## **FORUM**

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# CONTROVERSIES AS METHOD FOR ANTI-HISTORY

Controvérsias como método para ANTi-História

Controversias como método para la Antihistoria

#### **ABSTRACT**

Our aim is to develop and propose a method for ANTi-historians, using analysis of controversy as the starting point. Despite the theoretical and methodological development of the ANTi-history approach to the study of knowledge of the past and the creation of its history, there is room for method development based on controversy analysis. We ground our proposal in some of ANTi-history's assumptions (relationalism, the symmetry principle, and multiplicity) and practical concepts (translation and politics of actor-networks). In addition, we recommend four criteria that researchers should use in choosing a controversy to serve as a starting point for investigation. Finally, we present five steps for investigating knowledge of the past and the creation of history.

KEYWORDS | ANTi-history, organizational history, controversies, historic turn, actor-network theory.

### **RESUMO**

Nosso objetivo é construir uma proposta de método para os ANTi-Historiadores, tomando a análise da controvérsia como ponto de partida. Apesar do desenvolvimento teórico e metodológico da abordagem ANTi-History para o estudo do conhecimento do passado e a criação de sua história, há espaço para o desenvolvimento de um método com base na análise de controvérsias. Baseamos nossa proposta em algumas das suposições da ANTi-History (relacionalismo, princípio de simetria e multiplicidade) e conceitos práticos (tradução e política de redes de atores). Além disso, recomendamos quatro critérios que os pesquisadores devem usar na escolha de uma controvérsia para servir como ponto de partida para a investigação. Por fim, apresentamos cinco etapas para colocar em ação a investigação do conhecimento do passado e a criação da história.

PALAVRAS-CHAVE | ANTi-História, história organizacional, controvérsias, virada histórica, teoria-ator-rede.

#### RESUMEN

Nuestro objetivo es construir una propuesta de método para antihistoriadores, tomando el análisis de la controversia como el punto de partida. A pesar del desarrollo teórico y metodológico del enfoque ANTi-History para el estudio del conocimiento del pasado y la creación de su historia, hay espacio para el desarrollo de un método basado en el análisis de controversias. Basamos nuestra propuesta en algunos de los supuestos de la ANTi-History (relacionalismo, principio de simetría y multiplicidad) y conceptos prácticos (traducción y política de redes de actores). Además, recomendamos cuatro criterios que los investigadores deben usar para elegir una controversia que sirva como punto de partida para la investigación. Finalmente, presentamos cinco pasos para poner en práctica la investigación del conocimiento del pasado y la creación de la historia.

PALABRAS CLAVE | Antihistoria, historia organizacional, controversias, giro histórico, teoría del actor-red.

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## INTRODUCTION

History is an important dimension of organizations' contemporaneousness (Ocasio, Mauskapf, & Steele, 2016) but its role has been marginalized and overlooked in mainstream management research, as recent commentaries observe (Coraiola, Suddaby, & Foster, 2017; Maclean, Harvey, & Clegg, 2017). The historic turn in organization studies (Booth & Rowlinson, 2006; Maclean, Harvey, & Clegg, 2016; Mills, Suddaby, Foster, & Durepos, 2016) has afforded increased opportunity to study the past, history, and memory from different perspectives. One of these emerging approaches is ANTi-history, which has shown how dominant versions of reality are established in organizations (Corrigan & Mills, 2012). Both the theoretical and methodological implications of ANTi-history for researching the past and creating histories have been subject to recent discussion (for the former see Durepos & Mills, 2018; Mills & Durepos, 2010; for the latter see Durepos, 2015; Durepos & Mills, 2012a).

ANTi-history studies have shown that the process of creating history is marked by disagreements, conflicts, and silenced marginal voices (see Corrigan & Mills, 2012; Deal, Mills, & Helms Mills, 2018; Durepos, Mills, & Helms Mills, 2008). To trace the actor-network it would be interesting to start with controversies and identify situations in which actors disagree and question what was taken for granted (Venturini, 2010a). Despite the theoretical and methodological aspects of ANTihistory being well developed in the specialized literature, the potential of analyzing controversies as a method for ANTi-history is not addressed sufficiently. Furthermore, the systematization of ANTi-history research practice, indicating how an investigation might be operationalized and bring to life marginalized voices and suppressed controversies, is underdeveloped. Therefore, our aim is to propose a method for ANTi-historians, using analysis of controversy as a reasonable starting point.

Developing method dimensions is important to ANTi-history scholars because the identification and analysis of controversies allows for exploring different historical accounts created by actors and avoids giving special status to privileged actors (Secord & Corrigan, 2017). Even when the surface of reality appears coherent and unproblematic, stories not told can be brought to life when controversies are the starting point of fieldwork. The description and interpretation of heterogeneous actors' practices, interests, and relationships enacting history as multiple (Durepos, 2015) can benefit from the cartography of controversy because it analyzes multiple viewpoints (Venturini, 2010b).

