working group. Such a structure thereby frames the possible achievements of disruptive actors. In on our empirical study, we observed that convening produced a long period of stability during which the deinstitutionalisation process stopped, while in most European countries asbestos had already been banned. We explain this impact of convening by the fact that disruptive actors are taken seriously and their ideas are discussed and generate slight and gradual changes. To that extent, disruptive ideas are contained and are not likely to produce public debates. Finally, we observed that convening, instead of collectively defining a desirable future for actors in an institutional field, dissolves the will of individuals and tends to facilitate institutional maintenance through self-reproduction mechanisms.

CONCLUSION

Several empirical questions guided our inquiry. First, why was the deinstitutionalisation process so slow in the case of asbestos in France, in spite of the professional injuries and deaths it caused? How can the pace of deinstitutionalisation in the case of asbestos be explained? Our results indicate that defensive actors play a pivotal role. Their strategic agency is devoted to the reduction of contradictions in the field and to the creation of specific structures to facilitate agreements. The agency of disruptive actors is weakened in this process, since the issues they raise are incorporated into these structures. Being part of the institution, and constrained by the new arrangements they have helped to create, their disruptive agency is dispersed and the pace of deinstitutionalisation is therefore slowed down.

While many studies in the institutional change literature focus their attention on particular individuals or organisations, whose efforts are decisive in the process of institutional change, we encourage more careful analysis of all kinds of actions involved, more or less directly, in the deinstitutionalisation process. We emphasise the fact that institutional change cannot be reduced to polarised struggles. Some efforts are clearly oriented towards the defence or disruption of institutional arrangements, but are not the only factors which explain institutional change. We emphasise the role of actions based on sensemaking rather than strategic agency.

Some actors may be able to understand structural constraints and to suggest arrangements to (re)shape them but without the capacity or the resources to generate change at a macro level. Meanwhile, for actors embedded in an institutional field, disruptive or defensive work may enlarge the scope of issues to consider, leading them to change their daily practices. Thus, even if they did not initially intend to engage in institutional work, through practical sense, they will bring about change. These gradual changes will accumulate, and finally may contribute to institutional disruption.

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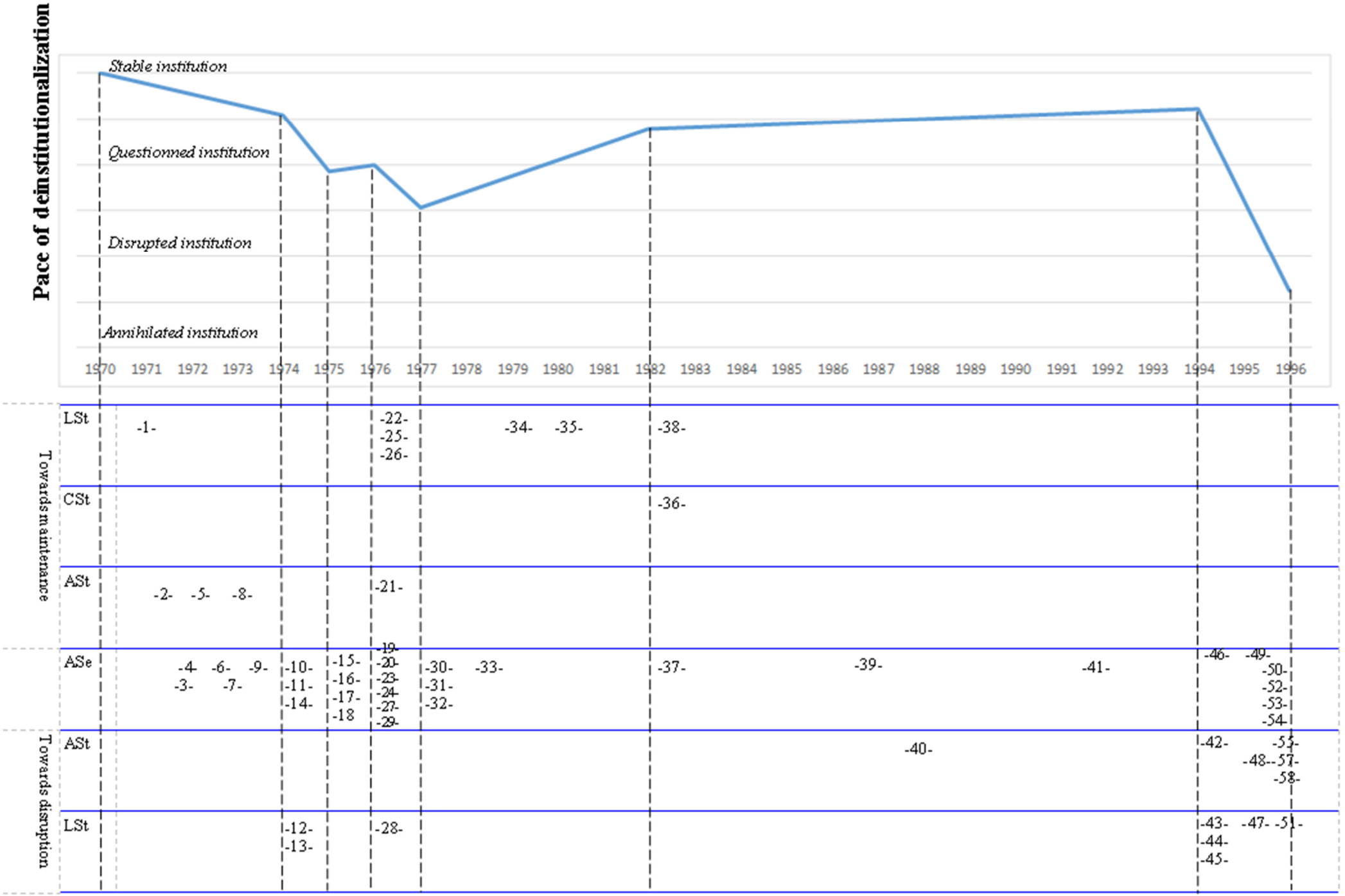

