Resisting maps: 
The performativity of maps on the territory

Whereas the previous chapters illustrated how complexity is dealt with from within the territory – i.e. by embracing, maintaining, or coping with complexity in a practical fashion – this chapter illustrates how the management of complexity by means of representational maps unfolds. As argued before, such maps aim to reduce the complexity of certain dynamic and indeterminate situations in order to be able to draw causal conclusions and, ultimately, to improve the performance of the infrastructure. This chapter zooms in on one specific ‘map’ that was pervasive at the OCCR: the performance indicator ‘punctuality’. It shows how this indicator was meant to neutrally represent the punctuality of train traffic but, in fact, interfered with the work of coordinators by implicitly cutting up their practices. The indicator can thus be interpreted as being performative in the sense that it separates the complexity of the work of coordinators into input (practices) and output (punctuality), thereby changing how work is conducted in sometimes unintended ways. However, the chapter also shows that this performativity can be countered: railway coordinators engaged in, what I here call ‘hiding practices,’ to resist the effects of the indicator on their work. This resistance, in turn, is performative in that it changed how the indicator was perceived and how discourses about punctuality changed in the OCCR. How the infrastructure emerges as a punctual system, thus happens at the intersection of maps and territories.
Chapter 5

The rich literature on power relations at the workplace has implicitly established a dichotomy between the concepts of control and resistance, between a deterministic view of suppressive managerial domination and a ‘romanticized’ view of the subversive power of marginalized agents (Mumby, 2005). Labor Process Theory, for example, examines how dominating organizations utilize the skills of workers in order to control the reproduction of capitalist interests (Braverman, 1974; Burawoy, 1979; Knights and Willmott, 1990). Resistance is explained from within ‘a negative paradigm’ (Thomas and Davies, 2005a, p. 685), as workers resist vis-à-vis managerial domination by engaging in sabotage or off-task activities (e.g. Roy, 1952, 1959). More Weberian inspired approaches focus on managing the workforce through impersonal and formalized rules, establishing an ‘iron cage’ where rationalized images of calculability and instrumentality prevail (Courpasson, 2000). Resistance shows up through employees’ attempts to manage, bend or break the boundaries between rules and practices of such bureaucracies (Gouldner, 1954; Hodson et al., 2013; Iedema et al., 2004; Kamoeche and Maguire, 2011). Although power relations, here, are less antagonistic – as managers and workers may together ‘engage in practices that are officially forbidden, yet tolerated by the organization’ (Anteby, 2008, p. 10) – the distinction between control and resistance is implicitly maintained, as workers resist against managerial rules and procedures.

Recent work on resistance in organizations has attempted to transcend the dichotomy as sketched above (e.g. Collinson, 2003; Contu, 2008; Fleming and Sewell, 2002; Fleming and Spicer, 2003, 2008; Mumby, 2005; Thomas and Davies, 2005a). In this debate, control and resistance are understood as mutually reproducing and constituting one another (Collinson, 1994); managers are sometimes akin to subordinates in their resistance (e.g. Ogbonna and Wilkinson, 2003) while resisting employees may become co-producers of organizational change (e.g. Courpasson et al., 2012). These studies often engage, to a greater or lesser extent, with a Foucauldian interpretation of power; power is not something someone has but what someone does. Power is inextricably entwined in ‘disciplinary apparatuses’ (Foucault, 1980, 1995) and control and resistance emerge as situated practices that simultaneously enable and constrain organizational action (Kondo, 1990; Mumby, 2005). However, our understanding of what constitutes such apparatus seems incomplete: there is a tendency to overemphasize its ideational and discursive character while neglecting its performative nature and how it is entangled in material instantiations (Barad, 2003, 2007; see also Dale, 2005). This raises important questions regarding when resistance counts (Thomas and Davies, 2005b) and whether resistance has the potential to actually materialize and escape the confines of mere ‘symbolic subversion’ (Witten, 1993).
A practice-based approach (e.g. Gherardi, 2012; Nicolini et al., 2003; Schatzki et al., 2001; Suchman, 2007) on the working of apparatuses deepens our knowledge about practices of resistance. Such an approach highlights the relational, performative and sociomaterial character of organizational phenomena (Nyberg, 2009; Orlikowski, 2007), emphasizing how apparatus render some aspects of practice visible and others invisible (Keevers et al., 2012). In this chapter I aim to understand resistance through a practice-based understanding of apparatus, specifically by employing a ‘posthumanist performative’ approach as developed by Barad (2003, 2007) who has critically engaged with Foucault’s notion of apparatus. She argues apparatus are not just ideational but *actual material-discursive practices* that actively interfere in the world that it observes. In other words, apparatus do not neutrally measure discrete categories in a measurement-independent world, but take part in creating the phenomenon and producing the categories it measures. Resistance, then, is not a pre-given category but comes about through apparatus’ interference in the world ‘through the configurations of human and non-human actors’ (Nyberg, 2009, p. 1194).

I draw on data from a study on practices of railway coordinators in the national coordination center of the Dutch railways. The performance of coordinators, like professionals in public sector organizations in general (Thomas and Davies, 2005a), is increasingly coming under scrutiny and subject to managerial control. Their practices are made visible through an apparatus of disciplinary technologies with the installing of performance indicators to measure and observe their work (Townley, 2002). Such forms of visibility are expected to trigger resistance (Townley et al., 2003) or even produce contradictory, perverse effects (Bevan and Hood, 2006; Tsoukas, 1997).

Based on the discussion above I ask the following question: *How are indicators performative and how may this produce opportunities for resistance?* I answer this question with data from an ethnographic study conducted from 2013-2015. Ethnography is an insightful method for studying resistance as it allows to describe, interpret and explain practices, meaning, and materiality through direct data collection by researchers physically present over a long period of time (Barley, 1990). I specifically zoom in on the indicator ‘punctuality’, which is the percentage of trains arriving according to the timetable. This indicator is one of the most important performance indicators for railway companies and, moreover, is materialized in the coordination center by ‘punctuality-meters’ that are visible on all computer screens and video-walls. For this indicator I am thus able to study the materiality of apparatus, where materiality is not understood as ‘merely an end product... [but as] an active factor in further
materializations’ (Barad, 2007, p. 66), producing both greater visibility and opportunities for resistance.