Creating a cartography of controversies is a useful tool with which to explore both contemporaneous presences and

absences. In conducting ANTi-history research, it is difficult to follow the actors whose voices were silenced and whose stories were not told (Kivijarvi, Mills, & Helms Mills, 2018). By focusing on actors' disagreements, allowing researchers to observe situations in which they cannot ignore each other (Venturini, 2010a), researchers can expose the networks of associations responsible for producing and occluding reality(ies) (Venturini, 2010a, 2010b).

Recently, Durepos, Shaffner and Taylor (2019) have called for a more critical historical analysis. The answer may be controversy analysis, a method through which hidden realities and marginalized viewpoints may be deployed (Venturini, 2010a). Considering that the development of ANTi-history is still in an initial phase (Mills & Durepos, 2010), we will take advantage of the space to "develop each of its constitutive facets as well as outline practical research implications for researchers who wish to use the approach" (Durepos & Mills, 2017, p. 57-58). Exploring this space, we will present a proposal for operationalization that builds on recent developments of the ANTi-history approach (e.g. Bettin & Mills, 2018; Durepos & Mills, 2017).

After introducing the key controversy ideas in the next section, we will present ANTi-history's assumptions. Subsequently, the practical concepts used for operationalization, along with controversy analysis, will be introduced. Then we will present the method proposal, showing some criteria for choosing a controversy and making some recommendations to guide researchers in designing their investigations and in planning their fieldwork practice. We shall argue that there are five research steps based on controversy analysis that will be useful as a guide for the study of the past and creating a map of the past's takenfor-granted history. Finally, we will present a practical example to briefly illustrate the five steps of the proposed method.

## **CONTROVERSY ANALYSIS**

## **Key ideas**

ANTi-history problematizes the taken-for-granted facticity of history as a contemporaneous account of the past and the practices and underlying assumptions that sustain conventional historical accounts (Bettin & Mills, 2018; Durepos & Mills, 2018; Myrick, Helms Mills, & Mills, 2013). Analysis of controversy is a useful way to accomplish this task because the genesis of the social processes that sustain contemporaneously and carefully assembled senses of normalcy are brought into view; both those currents that became dominant and those that were

dominated (Scott, Richards, & Martin, 1990). Furthermore, diverse actors' voices and viewpoints enter into the scope of possible investigation (Venturini, 2010a), because controversies are constituted by people and organizations taking sides, constituting whatever issues are at stake.

Controversies have been a central issue since the emergence of actor-network theory (ANT) (see Callon, 1989). For Latour and Woolgar (1986), "facts are constructed in such a way that, once the controversy settles, they are taken for granted (p. 202)." Controversy may be defined as "as anything (a discourse or action) that challenges the status quo between actors" (Hussenot & Missonier, 2010, p. 272). Hence, controversy is a situation of disagreement between heterogeneous actors engaged in action (Venturini, 2010a) in which alternate translations seek to fix their various and contradictory interests (Latour, 1999). The translations might be engaged conflictually or so dominate the field as to be seemingly hegemonic, with only minor cracks and fissures apparent in the veneer of concordance. The translation process becomes apparent during the reconfiguration of the actor-network, causing heterogeneous elements to appear, be modified or be excluded (Hussenot, 2014). For management and organization studies (MOS), controversies concern disagreements about the way an organization, project, or organizational practice is ordered, managed, or strategized (Hussenot, 2014).

Although controversy is evident through differences (Venturini, 2010a), it is distinct from relationship or task conflict (Jehn, 1995), which are one-off situations that occur and are resolved in the quotidian life of organization as ordinary events. Occasionally, conflicts may become a controversy when a variety of snowballing issues are triggered (Hussenot, 2008). In this sense, controversy is a process-oriented notion, "a way to follow the processes of organization as it evolves over time" (Hussenot, 2014, p. 374).

Organizational reality presents itself to us naturally as stable and coherent, the typical version of reality maintained and taken for granted by actors. These characteristics are the effect of much tacit work enabling an appearance of order (Law, 1994) in terms of strategy, structure, or organizing in general. However, the processes of constructing a version of reality and the organization thereof are rarely devoid of controversies (Latour, 2005; Venturini, 2010a). Many controversies occur around different models of governance, animated around numbers (Michaud, 2014), objects (Hussenot & Missonier, 2010), and the introduction of new technology (Lanzara & Patriotta, 2001). They also occur around interpretation and representations of the past as a central issue in the present.

Some ANTi-history scholars have addressed controversies directly or indirectly. Secord and Corrigan (2017) showed that the privateering historiography of Nova Scotia was performed by controversies between privateers and the court of the vice-admiralty. Through multiple accounts of the past, the authors analyze the tensions between different versions of history and how controversies helped to question the dominant version of reality. Despite not using the notion of controversies, Corrigan (2016) treats controversies indirectly by analyzing the conflicts between the municipality of Halifax and the community of Africville. The author brought to life peripheral actors and new versions of the past. However, these authors do not use controversies as a systematic method to map and describe the actor-network that constitutes the stories.