Figure 1: Timeline of actions which contributed to asbestos deinstitutionalization

Caption: -X- Cf. table 13 for details about action number X ; LSt : Leverage Strategic, CSt: Convene Strategic; ASt: Accumulate Strategic; Ase : Accumulate Sensemaking

iD	Action	Date	Profiles of action
Period 1			
1	International conference about Asbestos held in London with producers from Europe and English-speaking countries	1971	L.ST
2	Creation of COFREBA	1971	A.St
3	Beginning of an industrial strike in Ferodo (French producer of asbestos)	1973	A.SE
4	International conference organised by WHO in Lyon (France)	1972	A.SE
5	Publication by the INRS of documents to explain how to use asbestos without any risks	1972	A.ST
6	Complaints by asbestos workers against Johns Manville (American asbestos producer)	1973	A.SE
7	International conference organised by ILO in Geneva. Publication by the ILO of a report entitled "Asbestos: risks for health, how to prevent them"	1973	A.SE
8	Creation of a special committee in Eternit to monitor safety and work environment	1973	A.ST
9	Declaration by the CIRC that most asbestos products are carcinogenic (still uncertainty about the main form of asbestos)	1973	A.SE
Period 2			
10	Beginning of an industrial strike in Amisol	1974	A.SE
11	Creation of a social movement in the University of Jussieu	1975	A.SE
12	Meeting between Jussieu and Amisol	1976	L.ST
13	Call for solidarity for Amisol workers	1976	L.ST
14	Beginning of new negotiations in Amisol	1976	A.SE
Period 3			
15	Publication by the INRS of documents to propose limits on exposure	1976	A.SE
16	Adoption of a law (to protect workers under 18)	1976	A.SE
17	Limits on exposure lowered	1976	A.SE
18	Modification of French recognition of asbestos industrial diseases	May 1976	A.SE
Period 4			

19	Promotion through the media of the Amisol scandal	August 1976	A.SE
20	Consumer associations denounce the presence of asbestos in wine and other consumer goods	October 1976	A.SE
21	Publication of several booklets and advertisements by asbestos industrial unions	1st November 1976	A.ST
22	Conference held by asbestos producers' unions to defend the use of asbestos	3rd November 1976	L.ST
23	Broadcast of 3 TV programmes attacking asbestos	29th November 1976	A.SE
24	CIRC holds a conference on asbestos risks	14-17th December 1976	A.SE
25	The asbestos producers' unions write to the French Prime Minister	20th December 1976	L.ST
26	Publication of a book by asbestos industrial unions	January 1977	L.ST
27	Vehement response from renowned scientist denouncing asbestos practices	5th April 1977	A.SE
28	Publication by the *Collectif de Jussieu* of a pamphlet entitled "Danger, Asbestos"	14th June 1977	L.ST
29	All kind of asbestos recognized as carcinogenic by the CIRC	1977	A.SE
Period 5			
30	Ban of flocking in housing in France (decree)	29th June 1977	A.ST
31	Reduction in authorized thresholds of workers' exposure (decree)	17th August 1977	A.ST
32	Adoption of protective measures to transport asbestos (decree)	29th August 1977	A.ST
33	Ban of flocking in all kinds of buildings (decree)	20th March 1978	A.ST
34	Conferences held in Paris to promote asbestos	1979 (several dates)	L.ST
35	Asbestos industrial unions change their name and become an association	1980	A.ST
Period 6			
36	Creation of the CPA	1982	C.ST
37	Asbestos removal work in schools	1982	A.SE
38	Worldwide symposium in Montreal	1982	L.ST
39	Reduction in authorized thresholds of exposure (decree)	1987	A.SE
40	Ban of all kinds of asbestos (except chrysotile)	1988	A.ST
41	Tolerated exposure limits further lowered	1992	A.SE
Period 7			
42	Complaints by widows	1994	A.ST
43	Journalistic investigation about these widows	1994	L.ST
44	Journalistic investigation about the construction of a hangar (asbestos storage)	1994	L.ST
45	Conference held in Jussieu	1994	L.ST

46	Recognition of asbestos danger by independent French scientists	November 1994	A.SE
47	Creation of the CAPER	1995	L.ST
48	Publication of a French investigation	1st June 1995	A.ST
49	CPA dismantled	September 1995	A.SE
50	Broadcasting of a TV programme against asbestos (prime time)	28th September 1995	A.SE
51	Creation of the ANDEVA	February 1996	L.ST
52	Tolerated exposure limits further lowered and new law adopted	7st February 1996	A.ST
53	Law to protect workers	7st February 1996	A.SE
54	Obligation for owners to diagnose asbestos in buildings (law)	7st February 1996	A.SE
55	Complaints by 5 sick men	25th June 1996	A.ST
56	Publication of an official report (INSERM)	2nd July 1996	A.SE
57	Announcement of the ban on asbestos	3rd July 1996	A.ST
58	Ban on all kinds of asbestos (imports and use of asbestos)	1st January 1997 Decree of the 26th December 1996	A.ST

Table 13: List of actions