The findings show how the indicator did not neutrally measure or represent work but interfered with coordination practices in crucial ways and how, simultaneously, coordinators’ subtle acts of resistance shaped the meaning of the indicator. Coordinators developed various ‘hiding practices’ to find ways to evade and subvert the performative gaze of the apparatus. Ironically, however, although the materialization of the indicator increased visibility of coordinators’ work it also provided the conditions upon which coordinators were able to materialize their hiding practices. This chapter illuminates how resistance is not a pre-given category but is being made to matter through apparatus’ interference in the world; such apparatus consist of human as well as non-human actors, and this suggests that greater recognition should be given to the ways that materiality and materialization shape how meaningful resistance comes about (Dale, 2005).

The rest of this chapter is structured as follows. I first examine the notion of apparatus as developed by Foucault (1970, 1980, 1995) and argue that it hinges on the visibility and invisibility of subjects, after which the chapter engages with Barad’s elaboration of apparatus as material-discursive practices. After explaining the methodological implications of a practice-based approach I will present the findings. The chapter finally discusses the contributions of those findings.

5.1 Maps as a disciplinary apparatus

To transcend the dichotomy of control and resistance, scholars have suggested various alternatives to reconceptualize how both are co-constitutive and emerge from one another. Thomas and Davies (2005a) argue that a declared interest in micro-politics reveals how resistance emerges as a struggle to transform meaning. Similarly, surveillance-based organizations may reproduce ‘resistant selves’ (Collinson, 2003) through which subordinates seek to escape tight managerial control (Jermier et al., 1994; Knights and Willmott, 1989). Resistance, here, shows up in covert and subterranean forms, e.g. cynicism (Contu, 2008; Fleming and Spicer, 2003), gossip and rumor (Ogasawara, 1998), dis-identification from normative control (Kunda, 2009), restricting information from management (Collinson, 1994), or through invisible practices (Fleming and Sewell, 2002) and ‘hidden transcripts’
These studies overcome a dualist understanding of control and resistance by refusing to reify organizational actions or actors into pre-established categories (see also Prasad and Prasad, 2000).

Not surprisingly, these studies often depart from a Foucauldian interpretation of power. For Foucault, control and resistance are inseparable from an understanding of power, where power is not located in specific groups or categories (i.e. managers controlling or workers resisting) but is a disciplinary apparatus. Power is not divided between separated individuals but is *relational*, something that can be envisioned as an apparatus ‘in which everyone is caught’ or as ‘a machinery that no one owns’ (Foucault, 1980, p. 156). Crucially, in such apparatus where everyone partakes without owning the machinery, power produces individuals by making them visible *qua* individuals. Providing a dramatic description of the penal apparatus in early days, Foucault shows how *power* used to be made visible through the public exercitation of punishment; nowadays, on the contrary, power itself has become invisible while *objects of power* are made visible (Foucault, 1995, p. 3ff). Many of Foucault’s insights are related to this idea of visibility (the Panopticon, the disciplinary gaze, fields of visibility), suggesting that observed individuals become self-disciplined parts of the apparatus: ‘[h]e who is subject to a field of visibility, and who knows it... becomes the principle of his own subjection’ (Foucault, 1995, p. 202-3; see also Roberts, 2005).

According to Foucault an apparatus is ‘a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions... The apparatus itself is the system of relations that can be established between these elements (Foucault, 1980, p. 194). This definition developed from earlier work, where Foucault provided an ‘archaeology’ of knowledge and representations, most specifically from his notion of *episteme*: the historical conditions under which specific kinds of knowledge at a certain time came to be understood as ‘truth’ (1970). *Epistemes* relate to a system of concepts and discourses that allow certain possibilities of what can and cannot be expressed as legitimate: ‘[it] governs thought and experience – determines the seeable and the sayable’ (Townley, 2002, p. 553). Later Foucault identified *epistemes* as a ‘specifically discursive apparatus, whereas the apparatus in its general form is both discursive and non-discursive’ (1980, p. 197; emphasis in original). The relations between the heterogeneous elements of apparatus thus allow to bring the effects of power to the fore.
For Townley (2002), organizations in the modern *episteme* are characterized by the promulgation of management techniques that are disembedded from practice, abstracted from context, and based on a belief in universal rules or laws (see also Tsoukas, 1997). Abstract management techniques, e.g. performance indicators, promise greater control as they illuminate identifiable causal connections between input-output to increase performance. Sewell and Wilkinson (1992), for example, show how just-in-time and total-quality-control regimes are systems of surveillance that instill discipline and enhance control over workers. They argue that such principles rely on making work visible: the physical organization of plants, the simplification of workflow processes, setting daily targets, making individuals responsible for production, random visits from management, etc. In a similar vein, Sewell (1998) argues how horizontal structures of control, such as electronic or peer group surveillance, are deeply entwined with disciplinary apparatus. Although such forms of control are pervasive, workers may always find ways to escape it: ‘there will always be blind spots in the gaze of the electronic eye – the interstices of the network where individuals will resist the rationalizing forces of surveillance’ (Sewell, 1998, p. 425).

Finding the ‘blind spots’ in such disciplinary apparatus thus suggests that, while control is about making work visible, resistance may work in opposite directions. Scott (1990) introduces the concepts of public and hidden transcripts. Public transcripts are the observable ways that power relations are performed, while subordinates perform hidden transcripts off-stage, making such transcripts are less observable. However, these can still have actual effects, with the weak being able to challenge domination (see also Courpasson et al., 2012). Bernstein (2012) draws a more direct connection between the visible and invisible. His study in a Chinese mobile phone manufactory shows that increased managerial visibility triggered the exact opposite: concealment and hiding. He thus challenges the prevalent assumption that the more that is visible, the more we can see, stating ‘the more that can be seen, the more individuals may respond strategically with hiding behavior and encryption to nullify the understanding of that which is seen’ (2012, p. 209).

We can now begin to understand indicators as part of a disciplinary apparatus promising ‘control and easily identifiable causal relationships’ (Townley et al., 2003, p. 1062). Indicators allow to treat specific teams or individuals as a ‘case’ (Foucault, 1995, p. 170ff): through observing techniques individuals are made visible, performance is categorized, compared and measured in order to, eventually, be able to judge and punish. Resistance, here, may work in opposite directions, aimed at strategic hiding behavior through which
individuals struggle to transform and create new meaning for the indicators (cf. Thomas and Davies, 2005a).