The cartography of controversies method may help ANTihistory scholars to investigate actor-networks and map their constitution (Durepos & Mills, 2017) in order to bring politics to the foreground of organizing and question taken-for-granted facts. "Facts" are seen as products of the translations practice, which can be mapped through analysis of the controversies to highlight heterogeneous actor-networks that constitute the past (Durepos & Mills, 2012b). Whenever a situation becomes questionable, a controversy is enacted around multiple points of view. Divergent interpretations of the controversy must be described, until the dispute stabilizes temporarily (Lanzara & Patriotta, 2001). Controversy may end with a compromise (Venturini, 2010a) that legitimates its outcome, which is then shared by organizational members as a way of performing a given activity (Lanzara & Patriotta, 2001), leading to new relations between actors (Hussenot & Missonier, 2010).

In accordance with ANTi-history precepts we can affirm the argument that dispute settlement participates in creating a dominant version of the past (Corrigan & Mills, 2012; Durepos, Mills, & Helms Mills, 2008). How it assumes to do so will be covered next.

## **Analytical assumptions of ANTi-history**

## Relationalism

Relationalism involves emphasizing actors' relations and tracing associations that produce knowledge of the past (Kivijarvi et al., 2018), forming networks instead of assuming that these are pre-given (Durepos & Mills, 2018). Actors composing networks may associate or disassociate when controversies arise (Callon, 1989), their beliefs, identity, and characteristics fluctuating as they do so (Callon, 1986). The actor networks are

heterogenous: they may be organizations, social movements, groups, or individuals, for instance. Hence, relations taken to be solid states of affairs are uncertain and open processes that cannot be reduced to an objective and finished state (Law, 1992, 1999). Exposing these relations through controversies (Venturini, 2010a) shows, for example, how organizational governance and the relationships among actors change over time (Michaud, 2014).

The relationalism proposed by ANTi-history suggests that the relationships among actors in a network give meaning to past events and engender political engagement (Durepos & Mills, 2017), making issues controversial (Secord & Corrigan, 2017). How the past was transformed into history is brought to life (Durepos & Mills, 2018) through "looking at the politics of representing the past by tracing actors symmetrically (treating each with the same curiosity) and surfacing the past-as-history in its multiplicity" (Durepos, Mills, & Weatherbee, 2012, p. 269). Tracing the composition of networks (Durepos et al., 2012) enables researchers to move from social facts taken-for-granted to alternative histories of their emergence (Foster, Mills, & Weatherbee, 2014).

## Symmetry principle

Social ordering practices result not only from human actions but also from associations between humans and nonhumans (Latour, 2005). Behind this idea lies the principle of symmetry, which consists of analyzing human and non-human actors in the same analytical terms (Latour, 1987; Latour & Woolgar, 1986; Law, 1987). The controversies in which actors are engaged are a potent symmetrical analytical tool, since their analysis requires scholars to consider all available traces of the actors' effect (Venturini, 2010a).

The assumption is one of flat ontologies in the constitution of networks and controversies. Because action is a result of associated entities (Latour, 2005), various elements, such as rats and fleas (Anderson, 1974; Hinnebusch, 1997)—usually left out of organizational analysis—may participate in history production (Bettin & Mills, 2018) and be involved in different controversies (Secord & Corrigan, 2017). It is through controversies that heterogeneity appears most clearly. In this sense, multiple narratives of the past are to be expected to be performed by actors (Corrigan, 2016). Therefore, reality concerns multiplicity (Mol, 2002), being more than one at the same time that it is less than many (Law, 2004; Mol, 1999). Histories produce realities.

## Multiplicity: more than one, less than many

Multiplicity is related to the practices that enact a specific reality (Mol, 2002). Different practices produce different realities (Law, 2004). Therefore, historical realities are consequences of the many people and artefacts that make up an organizational practice (Corrigan, 2016), as well as how those elements are manipulated to create multiple narratives concerning the past (Foster, Coraiola, Suddaby, Kroezen & Chandler, 2017). When competing narratives frame situations in different terms, controversy around a specific issue emerges, with assumptions, routine procedures, and points in arguments being challenged (Scott et al., 1990).

Durepos and Mills (2018) state that historical reality is more than singular because different—but not endless and independent—versions of the past can be embodied through distinct practices. At the same time, historical reality is in some respects less than infinite in its possibilities because, although actors have different perspectives and views of the past, these perspectives have common points of reference (Durepos & Mills, 2018). A slice of history may be storied in terms of Kings, Queens, and elites; battles and victories; winners and losers; or people's, women's and subaltern's histories. The ANTi-history approach takes this idea seriously and shows that historical work implies the enactment of a set of histories produced by various actors.

