

# SAME, SAME BUT DIFFERENT: PROVOKING RELATIONS, ASSEMBLING THE COMPARATOR

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## INTRODUCTION: WHAT IS A COMPARATOR?

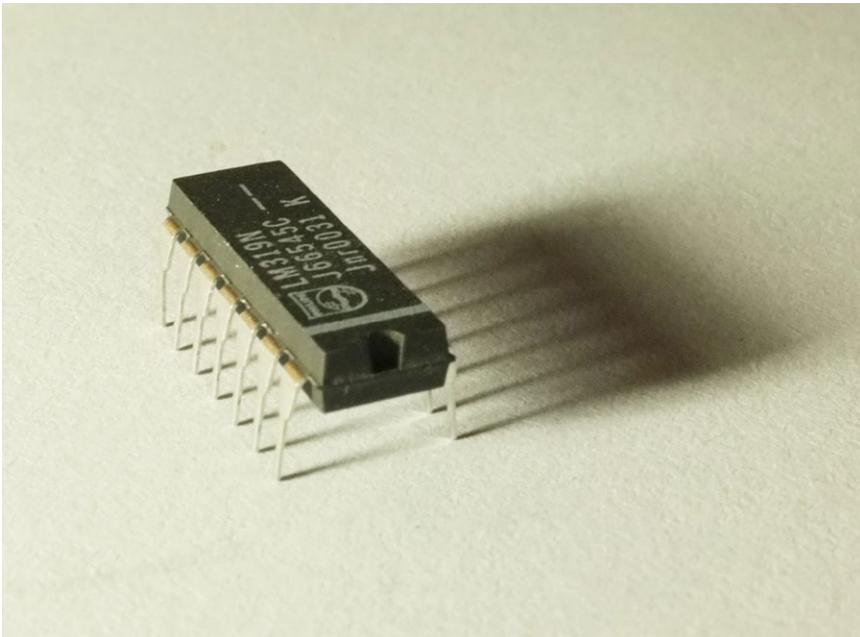
OUR EXPERIENCE OF WORKING ON A COMPARATIVE PROJECT ENTITLED ‘Organising Disaster: Civil Protection and the Population’, whilst trying to find the ‘same, same but different’,<sup>1</sup> has directed our attention to the practicalities of undertaking social scientific forms of comparison, as well as to some of the ethical and political questions that arise from its use.<sup>2</sup>

Much has been written about the latter question: as we detail in the book’s Introduction and touch on again below, comparison has been critiqued within social science from a variety of quarters. These concerns range from the unwarranted reduction of complex social and cultural phenomena by researchers through the imposition of comparative practice, comparison’s complicity with sometimes dubious political and methodological projects (e.g. European colonialism, strident methodological positivism, the creep of market-oriented ranking practices), and even the meaninglessness of invoking comparison as a distinct practice, given its apparent ubiquity in other settings.

What has received far less attention are the ways in which comparisons of all sorts come into being through an entity that we call the ‘comparator’. We

respond to this absence by asking and answering two questions: ‘Who, or rather, what, is the comparator? And, how does the comparator affect a researcher’s relationship with the objects being compared?’

Conventionally, the term ‘comparator’ is understood as a standard against which an object is compared. The comparator (in this sense of the word) is therefore a static benchmark – and it is the quality of being both *fixed and known* that allows the act of comparison to take place. However, there is also a type of microchip called the comparator that is more active and interventionist – it sits in electronic circuits and measures incoming voltages from different sources, switching on or off as a result of its act of *doing* comparisons between fixed and variable voltages (Fig. 4.1).<sup>3</sup> The comparator, in our appropriation of the word for social science, is therefore an assemblage that undertakes comparative *work*. As occurs with the comparator chip, social scientific comparison has to be assembled from diverse entities according to specific forms of knowledge and expertise. In order to produce the comparative output, these assembled parts have to actively intervene and provoke relations between previously



**FIG. 4.1** A comparator chip.<sup>5</sup>

uncompared inputs.<sup>4</sup> For obvious reasons, the comparator in social science is vastly more complex and heterogeneous than the comparator chip. As we will show, it is not a single thing, but an assemblage of researchers, funders, and research technologies – including entities such as databases and software, legal regulations and theories, and methods. When it is put to work, the comparator creates comparison(s) by shaping and being shaped by the world around it.