5.2 The performativity of maps: Entanglements and ‘intra-actions’

Although the notion of performativity has a rich and diverse heritage and is used in many different contexts and for different purposes in organization and management studies (for an extensive review see Gond et al., 2015), studies on resistance that take a performatively approach (e.g. Case and Piñeiro, 2006; Hodgson, 2005; Pullen and Rhodes, 2012) usually depart from the work of Butler (1990, 2011). Barad develops her notion of a ‘posthumanist performativity’ by elaborating and constructively critiquing the work of both Foucault and Butler, arguing that the discursive privilege of their work leaves unexamined how discourse actually materializes or how the non-discursive practices of apparatus contribute to the workings of power (e.g. Barad, 2003, p. 808; 2007, p. 59-66).

The importance of materiality in organizational life is increasingly recognized, partially due to a renewed interest in practice-based studies (e.g. Gherardi, 2012; Nicolini et al., 2003; Orlikowski, 2000, 2007; Sandberg and Dall’Alba, 2009; Schatzki et al., 2001; Suchman, 2007). Moreover, practice-based studies emphasize relational aspects of practices and knowledge, where knowledge is not a detached matter of objectively representing reality but rather a production that emerges from ‘the practical engagement between actors (both human and other-than-human)’ (Keevers et al., 2012, p. 101). These studies sometimes draw on insights derived from actor-network theorists (e.g. Callon, 1984; Latour, 1993, 2005; Law, 1991) where human and non-human actants are given equal amount of agency. A ‘posthumanist performatively’ approach (Barad, 2003, 2007; see also Pickering, 1993, 1995), however, departs from this principle of ‘symmetry’ and claims it to be a matter of entanglement: there are no ontological distinctions between a ‘human realm’ and ‘non-human realm’ in the first place (cf. Orlikowski and Scott, 2008; Orlikowski, 2007).

Extensively engaging with insights derived from quantum physics, Barad (2003, 2007) elaborates this idea of entanglement in order to overcome some problems that representationalism poses, and she gives ample examples of how apparatus play a role in the dynamic becoming of phenomena. ‘Apparatus are open-ended practices’ (Barad, 2003, p. 816) that do not neutrally measure or observe but are actively (re)configuring a world as they ‘help constitute and are an integral part of the phenomena being investigated’ (Barad,
For example, the ‘wave-particle duality paradox’ (i.e. the paradox that under certain conditions light behaves like a wave while under other conditions it shows particle-like behavior) is not informative in explaining the ‘true’ nature of light (is it a wave or particle?). Instead, the phenomenon under study does not have an inherent and independent quality, but is crucially entangled with the apparatus used to observe the phenomenon: ‘the nature of the observed phenomenon changes with corresponding changes in the apparatus’ (Barad, 2007, p. 106, emphasis in original). In other words, measurement is not transparent, nor do apparatus represent a measurement-independent ‘object’; measuring matters, both in the sense of providing a meaningful account of the phenomenon under study as well as its materializing effects in the world (Barad, 2003, p. 829).

Thus, Barad prefers the neology of ‘intra-action’ over ‘inter-action’, as the latter still presupposes a degree of separateness between discrete entities. ‘Intra-action’, on the other hand, treats ‘subjects’ and ‘objects’ as ontologically entangled; they do not exist as separate entities but emerge and materialize from within the relation. In a similar vein, matter and meaning do not stand in binary opposition but co-emerge through their ‘intra-action’ (Iedema, 2007). From such a perspective, actors and categories are not pre-given but emerge from their ‘intra-action’ and neither are the meanings of actors and categories pre-given but, rather, they materialize in the world’s becoming.

Barad warns to not treat boundaries or cuts between categories (subject/object, nature/culture, discourse/materiality) as determinate but, instead, to focus on how such boundaries emerge from ‘intra-actions’. Apparatus, as part of entanglements, play a crucial role here: ‘apparatuses are not mere observing instruments but boundary-drawing practices – specific material (re)configurings of the world – which come to matter’ (Barad, 2007, p. 140, emphasis in original). In other words, apparatus interfere with the phenomenon it observes, and what matters is how apparatus are performative in producing boundaries or differences (cf. Haraway, 1997). Thus Nyberg (2009), for example, zooms in on practices of customer service operators – in practice, operators and computers are entangled, and boundaries between the categories of ‘subjects’ and ‘objects’ only emerge through certain cuts made in ‘intra-action’ (e.g. operators objectifying or resisting the computer once the system crashes). In a different context, rituals in underground construction projects (the baptism and name-giving of boring machines) illuminate how rituals are reconfiguring (i.e. performing) sociomaterial entanglements by emphasizing as well as blurring boundaries between ‘subjects’ and ‘objects’ or ‘matter’ and ‘meaning’ (van den Ende et al., 2015).
Summarizing, we can now understand performance indicators not as an apparatus that ‘peers and measures innocently from a distance’ (Keevers et al., 2012, p. 113) but, rather, as material-discursive boundary-drawing practices that shape ‘which aspects of practice knowledge... are visible, heard and understood’ (2012, p. 117). Also, the dichotomy of control and resistance is not made up of separate and independent categories; ‘the cutting-in-half’ happens through ‘intra-acting’ agencies. In order to examine how apparatus of indicators are performative, we thus need to start from the idea of entanglement and, instead, focus how boundaries in phenomena emerge in ‘intra-acting’ agencies that materialize specific categories.

5.3 Methodology

This study is part of a longitudinal ethnographic study carried out in the Dutch railway system. Longitudinal ethnographic field research (Pettigrew, 1990; Van Maanen, 1979) enables behavior, meaning and cultural products to be interpreted and explained by means of direct data collected by researchers physically present in organizations or other settings over a long period of time (Barley, 1990). The aim is to provide an empathetic understanding of the daily activities of employees (Schwartzman, 1993; Yanow and Schwartz-Shea, 2006). The main focus of this research is on collaboration between different railway organizations and between different functional roles in the management of disruptions. Resistance, initially not an explicit focus of the larger research program, emerged over the course of the study as an element that helped to explain the practices of collaboration. Ethnographic studies typically start from a loosely informed theoretical understanding used to ground empirical observations (Glaser and Strauss, 2009) in order to provide ‘thick descriptions’ of a culture (Geertz, 1973).