Actors will sometimes disagree with each other, bringing different relevancies and interests to bear on their telling of history, resulting in controversies (Venturini, 2010a; Latour, 2005). Therefore, ANTi-history investigates the multiple enactments traced in the practices of the actors (Kivijarvi et al., 2018) to allow alternative realities to come into being. To assume that knowledge of reality is multiple implies a political question (Law, 2004; Mol, 1999) as to which reality should be adopted. This is best answered not by "taking sides" but by analytically unravelling controversies, how they are constituted, and what the assumptions are that frame the different positions (Yaneva, 2012).

## **Concepts for practice**

#### **Translation**

Social reality is obdurate but not immutable. Its relations, equivalences, and differences are brought into being through acts of translation. Translation can make different things equivalent (Law, 1999), transforming them through combining interests into a single composite focus (Latour, 1999). This is how organizational goals are made evident, for instance, by translating interests that motivate people to take different forms of action, direction, and

movement from one place to another into a focally collective object (Latour, 1987). Such translation is always contingent and local (Law, 1992).

From an historical view, to understand how transformation occurs is important. Thus, ANTi-history focuses on the practices through which relationships perform history (Bettin & Mills, 2018) and create knowledge of the past, shaping our view of the object of study (Kivijarvi et al., 2018). Historical accounts and narratives concerning the past that seem to offer a solid, single and trustworthy version of reality should be viewed with suspicion (Durepos & Mills, 2018): such agreement masks the processes of its production. As Laclau and Mouffe (1985) argue, hegemony consists in precisely such practices rather than the substantive content that they support. Translation involves politics of actornetworks, as argued by Secord and Corrigan (2017), such that "historical knowledge is situated in official practices that conceal translations and political strategies that enable actor-networks to act as one (p. 94)."

## The politics of actor-networks

ANTi-history helps us to open the work (Weatherbee, Durepos, Mills, & Helms Mills, 2012) performed by the politics of actornetworks, through which actors seek to construct an immutable interpretation of *the* past (Durepos et al., 2008) by establishing the dominance of a particular story (Durepos et al., 2012). Networks of actors are formed by political interests (Alcadipani & Hassard, 2010; Mol, 2002), so, "the past is seen as comprised of actors who have the capacity to alter the course of other actors," through enrolling heterogeneous elements (Durepos & Mills, 2012b, p. 711). The translation of interests that are sometimes divergent and contradictory (Latour, 1999) leads the actors to engage in the politics of actor-networks, creating an interpretation of the past that can be considered durable (Durepos & Mills, 2012b).

According to Mol (2002), the "real" is implicated in the "political," making reality something not fixed (Alcadipani & Hassarad, 2010). Accordingly, enacting one reality instead of another becomes a political question: any account of reality can hide, cover, or displace possible alternative versions (Law, 2004). By tracing the politics of actor-networks, ANTi-history seeks to make them explicit (Durepos et al., 2008). History creation occurs through various and different interpretations of reality and doing this form of accounting is not a smooth and stable process (Kivijarvi et al., 2018), giving rise to controversies between the actors involved in its production. Therefore, when we address the politics of actor-networks we must talk about controversies.

## **METHOD PROPOSAL**

## Criteria for choosing a controversy

Starting from Venturini (2010a, 2010b) and Hussenot (2014), we indicate some criteria in choosing controversies with which to study the past and analyze how historical accounts are created. It should be emphasized that the four criteria elaborated by Venturini (2010a) for studying technoscientific controversies and adapted by Hussenot (2014) for investigating managerial controversy indicate what researchers should avoid rather than favour. We changed the polarity of three criteria to the opposite direction originally suggested by the authors. Instead of avoiding "past, cold, and underground controversies," we recommend embracing them. Regarding the fourth criteria (avoid boundless controversies), we state it differently. We suggest that researchers "beware of boundless controversies." Considering the nature of ANTi-history research, that is, "an alternative critical approach to doing history in management and organization studies" (Durepos & Mills, 2017, p. 53), the modification was necessary. Next, we will detail each of the criteria, explaining our choice for changing the recommendation of the three criteria and for modifying the fourth as a form of alert.

#### First, embrace past controversies

Venturini (2010a) and Hussenot (2014) suggest researchers should avoid past controversies. According to Hussenot (2014), the point of avoiding past controversies is to prevent researchers losing grasp of the meaning of controversies as actors produce new interpretations over time. However, the sensemaking processes responsible for producing knowledge of the past should be investigated (Hartt, Mills, Helms Mills, & Corrigan, 2014) because doing so should expose what is taken for granted as historical fact (Durepos at al., 2008). Venturini (2010a) argues that if a past controversy has reached agreement and been closed it lacks interest, which is why he asserts that researchers should avoid past controversies. However, the status of any controversy is never definitive (Mol, 1999) and might be enacted otherwise (Law, 2004). The apparent closure of a controversy may be a means by which divergent voices were silenced (Foster et al., 2017) and a phenomenon was "black boxed" (Latour, 1987).