The creative figure of the comparator is largely absent from literature focused on comparison as a specifically qualitative social scientific practice. In recent discussions, its place is taken by much debate about the epistemological problems associated with comparison. It has therefore been observed that although comparisons have fallen out of favour, doing social research is always comparative (if only in implicit ways), and should be reconsidered (Gingrich and Fox 2002). The revived interest has led to renewed discussions of a number of old questions: Is it legitimate to compare this with that, or what is the *tertium comparationis* – the quality that the things being compared have in common (Steinmetz 2004; Wagner 2011)? What are the issues associated with the apparent undertaking of comparison and the construction of binary oppositions (Strathern 2011a)? What are the specific assumptions about relationality that inform Western ideas about comparison as contrasted to those from other areas of the world (Battaglia 2011; Candea 2011; de Castro 2011; Strathern 2011a; Strathern 2011b)? How might comparison, with its universalist historical baggage, be squared with contrasting approaches that have in some quarters been accused of relativism (see the various discussions in the special issue on comparative relativism, in particular Lloyd 2011; Holbraad 2011; Jensen 2011; Smith 2011)?

Meanwhile, in what is sometimes referred to as ‘comparative urbanism’, a number of authors have stressed that comparison would benefit if it became more adventurous and attentive to relational complexity. This might be achieved by moving away from the orthodox comparison of only large cities or nation-states, or towards understanding the rich variety of more complex relations and relationality informing a given urban setting (Cook and Ward 2012; Gough 2012; Jacobs 2012; McFarlane and Robinson 2012; Robinson 2011; Ward 2010). And, in a recent collection that aims to ‘thicken comparison’ (Scheffer and Niewöhner 2010), a range of authors discuss the difficulties of doing comparison,

while frequently noting comparison's creative, transformative, and potentially pedagogical effects. However, by and large, the method shows the analytical productivity of making different, unusual, or richer comparisons, rather than exploring the situated assembly of the comparative social scientific act itself.

Comparison has also been subject to analysis by a number of writers working with concepts and methods drawn from Science and Technology Studies (STS). This has shown clearly the way in which comparison is inevitably a constructive, creative act, a dynamic bringing together of entities that are otherwise potentially either unrelated, or related in some other way. This is what Helen Verran (2011) and Isabelle Stengers (2011) variously refer to as 'comparison as participant'. However, despite being so good at looking at the methods and procedures of others, STS has often tended to be rather silent when it comes to its own practices and politics (see Haraway 1997). Thus, the empirical focus has tended to remain on the comparisons done by others, whether by scientists (Stengers 2011), medical practitioners (Mol 2002), or indeed non-human entities as diverse as pigs, neutrinos, and tornadoes (Brown 2011). Again, the figure of the social scientific comparator tends to remain invisible and undeclared. This is despite the fact that STS (along with much feminist research) has shown that ostensibly detached applications of logic can be deeply implicated in a range of unarticulated interests and influences. It is thus crucial to study the specific assembly of the comparative act as it involves the building of what Annemarie Mol (2002) calls the 'platforms of comparison'. Looking at medical practitioners, Mol draws attention to the specific situation that produces the comparison (*where* the comparison is made) and the consequences of putting these entities into relation. We are keen to extend this empirical problematisation of comparison to social science itself. For if comparisons are indeed omnipresent and inevitable (an inevitable 'matter of fact', as Stengers (2011) puts it), then what are the specific procedures, (human/non-human) situations, and effects that produce social scientific comparisons?

We aim to show, first, that achieving comparison is a complex process in which a comparator has to be actively assembled. In our case, this comparator is a group of people mediated by a number of research technologies. Second, we show that this comparator is shaped by (and shapes) the research object in a

continual process. Finally, we explore the potential of an approach that explicitly seeks to *provoke* comparison – in which developments within our research result precisely from the specific way in which our comparator has been assembled.