The first author collected the data during two years of immersion in the field, during which he spent on average two days a week with the organizations concerned. The railway organizations encouraged the research, which was part-sponsored by one of them, so the ethnographer had access to most relevant research sites and informants, including the national and regional coordination centers. The research used an abductive approach (Agar, 2010) that ‘begins with a puzzle, a surprise, or a tension’, after which the researcher ‘seeks to explicate [this puzzle] by identifying the conditions that would make that puzzle less perplexing
and more of a “normal” or “natural” event’ (Schwartz-Shea and Yanow, 2012, p. 27). The initial puzzle for this chapter was a recurring observation of how coordinators decided not to respond to certain delays; this was especially puzzling in view of the punctuality indicator that sought to measure and control these practices.

5.3.1 Data collection and analysis

I employed multiple interpretive methods to access a great variety of data, as is typical of an ethnographic study (Ybema et al., 2009). The backbone of this study were observations in the railway coordination centers and the ‘shadowing’ (Czarniawska, 2007) of coordinators. During observations the first author was interested in the work of coordinators during both normal operations and disruptions. The ethnographic approach allowed me to interpret the ways in which employees dealt with deviations by means of hiding practices. This was mainly because: 1) lengthy immersion allowed me to build sufficient rapport with informants, and 2) the focus was on gaining an insider perspective of the practices of railway employees. Eventually, employees would reflect on their work in terms of their own professional understanding of how their work was prescribed in managerial documents or shaped by performance indicators. For this specific chapter I relied on the following data sources:

- **Field notes from ‘shadowing’**. I observed 47 shifts of coordinators in the national coordination center. Observations lasted between two and nine hours, with an average of six hours. I attended 12 management meetings lasting around one to two hours. I jotted down significant moments and quotes, and detailed descriptions of specific practices. At the end of each shift notes were translated into full field notes.

- **Field notes from meetings**. Coordinators gathered twice per shift to evaluate and discuss, amongst others, the punctuality of the train service. Each meeting lasted from 10 minutes to half an hour, and the researcher observed 30 such meetings.

- **Field notes from workshops**. Ten workshops were observed where coordinators underwent training and practiced certain skills, or where they evaluated and discussed major incidents. The workshops typically lasted half a shift, resulting in discussions about problems encountered by coordinators; this was valuable for this study, as coordinators seemed eager to explain problems in terms of tensions between a practical and managerial perspective on coordination.
• Transcriptions of interviews. I conducted 31 semi-structured interviews, lasting between 50 minutes to over two hours. The questions asked were designed to acquire a broad understanding of people’s work and the motivations behind certain practices. Resistance in relation to performance indicators emerged as a theme in some interviews more prominently than in others, but the topics discussed always reflected the broader theme of tensions between practical and managerial understandings of railway practices. The interviews were recorded and transcribed.

• Close reading and analysis of documents. I analyzed internal handbooks (which set out procedures to be followed by coordinators) and several external documents, such as official and publicly available letters between the organizations and the Secretary of State for Infrastructure and Environment.

In the analysis I moved iteratively between empirical work and theory, so that each could inform the other (Schwartz-Shea and Yanow, 2012). The first author sought to understand the ‘puzzle’ from the point of view of those inside the organization through a succession of fieldwork and interviews. Both authors engaged in discussions how to interpret the practices and narratives of employees and how to explain them from a theoretical perspective.

I started the analysis by categorizing different performance indicators used in the railway system and describing the various observed practices of coordinators in relation to these indicators. I generated a rough description of different indicators and the associated practices. Although the theme of ‘hiding practices’ emerged in connection with most indicators, I decided to focus on only the punctuality indicator in this chapter because they were particularly prominent in this case, as the ‘materialization’ of the indicator allowed me to provide clearer empirical evidence in terms of how resistance came to matter.

5.4 Installing the apparatus of punctuality

The railway system in the Netherlands is one of the busiest in Europe (Goodwin et al., 2012). ProRail, managing the infrastructure, is a government organization tasked with maintaining 7,030 kilometers of railway tracks. It allocates rail capacity to various operators, and is responsible for traffic control. The privatized NS is by far the largest passenger service provider with approximately 1.1m passengers per day. Both organizations are granted concessions by the government: NS has the exclusive right to use the main rail network, while ProRail has been assigned sole responsibility for managing the infrastructure.
The organizations had several ‘black years’ in terms of punctuality at the beginning of this century. In 2001, the punctuality dropped below 80%, a ‘historical low’, meaning that more than 20% of all trains were delayed over three minutes. The indicator punctuality became an important measure through which both organizations had to provide the Dutch government and public accountability of their performance. In their concessions with the government, both organizations defined a number of strategic aims and duties to be satisfied, which were then translated into a set of indicators. These indicators measure whether predefined targets have been met and, if not, the organizations are fined accordingly. In 2014, a maximum annual fine of €2,75 million was imposed on NS by the Secretary of State for Infrastructure and Environment, while ProRail had to pay €75k.

The indicator punctuality measures the arrival time of trains up to several decimal places at 35 rail junctions. The predefined targets for the railway companies is to reach an annual average of 87%, meaning that 87% of all trains should pass these rail junctions with less than three minutes of delay. Implicitly, the indicator thus installs a rationale that a punctual train service is a good train service, and the railway organizations stimulate their employees to work towards achieving good punctuality scores by making certain functional groups responsible for doing so. More explicitly so, in the national coordination center the indicator was ‘materialized’:

Right in the middle of the coordination center there is an enormous video-wall. I count 20 screens that are interconnected to form one large whole; someone tells me each screen is 42 inches in diameter. The video-wall displays information on current delays and disruptions, and in the middle there is a large circular display: the ‘punctuality-meter’. This circle provides a constant update on current punctuality scores; whenever it drops below 87% - the minimum percentage as agreed in the concessions – the circle changes color, from calm green to dramatic red (field notes 2 December, 2013).

Even when coordinators had their backs turned toward the video wall, they could still see the ‘punctuality-meter’, as it was also depicted on each individual computer screen.

Materializing the indicator can be understood as the (material) installment of an apparatus to make individual coordinators visible qua individuals in order to treat them as a ‘case’ (Foucault, 1995, p. 170ff). By ‘neutrally’ measuring and making punctuality scores visible in on the video-wall, the overall performance was somehow thought to be reflecting the work of coordinators. The National Coordinator, for example, explains how a low score
may offer opportunities to trace back what went wrong in coordination practices: ‘When you see this red ball appear on some of the train paths, well then everyone should start crystallizing out what has happened exactly’ (interview 27 November, 2014). Another manager goes a step further by equating the practices of coordinators with the color of the ‘punctuality-meter’, suggesting there is a direct causal relationship between the two without any interference from outside: ‘Punctuality means: “Let’s go for this green ball!” Literally. Continually’ (interview 19 January, 2015).