Although Venturini (2010a) recommends avoiding past controversies, he emphasizes some important points. First, past issues could be included in investigation if the researcher is able to move "back to the moment when the controversy was being played out" (p. 264). As widely shown by ANTi-Historians,

moving back to the past and making a rigorous account of history is possible (e.g. Deal et al., 2018; Secord & Corrigan, 2017). Second, even a controversy that has reached resolution "may be closed in many different ways" (Venturini, 2010a, p. 268), that is, historical reality is more than one and less than many (Durepos & Mills, 2018). We point out that if researchers intend to understand reality through controversies, they should not avoid past controversies but try bringing them to life through the association of heterogeneous elements.

## Second, embrace cold controversies

According to Venturini (2010a), situations in which actors are not presently in disagreement or where there is no potential rupture between them do not favor the analysis of controversies; better to observe heated debates to understand the various dimensions of a controversy (Hussenot, 2014). What was a controversy may have been black boxed because of dominant assumptions silencing marginalized voices. A case in point is the non-controversial nature, for much of its career, of the Hawthorne effect, which recent research has deconstructed by returning to the "cold case" and seeing it anew through historical materials (Busse & Warner, 2017; Hassard, 2012; Mannevuo, 2018; Muldoon, 2017). Inspection of a supposedly cold issue can reveal that knowledge of the past is taken for granted in organizational history (Durepos & Mills, 2012b; Durepos et al., 2008). Actors' feelings, meanings, and emotions (Hussenot, 2014) may have been suppressed from the scene and become hidden from everyday organizational life (Mannevuo, 2018). Cold controversies lie like a barrier over voices silenced and stories not told (Kivijarvi et al., 2018) and can be placed underground in organizational history.

## Third, embrace underground controversies

Venturini (2010a) and Hussenot (2014) recommend that researchers avoid underground controversies. We agree that is difficult to access confidential or classified issues (Venturini, 2010a), especially where organizations wish to preserve their reputation (Hussenot 2014). Nonetheless, if actors act, if they somehow associate with each other, they will leave some traces and information that researchers can use to describe them (Latour, 2005), even if the controversy is supposedly cold and has been placed underground.

Considering that good controversies are the intense ones (Venturini, 2010a), researchers should embrace underground controversies as a means of bringing the organizational

dynamics and emotional debates (Hussenot, 2014) to life in ways that expose the power relations, the politics of actornetworks, and show the multiplicity of reality. Charting power relations and how knowledge of the past is produced and taken for granted is one of the objectives of the ANTi-history approach (Corrigan & Mills, 2012). Power relations can be masked by burying controversies and covering them with naturalized social relationships, established in institutional structures, embedded in technologies, or biased in historical creation. As Mannevuo (2018) suggests, organization "settings always have fractures that might open up possibilities for reparative readings of the process of making workers and thus revise overly deterministic theories of oppression and vulnerability, (p. 1243)" a case she makes clearly for the historical research conducted in the Relay Assembly Test Room of the Hawthorne plant of General Electric.

Simon Kuper (2019) provides another apt example in showing how membership of the Oxford Union in the 1980s prefigured the politics of Brexit in the present day. As he wrote, "you turn the pages of yellowing student newspapers from 30 years ago, and there they are, recognizably the same faces that dominate today's British news." Johnson, Gove, Rees-Mogg, Hunt, and Cameron eased effortlessly from their elite schools (in most cases, Eton), into a milieu in which debating skills consisted largely of an ability to speak wittily about something of which one had little knowledge nor felt the need to gain it. Style over substance, rhetoric and wit over reason and evidence: these were the attributes marking out the actor network that was to become the ruling coteries of Brexit in government.

## Fourth, beware of boundless controversies

Venturini (2010a) and Hussenot (2014) suggest that researchers should avoid boundless controversies. We do not suggest avoiding this kind of controversy entirely, because tracing the extension of an actor-network related to a controversy is a researcher's choice based on interest in covering a certain period of time in the historical account or in which the actor-network being studied is situated (Law, 1987). Furthermore, the extension of a controversy depends on its complexity and scope (Venturini, 2010a). We do not, however, recommend embracing boundless controversies indiscriminately but advise that when choosing a controversy embedded in much debate, requiring considerable work and time, researchers should be aware of resource availability (Venturini, 2010a) and of the textual limits of genres. As pointed out by Latour (2005), "any method depends on the size and type of texts you

promised to deliver... ...writing texts has *everything* to do with method" (p. 148, italics in the original).

A useful approach to dealing with these issues is to take the ANT concept of an actor as anything that makes a difference, modifying states of affairs (Latour, 2005; Mol, 2010), and put it to work in delimiting the scope of the network of actors involved in the controversy. As stated by Law (1987) "the scope of the network being studied is determined by the existence of actors that are able to make their presence individually felt on it. (p. 131)" Doing this aligns with the ANTi-history approach by understanding actors as elements capable of altering other actor's actions through associations (Durepos & Mills, 2012b). According to Latour (2005), actors will leave some traces, directly or indirectly, even if they are silenced or repressed, providing opportunity to inspect elements of a network that are usually ignored (Law, 1992). Bearing these criteria in mind, we shall next look at the five steps of research entailed in using ANTihistory assumptions and practices.