We present comparison as we have experienced doing it, seeking it, and observing it, mainly within the first half of our four-year research project. This is a story of how the creation of a ten-page proposal became a research project with a life of its own, shaped by diverse personalities, experiences, knowledges, and technologies, as well as our research objects themselves. In doing so, we recognise that there is a fine line between navel-gazing and the constructive sharing of one's own experiences. We hope our paper achieves the latter.

## THE PROJECT COMPARATOR

In our project, titled 'Organising Disaster', we are interested in exploring the ways in which disaster preparedness is produced. We analyse civil protection as a specific form of ordering society, involving modes of knowledge, technologies, and organisations intended to deal with disaster. We follow an assembly of organisations and organising technologies, and examine how they produce particular ways of preparing for disaster, and how this, in turn, has effects on the way that society is composed. To do so, we look at three national cases: India, Switzerland, and the United Kingdom.<sup>6</sup> From the very outset, the project has been explicitly comparative, with each team member taking responsibility for one of the three cases. The venture might thus appear to be conventionally comparative – another in the long line of research undertakings that has the nation-state as a unit for comparison. However, we are interested in the question of comparison precisely because we are uncomfortable with how it tends to be generally problematised. Our response in this paper is an 'eigen-observation': we scrutinise our own organisational practices and modes in which our own knowledge is brought to, and shaped through, the objects we study.

The following observations give a sketch of the basic layout of one particular comparator. However, we maintain that any account of a comparator would need to cover a similar set of elements (see below). For this reason, our description

can be taken as a first step towards understanding its generic features. A working comparator is always a complex assemblage, and never simply a tool, an operation, or a method.

In the first part of the paper, we describe the following elements of the process: the initial assembling of the comparator and its researcher constituent parts, the feeding of the comparator, and finally the calibrating of the comparator. Later, we show what happens when the comparator goes to work.

### *Assembling the Comparator*

We, the comparator, consist of three human team members (Michael, Joe, and Zuzana) and a number of technologies. Michael, as the project lead, began building the comparator by writing a research proposal. The number of human actors was pre-defined by his proposal. Once he received the funding, adverts were placed, interviews conducted, and CVs assessed. And it is here that the project's initial process of assembling a comparator begins. Through this process of searching and weighing both imagined qualities and the potential fit into a team, there is a move from the fiction of a project as the outcome of a unified author towards the project as a contingent practice, dependent on the meshing and balancing of similarities and differences within a team. This selection procedure also highlights a strange imbalance in the comparisons at stake: the comparisons that emerge from the research project are founded on the comparison of academic CVs and first impressions in a carefully staged twenty-minute play called the 'job interview'. This process decides research routes taken and not taken. By bringing together these diverse individuals (Michael, in his decisions, and Zuzana and Joe in their accounts of themselves) who in our case were not previously known to each other, our comparator was born.

We can now go back to the proposal and read from it some crucial features of the particular comparator that were defined in it. The proposal suggests undertaking three case studies in three different countries. In other words, it sets up a three-way comparison that is in many ways unbalanced. By naming countries as the entities to be subject to comparison, the proposal, on the

surface at least, resorts to a tried and trusted method of comparing at the level of the nation-state. However, already in the proposal it becomes clear that the nation-state is a placeholder for a multiplicity of organisations, practices, and places. This becomes even more obvious when we actually work on the project. As the project does not merely compare (national) policies, but rather actual exercise practices, it lets each case study itself make a variety of selections within the mixture of differing national disaster management practices. It is a central aim of the project to compare countries with very different frameworks: from India, with its highly professionalised approach, to Swiss civil protection, which is reliant on a draft system.

This uneasy form of comparison is not only a matter of our research object – disaster management – but it is also an outcome of Michael's particular training and exposure to organisational sociology, STS, and European anthropology. Combining an ethnography of organisations with an analysis of discourses produces the problem of how to relate the local and parochial to a wider set of social influences. Doing this in three countries in parallel inevitably brings up a multiplicity of specific empirical levels that do not obviously link up with each other.