Nonetheless, it was believed the indicator worked as a neutral measuring apparatus, almost like a thermometer objectively representing the state of the railway system. One analyst, responsible for the development and implementation of indicators, explained this as follows: ‘We can now gain much more insight in the relation between what coordinators do and what we measure; if performance improves you have to see this reflected in the indicator’ (interview 22 September, 2015). When being probed whether the ‘punctuality-meter’ in some way steers the performance of coordinators, he maintains: ‘Steering for punctuality? No, this is not something we try and steer for, it is just something we measure’. Management thus understood the indicator as something promising greater control by identifying causal connections between input-output (Townley et al., 2003), between the work of individual coordinators and performance in terms of punctuality. However, there are limits to the extent that a practical world can be made visible (Suchman, 1995); indicators can be seen as decontextualized representations (Tsoukas, 1997), disembedded from practice and potentially generating conflict and resistance (Townley, 2002).

5.5 Resisting the performativity of the map

In this section I show how the installment of the indicator did not provide the mere means to measure performance but how the indicator, by observing practices of railway coordination, was performatative in shaping those practices. This highlights “the inseparability of “observed objects” and “agencies of observation”” (Barad, 2003, p. 814), and how such ‘intra-actions’ produced several boundaries in an otherwise entangled railway world. These boundaries, between different subjects and objects, provided the grounds upon which resistance (as a temporarily observable ‘category’) was able to materialize. I analyzed the following three forms of resistance: turning a blind eye to the indicator, subverting its meaning, and
sabotaging the materiality of the indicator. First, we must examine how exactly the apparatus was performative in shaping practices of railway coordination.

5.5.1 Cutting up complexity

Although the work of coordinators was traditionally perceived as a holistic practice, that is protecting ‘the greater good’ of the whole system, the indicator now ‘intra-acted’ with those practices resulting in the emergence of boundaries in the holistic system and producing separate subjects and objects. For example, delayed trains or incidents were blamed as the result of failing infrastructure, defect level crossings, extreme weather conditions, employees from other railway organizations, slow computer systems, etc.:

A coordinator reflects on an incident where an ultrasonic device had measured parts of the railway tracks. The results showed that the technical condition of some switches was close to the minimum norm. He goes on to ‘cut up’ the otherwise connected system of railway coordination to find support for his diagnosis: ‘I received drawings of the station indicating which tracks seemed deteriorated... but we weren’t able to get this [information] communicated with others’. This drew boundaries, not only between different meanings of the state of the infrastructure but also between different subjects: ‘I tried to convince some colleagues about the switches, but they responded it wasn’t part of their tasks... I tried to reach the dispatchers, but they argued I wasn’t an official source for information as I’m not responsible for safety [but just for coordination] (informal conversation 25 February, 2014).

Even passengers were sometimes considered as a source of delays and, hence, decreasing punctuality. At one workshop I observed a coordinator saying: ‘The largest disturbing factor on the rails are passengers’. He explained different ways in which passengers cause delays:

‘If it rains, passengers gather on one or two dry spots instead of spreading out over the platform; this influences boarding time as many passengers now use a few doors. Or a helpful train conductor who, while the train has to depart, still answers questions from passers-by. It sounds strange, but if we ran without passengers, punctuality would always be high’ (observations during workshop, 13 December 2013).

To be clear, nobody actually wanted trains without passengers, but we can interpret this as an effect of cuts being made between the otherwise entangled state of apparatus and practices:
‘intra-actions’ produce different categories ‘with meaningful actors materializing’ (Nyberg, 2009, p. 1193), shaping practices of railway coordination.

Sometimes, as I observed, coordinators decided to skip certain stations if a train was delayed; this would enable the train to gain a few minutes and so arrive punctually at the next measuring point. As a consequence, people at this station had to wait for the next train to arrive, while those in the train were unable to get off. In 2014, 3,000 times a station was skipped in this way to eliminate delays (Letter to the House of Representatives by the Secretary of State for Infrastructure and Environment 20 January 2015). Another way to increase scores was to cancel a train altogether if it was already severely delayed at its departing station. Punctuality is calculated in terms of the number of trains that actually run, so a train that never sets out is not deemed to be unpunctual. One coordinator responds to this rather cynical: ‘Sometimes when I see a delayed train I can only think: revoke this train immediately, that’s good for punctuality scores’ (observation 6 February 2014). The following example shows how coordinators ‘played’ with this in practice:

A coordinator observes that train 2600 is becoming delayed. He looks at a diagram to see the effect of this delay; if this train leaves late, it will end up behind a slower freight train, which will only increase its delay. He decides to let the train depart but only for the first part of the journey where there are no measuring points. From station Roosendaal he creates a ‘new’ 2600 departing on time, and the delayed 2600 is cancelled midway through its journey. When explaining what he is doing he says: ‘It is a very long line with many measuring points from Roosendaal onwards. So, from a tactical punctuality perspective it isn’t smart to let the train continue delayed’ (observation 20 January, 2014).

Although skipping stations or cancelling trains was an unpopular practice among coordinators, it was sometimes legitimized: ‘Cancelling trains between 1:00 and 3:00 pm is not a big problem. It affects very few people, but you do see the punctuality go like... [he draws an imaginary line in the air, representing an increase in punctuality]’ (interview manager 1 October 2015). Not surprisingly, the practices that emerged in response to an increased focus on punctuality were soon controlled by installing yet another set of indicators, such as the percentage of cancelled trains.

The measuring apparatus of indicators should thus be seen as an inseparable and entangled part of the phenomenon it measures. It does not ‘peer from a distance’ but interferes and has actual materializing effects in the world, changing practices of coordination as well as effectuating further changes in the apparatus of indicators. Not surprisingly, these
new practices stood in tense relation with the professional ethos of coordinators and they attempted to resist the effects of the indicator in several ways.

5.5.2 Turning a blind eye to the map

Coordinators of NS are mostly concerned with coordinating rolling stock and personnel, whereas ProRail coordinators provide ‘train paths’ in their computer systems whenever trains have to be redirected. If a disruption appears to have a significant effect on the train service, coordinators can find ways to minimize the impact by coordinating rolling stock and personnel over newly created train paths to avoid the disruption. In the words of one coordinator: ‘We guard the railway timetable of the country... We should always try and prevent a local incident from spreading through the network’ (informal conversation 20 January 2014). How ‘the timetable of the country’ should be ‘guarded’ exactly, however, was understood in different ways. A manager interpreted this as follows:

‘Punctuality [is reached] if coordinators work systematically. A coordinator is responsible for his product... The timetable is his tool, and when a train doesn’t do what the timetable prescribes the coordinator has lost his grasp on punctuality... So a coordinator has to be responsible for reaching good punctuality scores’ (interview manager 13 October, 2015).