## **Research steps**

In this section, we will present the five steps useful for ANTihistory researchers: first, identify the controversy related to the phenomenon under analysis; second, map the actor-network involved in the controversy through time; third, trace the translation practice throughout history; fourth, identify the politics of actor-networks; fifth, describe the multiple realities being performed in practice by the actors. These steps should not be viewed in a linear fashion, as many of them occur simultaneously.

> Sampling: how to identify controversies: As mentioned earlier, when we present the criteria for choosing controversies, it is helpful to identify an emerging and vivid controversy (Hussenot, 2014; Venturini, 2010a). However, instead of ignoring cold controversies, researchers should inspect them for silenced and repressed voices marginalized by power relations, the effects of which may become visible as "suppressed traces" (Hartt et al., 2014, p. 14). Controversies expose hidden and heterogeneous relationships (Venturini, 2010a) in the actor-network of the historical account. As controversy unfolds, the heterogeneity of an object's interpretation presents itself more clearly as the actors involved discuss and position themselves in relation to the putative object (Latour, 1987) of contestation.

To identify what is or is not a controversy, researchers should look for ideas or practices taken for granted in the past but being questioned more recently (Venturini, 2010a). Unlike one-off relationship conflicts or task conflict (Jehn, 1995), historical controversies trigger a variety of snowball issues (Hussenot, 2008) related to the past and the facticity of knowledge production (Durepos & Mills, 2018). The tension between distinct narratives and accounts is what matters, because it is evidence of an initial disruption between actors (Bettin & Mills, 2018). Once the controversy is identified, the trail is opened so that the researcher can work out who the actors were and further trace the different historical narratives created by them in disagreements. Thus, the next step is to map the controversy's actor-network.

2. Scanning the terrain: how to map the actor-network: After a controversy arises, an actor-network is formed around it, becoming "the fleeting configurations where actors are renegotiating the ties of old networks and the emergence of new networks is redefining the identity of actors" (Venturini, 2010a, p. 264). Controversies implicate all kind of actors (Hussenot, 2014; Venturini, 2010a); those central and peripheral (Corrigan & Mills, 2012), non-corporeal actants (Hartt et al., 2014), humans and nonhumans (Secord & Corrigan, 2017), and practitioners and historians (Kivijarvi et al., 2018). Considering that controversy analysis is based on the symmetry principle (Callon, 1986), mapping an actor-network implies being open to all perspectives and including as many viewpoints as possible (Venturini 2010b).

In doing so, an actor-network can be mapped through three parameters that take the actors' viewpoint: representativeness, influence, and interest (Venturini, 2010b). These parameters are useful for framing the researcher's choice of the extent of the actornetwork to be mapped. A viewpoint is said to be representative when it has substantial support from actors sharing arguments. In this situation, the statements made by this group deserve the researcher's special attention. To map the actor-network, it is important for researchers to identify the actors whose statements produce controversy. Minority views should not be disregarded, as we shall see later, "because representativeness is a matter of weighting much more than of counting" (Venturini, 2010b, p. 798).

Some viewpoints have more influence than others. While a controversy is occurring actors will compete to occupy influential positions "that give them the power to affect the actions of other actors [...] because, like it or not, they will have better chances

to shape controversies" (Venturini, 2010b, p. 798). Influential viewpoints concern not only the number of allies they attract but also the enrolment of prominent supports enhancing the chance of succeeding. Mapping the actor-network demands that the researcher trace through time the trails used by actors to position themselves at a favorable point capable of enlisting weighty supporters.

Controversy depends, necessarily, on minorities disputing and disagreeing with majority reports: "It is disagreeing minorities who bring controversies into existence by refusing to settle with the mainstream and reopening the black boxes" (Venturini, 2010b, p. 798) of historical accounts. Marginal and minorities' viewpoints articulate silenced or repressed perspectives that are useful for questioning what is taken for granted and showing alternative versions of reality marginalized by powerful actors.

the actor-network involved in a controversy through time is a step that makes actors and connections more visible. However, as noted by Bettin and Mills (2018, p. 70), "doing history" is not limited to tracing the association of human and nonhuman "but it also includes a concern about how actors relate to each other, how they connect and disconnect, and how they achieve such strong alignments" to create history. These movements between actors are an effect of translation processes and are to some extent the result of the controversies (Hussenot, 2014).

Callon (1986) depicted translation as comprised of four stages: problematization, interessement, enrolment, and mobilization of allies. Problematization refers to a system of alliances or associations established between entities to define their identity and goals and to create an obligatory passage point that all actors must accept to achieve what they want (see Clegg, 1989). In controversies, this means that the association and oppositions created around a specific issue situate the positions of the actors and the structure of the network in the process and flux of its evolution (Venturini, Rici, Mauri, Kimbell, Meunier, 2015).