Further, the proposal makes a crucial connection: it assigns one person to each case country. It creates a comparator in which persons are aligned with a particular level of comparison (the nation-state). However, one could imagine the same project with different persons being responsible for different levels of analysis. By pre-deciding to match persons with places, a particular kind of comparator was already envisaged in which local specialisation would be conceived of as located in persons, thus following a traditional model – at least in anthropology – in which knowledge about places and cultures is assumed to be located in researchers' minds and bodies. However, from the start, decisions were made that had significant effects on the relationship between researcher and place. For Michael, he decided that, despite being Swiss, he would research the UK, and not Switzerland. It was his personal way of acquainting himself with the country to which he had emigrated. As it happened, the other two project members (in typical 'anthropological' fashion) would also not conduct research in their native countries. While Zuzana (a Czech anthropologist specialising

in South Asia) has had experience with conducting research in India, for the British economic and STS sociologist Joe, Switzerland was quite unfamiliar. The comparator then is very much one that deals with distributing the sensory apparatus of researchers over the world, and brings it back together to exchange what was gathered.

### *Feeding the Comparator: Cohesion and Autonomy*

Once the comparator is assembled, its life can assume different forms and the comparison it produces hinges on the comparator having a certain cohesion. This is an often overlooked feature of comparison. Comparing is a practice of bringing material together and putting it in conversation, and not simply an assembly of empirical data with different characteristics. Only a comparator – able to hold the three in view simultaneously in a practice of commensuration – may eventually produce comparison. Before bodies can go into the field, they first have to be made part of the comparator.

Some models for achieving this kind of cohesion include: research and writing procedures involving constant struggles over theoretical or disciplinary hegemony; a very loose assemblage of individual author-subjects, each with their own voice and research practices that exist next to one another; and a hierarchical model in which some parts of the comparator are ‘research assistants’ that do what the team leader tells them, and in which their primary function is to act as extensions of his or her author-subject. Each of these approaches obviously has its own advantages and disadvantages. Our approach has been a mixture of these. We have a broadly flat structure, but one that is characterised by hierarchical ‘moments’ when Michael assumes the role of final decision maker. One such decision was to specify three parallel research projects associated with three different places, which inevitably reduced the autonomy of the other two team members. ‘Hierarchy’, then, is not so much a matter of an organigram, but an outcome of the fact that one person wrote the research proposal, and that, in implementing the proposal, Michael also decided to stick (broadly) to his original plans.

Our approach also involves two modes of doing research. The first is an autonomous mode, one more familiar to social scientists: this is the pursuit of individual research interests in relation to a particular object. Here, insight stems from the individual's personal relationship to that object, in which they feel able to bring their own particular set of skills and interests to bear. Based on our own experiences, we are confident that this mode is a crucial precondition for an individual researcher's ability to engage with an object creatively (an extreme opposite case would be the over-determined research setting where a researcher slavishly does the bidding of another). But we also see this autonomous, individual mode as one way of *feeding* the comparator. We will provide more examples of this below. For now, it can be summarised as a process of pedagogical and creative development: we are continually trying to make this heterogeneous, but at least partially unified entity, better able to compare than it could previously: individual insights about one case have the potential to allow the comparator to both learn (i.e. to compare better than it could before) and grow (i.e. to extend its reach), and to be able to comparatively connect research entities that it was not able to connect before. However, in order to be able to do so, the comparator has to be trained through a second, less familiar mode of engagement: calibration.

### *Calibrating the Comparator*

The artist John Stezaker splices together portraits of men and women to form what he calls 'marriages'. In a recent interview, Stezaker said:

I am often asked why I don't just get two people, pose them for photographs and splice the shots more accurately, but that misses the point. It's the imperfect match, the failure of unity, that makes us identify with these beings (Phillips 2012).

The image below (Fig. 4.2) of our team – and Zotero – as comparator is an homage to Stezaker's 'marriages'. What holds for his images also holds for the



**FIG. 4.2** The assembled comparator

comparator: it is the imperfect match *created by attempting unity* that creates a functioning comparator. Without the attempt at unity, there is no comparator. Further, and more importantly, even if a perfect match were possible, to strive after it would be to overlook the possibilities for creative tension generated by an imperfect unification.