Whereas the coordinator talks about the timetable as a tool through which he is able to practically engage with emerging situation, the manager sees it much more as an instrumental tool and she seems to equate the artifact with coordination practices.

One way through which coordinators attempted to resist this instrumental thinking, which they saw as one of the reasons for why their practices had changed, was by refusing to ‘cut up’ their holistic understanding of the railway system. Thus, by turning a blind eye to the indicator, they kept practicing according to their practical logic as they had always done. Work was perceived as difficult to represent in formal and abstract terms and, instead, coordinators often explained their practices in terms of ‘acting from a different dynamic [than in handbooks]; we just do it’ (informal conversation workshop 30 January 2014). Sometimes, for example, coordinators chose to hide a specific delay as one that had to be acted upon, as they believed putting much effort into eliminating one delay may have only minor impact on the overall punctuality or even cause other unforeseen delays in the entangled system:
Two coordinators notice a defect level crossing with potential impact on the train service; however, they rather postpone reparation work until after rush hour to diminish its effect on busy trains. This form of anticipation is seen as an important aspect of railway coordination ‘in order to prevent further delays’. But, one coordinator adds, ‘although we are not responsible for the “now-moment”’ it is becoming increasingly difficult to not ‘get sucked into this “now-moment” as others are continuously asking for more information to make quick decisions’ (observation 6 February 2014).

Turning a blind eye to the indicator, coordinators thus allowed themselves some degree of discretion in deciding how and when to act. Reaching punctuality is, at least in coordinators’ understanding, a way of practically and situationally engaging with a holistic railway system where different subject/objects – others, timetables, trains, computer systems – are entangled in practices (Orlikowski, 2007; Suchman, 2007).

5.5.3 Subverting the meaning of the map

The way that the apparatus shaped the practices of coordination was sometimes deemed undesirable by coordinators, and I observed several ways how they started questioning the meaning of punctuality. Small delays, for example, were often framed as something that was beyond the scope of influence and coordinators addressed these were difficult to manage. For the indicator it did not matter whether a train was delayed for three or twenty minutes, and internal assessment of historical data revealed that poor punctuality was caused mostly by cumulative small delays (of between three and five minutes) rather than by less frequent larger ones. However, in practice this was questioned:

Two coordinators, who had informally formed the ‘work group for small delays’, report the results of their analysis to the National Coordinator during a meeting: ‘Our conclusions are that we can do very little about it; coordinators are powerless to act on small delays’. The other continues: ‘From the perspective of the passengers, of course I understand it [punctuality] is important. But I find it increasingly difficult to understand why we, as ProRail, are responsible for this’ (observation meeting 16 December 2013).

It was evident from several informal conversations that small delays were held to be less important, thereby subverting the meaning of the punctuality indicator by effectively pushing it out of sight: ‘What do five minutes mean for a passenger?’ or ‘Five minutes, that’s not a
real delay.’ Constructing small delays as unimportant challenged the meaning punctuality and whether – in terms of measuring and steering for punctuality – it makes any sense in practice. One respondent clearly argued how the indicator cut up an entangled railway world and how this was detrimental to a more holistic understanding of railway coordination: ‘Punctuality is... it’s black and white. It’s a cold number that doesn’t tell you much about the experience of passengers’ (interview Customer Monitor 5 December 2014). The Customer Monitor works closely with coordinators and analyses the consequences of their decisions on passengers. He dramatically turned the meaning of indicators ‘neutrally’ measuring performance into an almost existential organizational dilemma, exclaiming: ‘But why are we [as railway organizations] on this earth again?’ He explains:

“Our philosophy is that customers come in the first, second and third place. But we laugh about this. Customers don’t come first, second or third – it’s impossible when you go for punctuality... Why can’t we just explain we didn’t reach the punctuality norm on a specific day, because, well, we did make sure everybody arrived at their destination?’ (interview Customer Monitor 5 December 2014).

Subverting the meaning of the indicator, coordinators were able to challenge how coordination should be understood, thereby hiding aspects of what it means to be punctual. Although it may seem that turning a blind eye and subverting the indicator mostly stayed on a discursive or ‘symbolic’ level of resistance, I will now show how this was intimately entangled with the materiality of the indicator.

5.5.4 Sabotaging the materiality of the map

The ‘punctuality-meter’ provided means for coordinators to resist the indicator by engaging in hiding practices that were aimed at sabotaging the material instantiations of the indicator:

On the video-wall the ‘punctuality-meter’ is bright red with the number 75% in it. I haven’t seen it this low before and, excited to observe how the coordinators will act, I cannot help but notice calm and quietness. The map of the Netherlands is filled with smaller red circles, signifying which junctions have the largest delays. The coordinators sit with their backs to their computer screens, facing each other but not discussing punctuality. One stands in the middle, almost as if he is performing for an audience, entertaining his colleagues with jokes and stories while the punctuality score on the video wall is dropping even further (observation 2 December 2013).
The above observation is exemplary in how coordinators seemed to relate towards the ‘punctuality-meter’ and on many occasions I saw how small delays were ignored and dismissed as unimportant, thereby concealed as a delay to act upon. This was not just undertaken individually but also in closer collaboration:

A group of coordinators, all with their backs to their computer screens, discuss what to do about a delayed train. One asks: ‘What are we going to do [with this train] guys?’ Another coordinator puts two of his fingers in his nostrils, saying in a childish voice: ‘We are good-for-nothing’, and everybody laughs. A bit later, team leader Deborah notices that trains are becoming congested near Schiphol Airport. She asks her colleagues: ‘Guys, what’s going on at Schiphol?’ One smiles and releases a long ‘nooooooo’, followed by ‘relax, Deborah’. She tells him to find out what is going on, but everyone keeps talking as if nothing has happened (observation 20 January 2014).

Now, the coordinators’ behavior did not actually influence the measurement of punctuality, as it had no effect on the final reported statistics. But coordinators did collectively ‘downgrade’ small delays, regarding them as not worth acting upon; by choosing to ignore them coordinators were effectively pushing them out of sight.