Interessement is represented by actions taken by the actors "to impose and stabilize the other actors it defines through its problematization" and building devices to protect them from other actors "who want to define their identities otherwise" (Callon, 1986, p. 71-72). Although the success of the interessement testifies the previous stage and its systems of alliances, it is never assured. So, actors must be enrolled. Enrolment corresponds to the attribution of interrelated roles for the creation of alliances

among the actors, resulting from multiple negotiations around a proposed solution. The disagreement aroused by a controversy in this stage makes not only the actors' behaviors and expectations explicit, but also the main organizational practices and rules (Hussenot, 2014).

Finally, mobilization is the stage when actors accept a specific goal, there is a dominant coalition of elites that are well linked with each other and have a clear role in the network. At this moment, a central actor becomes an influential spokesperson, representing as the network of interests all those silenced during the network's formation. The diverse entities act as one, as an actor-network, through a representative spokesperson. At this stage controversy ends in the compromise of a negotiated order (Venturini, 2010a) whose outcome becomes legitimated (Lanzara & Patriotta, 2001) as the official organizational history.

These different stages of the translation process may be useful for an ANTi-Historian in the investigation of controversies, but we suggest they should not be used in a linear and mechanical way, because they can overlap and do not have clear boundaries (Callon, 1986).

Labelling: the politics of actor-networks: Actornetwork controversies are decided by power relations and practices (Law, 2004; Mol, 2002; Venturini, 2010a). Some positions become more influential as some actors' ability to shape controversies is successful (Venturini, 2010b). What is taken to be known involves manipulation of the flow of possible knowledges (Mol, 1999) entering into history creation (Bettin & Mills, 2018). Taking this idea as a starting point, Durepos and Mills (2018) assert that "if there are different versions of the past performed as history, and these are different versions of reality, then the question becomes which version to perform (p. 444)." There is a politics of actor-networks, that is, the engagement of actors (practitioners, interviewee, historians, ideas, documents, artefacts, archives) as they enroll each other, alter the course of action, and instill a version of reality favorable to a specific group (Durepos & Mills, 2012b).

In this step, the researcher identifies the ascription of motives (Blum & McHugh, 1971) of the actors engaging in the controversy. The focus is on those motives that lead to an investment of effort and resources in persuading others to create a goal, connect to each other, accept a role, and be represented by a central actor. Doing so, controversy analysis displays the

social implications of taken-for-granted assumptions that assume relative inertia being challenged by motives for action (Scott et al., 1990, p. 474).

In addition, an important task is to investigate how some motives are repressed and silenced in a controversial situation, especially by the upshot of past controversies becoming embedded in the fabric of organizational structures, processes, and relationships, forming necessary nodal points (Lanzara & Patriotta, 2001). The means of representation of the past events that led to the present embeddedness (narrative, writing or artefact) affects their meaning. According to Durepos and Mills (2018), "history is an outcome of the socio-politics of different conglomerations of actors (human, non-human and non-corporeal) as they transform a sense of the past" (p. 437, see Deal et al., 2018; Hartt et al., 2014), therefore, it is unwise to limit the sources under investigation.

## 5. Describing the multiple reality and power relation:

After undertaking the previous steps, researchers will be able to undergo the final step, of describing the multiplicity in the history creation. Identifying excluded actors and bringing hidden events/actions into being may reveal multiple past realities. As shown by Mol (2002), different realities are enacted as the outcome of distinct practices and compromises after resolution of a controversy (Venturini, 2010a). When a reality is black boxed, we cannot see the actors less-visibly associated with a central actor unless they are revealed by a controversy (Callon, 1989). Thus, in this step researchers should be attentive to the actors' everyday practices enacting both visible and less-visible realities, because it is from these that history emerges (Bettin & Mills, 2018).

Controversy analysis in the study of the past is a tool capable of showing that controversies around history creation could be closed in different ways (Venturini, 2010a), that reality could be otherwise (Law, 2004). Taking multiplicity assumptions seriously helps to "undermine any notion that the past is fixed and unchanging, eschewing closure while remaining permanently open to revision" (Maclean et al., 2016, p. 627). Attending to controversy takes the democratic politics of research as an exercise in conjectures and refutations seriously—research as politics by other means rather than a conception of it as an ordered process of accumulation of more certain knowledge. Instead, following Popper (2014), we orient to dissensus, disconfirmation, and democracy.

Focusing on ruptures of everyday actors' experiences is an opportunity to understand organizational dynamics (Hussenot, 2014) and how associations and alliances are built to settle a specific reality while marginalizing others, not always intentionally. Therefore, to identify multiplicity we suggest researchers seek narratives, documents, artefacts, or events that afford some clues to the potential disagreements concerning organizational history or knowledge of the past and practices performed by actors. Organizational controversy concerns differences whose unfolding displays evolving distributions of power (Venturini, 2010a). ANTi-Historians "shadow" the constant work of actors in establishing connections, disputing and negotiating whatever the issues are at stake. Following the action, multiplicities proliferate empirically.