Calibration is one way of deliberately moving towards this imperfect unity. It can be understood as an ongoing mutual adjustment – of each, to each other, as well as to our technologies, and our research objects. The first route we took was to calibrate some of our thinking through weekly reading seminars. This not only helped us read some of the more pertinent literature for our study, but it also helped to calibrate our ideas of what we are looking for and how we are thinking about what we are doing. Reading is in many ways a comparative practice which inevitably shapes how we see our cases, even if the topic is unrelated. It is very much the collective act of discussing the reading, in which pre-knowledge, or even guesswork about empirical material, is inserted and tested with regard to its comparative promise(s). The reading seminars also highlighted the very

different ways in which we, the human parts of the comparator, are each influenced by our training and differently conceive of both ethnographic fieldwork and issues of comparison.

Another crucially important calibratory practice of ours is how we file what we have read. We process all our materials through another component of our comparator – Zotero, a piece of bibliographic software that makes referencing much simpler. Zotero is one part of the technological mix that feeds and calibrates our comparator (other crucial tools are shared qualitative data analysis tools (NVivo), shared online storage facilities, and communication tools that enable multi-way, remote communication – e.g. Skype conference calling). But more than its bibliographic function, it is Zotero's ability to become a shared database that is particularly powerful for us. All our notes, references, and PDFs of journal articles are automatically synchronised, with each team member having access to the materials that other team members have uploaded, read, excerpted, and annotated.

This process is a strange kind of putting what is normally 'private' and individually memorised into the hands of the research group. A researcher's unique trail of readings, similar to their engagement with ethnographic data, is usually assumed to be embodied. The conventionally conceived author-subject is in many ways understood as nothing else than a machine (albeit a nontrivial one) that rejigs past readings and combines these with 'ideas'. In its very design and promise, bibliographic software, as a recombination and sorting device, already implies a re-ordering of the author-subject (Krajewski 2012).<sup>7</sup> The resulting databases potentially become electronic filing cabinets with the (unacknowledged) status of a co-author. As Niklas Luhmann put it in his account of working with his own unique sorting system, 'The following is a piece of empirical social research. It is about me and another: my filing cabinet' (1981: 222).

However, using an ever-expanding bibliographic database as a group adds a further dimension to this aspect of research practice: texts appear, with little sense of the logic that accompanied their insertion. At its most practical, this means that some of the more mundane work of the comparator can be distributed across multiple parties: key relevant sections can be excerpted for others to use, and key facts and figures are highlighted. Further, since Zotero does not

show (unless manually inserted)<sup>8</sup> who authored a note on a text, these notes could be written by any team member. Especially if some time has passed since the text was noted, this can generate a strange sense of self-misrecognition as the reader wonders: ‘Did I write this?’ Often, it is not possible to be sure, and thought processes and ideas start to blur. This is another step away from a unified author-subject and towards a distributed but cohesive comparator.

Moreover, Zotero itself materialises the comparator as a cohesive unity. As a unified entity, comparators need to perform processes of differentiation in order to make comparison possible. In a bibliographic database, any item or note could potentially be a unit of comparison with any other. The result is that, to keep comparison stable, the database ends up mirroring and reinforcing the project structure. In our own case, this happens in two-ways. First, as we created folders for primary and secondary source materials for each of the three countries being researched, Zotero reproduced the national case study structure. All references relating to India are in a folder titled ‘India’, and so forth. But, second, we also created folders for each person, and these were meant to contain any material deemed important by him/her. This dual structure then shows that, through its operations, the comparator, understood as dependent for its success on forms of communication between team members (and between team members and Zotero), produces a multiplicity of possible alignments: people come to be aligned with places and certain references, but this happens precisely because Zotero is in principle neutral and non-aligned. In practice, it is perfectly possible for Zuzana or Joe to check material contained in a folder called ‘Michael’.

Further mutual calibration occurs in the writing process, although different types of writing generate different comparative modes. Collective papers explicitly provoke comparison, as the writing of this article has revealed to us. This text only partially reveals the numerous (sometimes difficult) processes of calibration we have undertaken as we have tried to adjust to the ambitions, ideas, and writing styles of others – with each category having the potential to be compared according to values which can be understood very differently between authors. This is one of the most explicit sites where negotiation emerges as an important calibratory tool. In our struggles for a coherent (but not unified) voice, as articulated through texts – as well as in our meetings and

conversations – comparison becomes contingent on the success of ongoing processes of comparative negotiation.