Some practices emerged that manipulated the indicator or, at least, the way that the indicator was represented in its material instantiation. For example, coordinators were granted permission to adjust the settings of the ‘punctuality-meter’ on their individual screens as this could potentially help them to be informed about the specifics of certain delays (i.e. they were able to change the settings so that it would either show local or national punctuality scores, or they could choose to depict only delays of a certain amount). Although this was meant as a tool to help coordinators see and interpret the specifics of certain delays, over the course of the research I noticed how people increasingly adjusted the computer settings in order to push small delays out of sight. One day I observed that the ‘punctuality-meter’ on one coordinator’s screen showed a green circle, and read 92%. The circle on the video-wall, however, was bright red, reading 85%. When asked to elaborate, this coordinator said she prefers to filter out small delays as she could not do much about them and, moreover, ‘because the green just looks better’ (observation 10 February 2014).

Another example is that one day even the settings for the big circle on the video-wall were adjusted to only show the punctuality of trains delayed by more than five minutes instead of three. Whereas this adjustment happened implicitly at the beginning it soon became more explicit. Coordinators increasingly realized that the red color of the ‘punctuality-
meter’ represented not only the state of punctuality affairs outside, but that it also somehow seemed to reflect their practices (i.e. that their efforts to ‘work towards green’ had failed). Since coordinators widely agreed they were powerless to act upon small delays causing a low punctuality, the seemingly laudable nature of the indicator became a point of discussion in shift evaluations. This happened not just in terms of the ideational aspect of the indicator (what does this indicator measure and mean?), but also in terms of its material instantiation (what does the red or green say and how should we interpret this?). Coordinators organized occasions to start ‘experimenting’ with the ‘punctuality-meter’. During evaluation shifts they informally convinced the ICT-coordinator (part of the evaluation team) that the information on the video-wall did not reflect their interpretation of punctuality, and they arranged access to adjust the settings of the video-wall.

During the research this happened more often, and from a certain day the changed parameter of the indicator on the video-wall became standard. In shift evaluations, coordinators started to evaluate punctuality based on five minutes, thereby concealing smaller delays in terms of ones requiring action. Indeed, in many conversations during shifts and subsequent evaluations, coordinators seemed to be content with their own ways of depicting punctuality:

Someone mentions that punctuality on five minutes was really high, and he reads the scores per hour. The other coordinators seem satisfied. One leans back in his chair: ‘Let’s put it [the settings of the ‘punctuality-meter’] on 10 minutes tomorrow’. Everybody laughs (observation evaluation 7 February 2014).

The ‘punctuality-meter’ ceased to be an artifact neutrally depicting punctuality and became instead symbolic of dispute and an object of resistance (cf. Courpasson et al., 2012). Whereas it supposed to generate deeper insights into the practices of coordinators by ‘visibilizing’ their performance on the video-wall, the hiding practices of coordinators were aiming for the exact opposite.

5.6 Discussion and conclusions

Rather than allowing the indicator to shape coordination practices, findings in this study show that coordinators subverted, sabotaged, and reinterpreted the meaning as well as materiality
of the indicator to fit their already existing practices. I do not interpret such hiding practices as innocent acts of resistance; in the case studied, hiding happened in order to counter the performative effects of the apparatus trying to make visible the labor process. Moreover, coordinators had good reasons for finding recourse in hiding practices, as this allowed them to resist relatively under the radar. At the same time, management was not concerned too much with coordinators’ sabotage and subversion, as they interpreted the indicator as a neutral measuring device and the hiding practices did not actually manipulate the punctuality scores. This raises important questions regarding the ‘effectiveness’ of resistance or when resistance actually counts (Thomas and Davies, 2005b), a question I pick up in the following pages.

The current chapter contributes to the literature on organizational resistance that is concerned with transcending its implicit dual relationship with control (e.g. Collinson, 1994, 2003; Contu, 2008; Fleming and Sewell, 2002; Fleming and Spicer, 2003, 2008; Mumby, 2005; Thomas and Davies, 2005a) by exploring how resistance comes about through its entanglement with other organizational phenomena. Firstly, the entanglement of ‘apparatus of observation’ and ‘observed phenomenon’ reveals how an apparatus is not just a distanced ‘analytic of power’ (Foucault, 1980, p. 198) but a crucial part of the power relations it analyses, thereby de facto producing practices of control and resistance. Secondly, concurring with Dale’s (2005) observation that the role of materiality in work on control and resistance continues to play a marginal role at best, the findings show that resistance emerges from ‘intra-actions’ of entangled ‘human’ and ‘non-human’ actors. Thirdly, focusing on the entanglement of ‘meaning’ and ‘matter’, the chapter offers a response to recent critiques on the usefulness of resistance as a concept (Dent and Goldberg, 1999; Piderit, 2000; Thompson and Ackroyd, 1995); it shows that taking the materiality and materialization of resistance into serious account helps conceptualizing the fullness of how and when resistance comes to matter.

### 5.6.1 Entanglements of ‘apparatus of observation’ and ‘observed phenomenon’

Focusing on the entanglement of ‘apparatus of observation’ and ‘observed phenomenon’ allows us to analyze the performative nature of performance indicators. Studies on control and resistance acknowledge that ‘disciplinary apparatus’ exert control and produce subjective selves by making the labor process visible (e.g. Fleming and Spicer, 2003; Hodgson, 2005;
Sewell and Wilkinson, 1992; Sewell, 1998; Thomas and Davies, 2005a), while at the same time this productive force brings into being the conditions upon which ‘resisting selves’ (Collinson, 2003) are able to subvert the meaning of apparatus (Hodgson, 2005, p. 65; Knights and Willmott, 1989). How apparatus produce such opportunities for control and resistance, however, remains obscure because these processes are predominantly explained from within a discursive realm (cf. Barad, 2007, p. 59-66).

The contribution of the practice-based approach lies in the detailed evidence I gave concerning the performance indicator ‘punctuality’, thereby showing how the effects of the indicator actually materialized in the coordination center. The ‘punctuality-meter’ on the video-wall is a clear example of how the performance of coordinators was materially represented and how this shaped coordination practices. Measuring only parts of the holistic railway system, the indicator produced boundaries between otherwise entangled subjects and objects such as passengers, coordinators, computer systems, timetables, etc. ‘Intra-actions’ between these subjects/objects, that temporarily emerged as discrete ‘categories’, materialized changes in practices of railway coordination, evidenced by the fact that coordinators now skipped stations or cancelled delayed trains in order to reach good punctuality scores. The apparatus was a performative device changing practices into the image of the indicator; in other words, apparatuses are not just an ‘analytic of power’ (Foucault, 1980, p. 198) capturing already existing power relations like a camera but they are an engine, materially producing that what it observes (cf. MacKenzie, 2008).