## **Practical example**

In the cartography of controversies terms, in contemporary times, thinking of the history of the present, an example would be the subject of environmentalism and climate change as well as the many objects held to represent it: firestorms in the Amazon, California, and Australia; ice melting in Greenland, Antarctica, and the Alps; floods of pestilential proportions in the United Kingdom, the United States, and Bangladesh. Hence, one can think of climate change negotiation as a potential controversy to be further investigated in Management and Organization Studies (step 1: sampling). Once a specific climate change negotiation is identified as a controversy, the researcher should identify who the actors are (national leaders, NGOs, transnational corporations) and trace the different historical narratives produced by them in disagreements (favorable arguments versus contrary arguments) that are taking place. Based on an analysis of environmentalism and its multiple facets throughout history, Bothello and Salles-Djelic (2018) identify several international actors (e.g. intergovernmental organizations, business groups, and scientists) responsible for creating initiatives and narratives related to this topic over time. This scanning practice helps researchers to generate a broader picture of the terrain, which will be traced in the next step (step 2: scanning). However, it still remains necessary to understand how relationships between actors happen with respect to climate change negotiation, how and if they connect, and what the results of these relationships are. To draw out the climate change negotiation's translation practice, one must describe how the relationship between contradictory points of view occurs because controversies are the focus of disputes and debates, demanding the construction and mobilization of alliances

between heterogeneous actors (Venturini 2010b). These might be how organizations strive to manage their effect on planetary boundaries (Bothello & Salles-Djelic, 2018) in the age of the Anthropocene (Heikkurinen, Clegg, Pinnington, Nicolopoulou, & Caraz, 2020). More prosaically it could be a question of the relations between technology and work practice (Hussenot, 2008), the role of mediation objects (Hussenot & Missonier, 2010) and the social, cultural, and political aspects of an innovation (Callon, 1989) (step 3: tracing).

Evidently, it is important to consider relationships in terms of power relations (Mol, 2002), because certain positions of actors in the network have greater abilities to influence the direction of the controversy. It is in this sense that Venturini (2010b), when dealing with climate controversies, states that different weights must be given to different actors (Panel on Climate Change, Global Climate Coalition) negotiating an agreement on global warming with a minimal chance of success, because perspectives are supported differently. For Bothello and Salles-Djelic (2018), this is what happens when organizations attempt to embody the environmentalism discourse. Organizational actors mobilize and champion different concepts in relationship with specific ideological assumptions that "evoke contrasting normative implications in, for example, public agencies or forprofit firms" (p. 94). Furthermore, researchers should focus on the motivations that drive actors to invest resources to persuade others of the validity of their point of view. For example, some companies invest a lot of money in environmental responsibility, green products, and scientific research. It would be important to investigate how some voices are repressed in the ongoing process of the dispute. For instance, the spread of memes on social media ridiculing defenders of the environment (step 4: labelling).

Considering the reasons and perspectives involved in the controversy, understanding which are more representative and which are silenced, allows the researcher to articulate the multiplicity of the creation of history. As an illustration, Bothello and Salles-Djelic (2018) claim that environmentalism is not homogeneous and a-temporal because it is a historically constructed institution full of multiple narratives. According to these authors, different labels are associated with environmentalism, indicating that this concept cannot be reduced to a single vision. There are various viewpoints supporting environmentalism and climate change. However, there are several others based on reasonable arguments that question some specific aspects of global warming. Each of them generates specific managerial implications for organizations and decision-makers. They should also be included in the actor-network to show

that historical reality is multiple (Durepos, 2015). They may coexist, but sometimes they clash with each other (step 5: describing).

This, like countless other examples that could be given, shows that embracing controversies in organizational analysis implies being open to describing and not simplifying its multiplicity and complexity (Latour, 2005; Venturini, 2010a).

## CONCLUSION

Our aim in this paper was to develop and propose a method for ANTi-Historians, using the analysis of controversy as a starting point. Considering that knowledge of the past and history creation are performative activities, that is, they are a matter of practice, we intend to further ANTi-history research by suggesting a method for comprehending the analysis of the phenomena it conjures. In doing so, we show that the cartography of controversies method appears to be a useful tool for achieving this objective. Marginalized, silenced, or repressed voices can be brought into focus once researchers seek out the disruptions caused by those disagreements and conflicts that happen throughout organizational life and actors' practices. In line with Durepos and Mills (2018), we agree that "the shift of focus from knowledge to practice will have consequences for how we approach history. (p. 441)" Therefore, more than a theoretical improvement, the development of methods that meet the challenge posed by ANTihistory is necessary. We offer the aforesaid as a stage on which this controversy may be played out.

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### **AUTHORS' CONTRIBUTIONS**

The authors declare that they participated in all stages of development of the manuscript. From the conceptualization and theoretical-methodological approach, the theoretical review (literature survey), as well as and finally, writing and final review the article.