Autonomous, individual papers can also quickly be pulled towards comparison. We decided from an early stage that any member of the team could use another's data as required. We have even written down this sharing principle as a kind of contract. The need for this arose from various issues we discussed at the start of the project related to the possibility of people leaving the project. On the face of it, this was not related to the comparator; however, it automatically contributed to the particular form that the comparator took. The agreement stipulated that in the case of a team member leaving, all of his or her materials would remain with the project, but they could also be used by the person who was departing. The remaining team could further use this material for publications, but that would make the leaving member an author on publications substantially based on these materials.

We have also each given conference presentations where one of us has used another's materials for their own comparative purposes. We have frequently found comparing our national cases helpful, often as an explanatory device. Of course, this implies a high degree of leniency on the part of the producers of the material. It also reveals to us (as well as sometimes to others) that the comparator is something assembled. The assumption in a conference is that what is said is backed by the embodied experience of the speaker. But our creative 'borrowings' from others are not 'citations': they do not draw on material produced and claimed by another author as settled facts. Instead, our new author – now an independent (socio-technically distributed) comparator in its own right – lays claim to 'data' without being able to fully qualify its use. This becomes most obvious when (during conference presentations) one is required to answer questions on the other, less familiar cases.

We aim to reach productive (im)balances through our comparisons, where, on the one hand, they hold the potential to make team members think, but, on the other, are neither so strange and different as to repel, or simply baffle. To be only able to draw on partially shared understandings of what it means to do what we do has the extremely challenging effect that, before and while we compare, we also compare our modes of working. When working as a team, comparison

does not therefore automatically emerge, as it needs to be actively calibrated, with materials being constantly reframed through different theoretical and methodological lenses.

There is one further actor that plays a crucial role in changing the composition of the comparator, which we have so far only touched on briefly: our research objects themselves. What then happens when we take the comparator and its calibratory apparatus into the field and into dialogue with the people and things we encounter there?

A comparator is not only calibrated in relation to the persons that compose it, but also in relation to the settings and objects it attempts to compare. Much has been written about the way that comparison changes the outcomes of both qualitative and quantitative research. Less attention has been paid to the inverse relationship between the research object and comparison itself. In examining this, we follow three ways in which the comparator is shifted by the entities it encounters. The first concerns access – that is, how and when we were able to obtain entry to our respective field sites. In order to provide a sharp contrast, we will focus on just two of our three cases in this instance: Switzerland and India. These can be said to represent opposing poles in the varying trajectories of access we have observed over the course of our project. The second shift concerns those moments when a particular set of objects in one site shifts comparative attention in another. Here we begin to draw all three of our cases into dialogue. We continue in this vein to examine the third and final set of shifts. These are enacted not in relation to a particular set of objects, but in relation to practices – comparative practices, in fact. We examine what we can learn from the comparisons of others, as well as how we might compare these to our own social scientific comparisons.

### *Access Shifts the Comparator*

As noted, most discussions of comparison conceive of it as if it were a smooth and transparent practice in which the comparator is in full control. This is equally true of those who critique comparison as being oppressive for forcing

entities together. This overstates the power of social research and (particularly for ethnographic research) is often far from the case: the comparator is dependent on what is usually called access to the field. In our project, each researcher ideally needs to gain access to at least some parts of each country's civil protection organisation. Given the conception of the comparator we have outlined, we might rather call it not access, but 'the extension of the comparator to our interlocutors' (for reasons of practicality we do, however, use the former in what follows). These extensions are based on innumerable contingencies that in turn, shape the comparison. While in non-comparative research these simply change the course of the project, for a comparative project each contingency has repercussions for the whole comparator. Each field note in one site raises a potential question about the respective field note in the other site(s), and each movement of the research trajectory in one site adds tension to the overall direction of the comparator. To assume that the comparator has the power to force ethnographic sites into one comparative framework would ignore the fact that each negotiation with a field site has its own trajectory that can only partly be influenced by the needs of the comparator.