Similarly, ‘intra-actions’ between entangled ‘apparatus of observation’ and ‘observed phenomenon’ also produced and materialized temporary forms of resistance. The indicator moved certain aspects of coordination in sight (i.e. the focus on punctuality) at the cost of other aspects (i.e. a holistic view on coordination), and negotiating which part of practice knowledge was visible or could be articulated in meaningful ways provided the ground upon which resistance emerged. Contrary to some scholars (e.g. Prasad and Prasad, 2000; Thomas and Davies, 2005a), the findings show that such forms of a ‘struggle for meaning’ are not merely discursively or symbolically constituted but have actual materializing effects. For example, through ‘intra-actions’ between the apparatus and practices the meaning of the indicator was subverted, but this subversion actually came to matter as shown by coordinators refusing to take notice of the indicator or even changing the material instantiation of it. Building upon Nyberg’s (2009, p. 1194) observation that control and resistance are produced through arrangements of human and non-human actors, I claim that a constructive way to
transcend the dichotomy of control and resistance is to depart from the idea of entangled subjects and objects and their ‘intra-actions’. Taking ‘inter-acting’ agencies as a point of departure eventually falls prey to reinforcing the dichotomy, as it is concerned with power relations between agencies, between those who dominate and those who resist. ‘Intra-action’, on the other hand, has the potential to analyze how control and resistance refer to the same phenomenon and that the two categories may only temporarily emerge from within the relation of two always already entangled concepts.

5.6.2 Entanglements of ‘human’ and ‘non-human’ actors

One way to go forward in doing so is to account for the entanglement of ‘human’ and ‘non-human’ actors, thereby giving greater recognition to the role of materiality in studies on control and resistance in organizations (Dale, 2005). Arguably, earlier studies have already demonstrated that resistance is often enacted materially or physically: soldiering and sabotage have actual material consequences in the output of factories or assembly lines and, more subtly, objects at work can be a source of resistance through employees ‘play’ (Roy, 1959) or ‘pilferage’ (Anteby, 2008). I suggest, however, that these studies do not account for materiality in the fullness. As a ‘posthumanist performative’ account reminds us, we need to refuse to equate materiality with the physicality or tangibility of objects. As Barad suggests, materiality also produces or, indeed, materializes the enactment of power relations (2007, p. 66). The findings suggest that taking stock of materiality in more sophisticated ways may provide a useful starting point for scholars developing the concept of resistance further. Thus, whereas Hodgson (2005) shows how project managers subvert a ‘model of professionalization’ and Thomas and Davies (2005a) explain how public servants discursively resist ‘the discourse of New Public Management’, I interpret the resistance of coordinators in material-discursive terms. Coordinators’ sabotage or play with the ‘punctuality-meter’ is not a matter of humans interacting with something non-human that is passively awaiting signification or meaning, but both should be interpreted as ‘intra-acting’ agencies through which the phenomenon of resistance materializes. In other words, the meaning of the ‘punctuality-meter’ is inextricably entangled with, shaped by and producing its materiality. ‘[A]pparatuses are not preformed interchangeable objects that sit atop a shelf waiting to serve a particular purpose’ (Barad, 2003, p. 816) but they are always in the act of becoming through humans and non-humans ‘intra-actions’, a process that is ‘perpetually open to rearrangements, rearticulations, and other reworkings’ (Barad, 2003, p. 817).
5.6.3 Entanglements of ‘meaning’ and ‘matter’

Finally, the findings challenge the prevalent distinction between ‘matter’ and ‘meaning’. In line with Duguid (2006, p. 1797), sometimes ‘workers may know more than managers about what is good for the company’, and coordinators’ resistance need not necessarily be seen as disobedience in a negative sense. Hiding practices may be a way through which coordinators are able to make situated decisions to guard the overall state of a system. Analyzing even further, this might be a form of what others have called ‘productive resistance’ (Courpasson et al., 2012) in which employees’ resistance may have actual consequences for organizational phenomena. According to the authors, employees can concretize resistance through ‘objects of resistance’, and such objects are relevant as they help to make claims of resistance public and more dramatic (2012, p. 815). Yet, what this chapter illustrates is that such objects of resistance may also help in developing hiding practices through which employees are able to resist while ‘staying underneath the radar’. Moreover, whereas they conceptualize these objects of resistance as having the dual aspects of tangibility and sociality, my starting point would be that the relationship between the matter and meaning of objects is one of entanglement. Meaning and matter, the discursive and non-discursive, or the ideational and the material are not separate regimes of knowledge; rather, they co-emerge in an ongoing materialization of the world (Iedema, 2007). At the very end of the study I heard the first traces of a new punctuality discourse bubbling underneath the surface: NS and ProRail engaged in conversations to explore the possibility of a punctuality indicator that better reflected a holistic understanding of the railway world.

5.6.4 Resistance that matters

The literature on resistance has recently been addressed from a number of angles challenging the ‘status’ of the concept in terms of its usefulness (e.g. Dent and Goldberg, 1999; Ford et al., 2008; Piderit, 2000). Some have argued that especially Foucauldian inspired studies have somewhat marginalized the potential of resistance against managerial domination (Thompson and Ackroyd, 1995), resulting in rather invulnerable forms of ‘decaf resistance’ (Contu, 2008). The findings show that, although coordinators’ resistance took covert forms of dis-identification (Fleming and Sewell, 2002; Fleming and Spicer, 2003), the effects of their resistance was not invulnerable at all, nor merely ideational or ephemeral. On the contrary, we should interpret the changes in the indicator (i.e. the gradual inclination to incorporate more
‘holistic measures’ into the apparatus) as a consequence of the boundary-drawing practices and ‘intra-actions’ between the apparatus and coordinators’ practices. Thus, starting from an entangled rather than dualistic relationship, subterranean forms of resistance may very well ‘count’ (Thomas and Davies, 2005b) if we take into consideration how this resistance is able to materialize and leave marks on organizational others. Such resistance matters, in the sense that it produces both meaningful and material consequences in a world that is ‘radically open at every turn’ (Barad, 2007, p. 235).