Of our three cases, Switzerland provided the quickest and smoothest journey of a researcher into the field. Joe heard a radio interview in which a key member of the governmental apparatus that coordinates Swiss civil protection was speaking about a major forthcoming exercise. A letter of introduction to the person was drafted and Joe received a reply two days later, informing him that the request had been forwarded to press relations. A week after that, another reply arrived from the head of press relations, informing him that after consultation with the head of the exercise, access had been granted. Two months later, he was in the field, observing one of the largest command and control exercises that had been staged in Switzerland in recent years. There, he was able to meet key players and develop contacts that would facilitate many additional fieldwork visits over the next year and a half, including to meetings surrounding a second major exercise. He was also eventually able to obtain schedules detailing when and where all the exercises involving central government would take place, allowing him to plan and coordinate his fieldwork accordingly.

Gaining access, then, was relatively straightforward. With the benefit of hindsight, we can reflect on how this part of the comparator benefitted from at least two broad sets of helpful circumstances. The first are the relationships between the background of the researcher, the framing of the project, and the history of Swiss civil protection. It was Joe's distinct impression that his position as an outsider helped smooth his access. Within Switzerland, there is some sensitivity about the role played by civil protection.<sup>9</sup> However, being a British researcher and thus ostensibly disconnected from these debates, as well as being able to frame the research as part of a wider European interest in civil protection (given the project was funded by the EU), may have helped allay fears that the research was being conducted with unstated political objectives. The second is the particular organisational culture that is a feature of Swiss civil protection. Chain of command is rigorously respected, perhaps even more so than in some other Swiss organisations, given that a significant number of its personnel continue to be involved in Switzerland's militia army.<sup>10</sup> There is also a pervading culture of organisational efficiency: people are almost never late for meetings; meetings themselves closely follow pre-planned agendas; emails rarely go unanswered; events are organised in good time and often months in advance – even years, in the case of large exercises; the relevant IT infrastructure allows shared access to key documents; emergency organisational action plans are rigorously worked over and scrutinised; and so on and so forth. For the Swiss field site, numerous materials existed and were readily available, and access to it was smoothed through the very same organisational routines that were part of the research object. In other words, the comparator could be fed because the organisation itself had certain features that helped to feed it.

Compare this to the labour involved in gaining access to the Indian field site. This involved at least four sets of challenges. First, a particular bureaucratic actor had to be enrolled: the research visa.<sup>11</sup> A major consequence of this was to delay the entry of the comparator into the Indian field site by ten months.

The second challenge was that the frequent transfer of people between different parts of the Indian administrative apparatus rendered any negotiated access

temporary. In one instance, Zuzana had to liaise with four different heads of the same force, all of whom had different opinions about 'letting her in'. Whenever one left, she had to seek new permission from the next. The first two gave an oral commitment to support her, while the third 'head' even went ahead and formally authorised her access. This, however, turned out to be not enough. Upon Zuzana's return to India for a planned six-month stay (now accompanied by a full research visa), the new (fourth) organisational head revoked the access granted to her by his predecessor and asked that she obtain authorisation from the Home Ministry. This involved temporarily enrolling the Czech embassy (given Zuzana's nationality), who were required to issue further supporting documents until she finally gained access.

The third issue was the central position of personal and informal relationships with key people that often determined the degree and type of access. Many of Zuzana's initial contacts were brokered by fellow academics either from Puducherry or New Delhi. After another promising research lead fell apart due to a change in personnel, fellow researchers in Puducherry put her in touch with someone near the very top of the local hierarchy.<sup>12</sup> This opened a new door to a research site perhaps better than that which was now inaccessible. Increasing familiarity with Zuzana and the project amongst key figures in the Indian state hierarchy also played a role. For instance, towards the end of her stay in India, officers (who had initially been adamant about strictly following official hierarchical processes) became more willing to exert what agency they could within their realm of responsibility to make her research possible. For example, she was given tips about upcoming events that did not require official permission, allowing her to collect perhaps the most important data of her research so far.

The fourth issue is that disaster management falls under the responsibility of the Home Ministry. One consequence of this is that access to disaster response bodies is considered a security issue as they are manned by personnel from paramilitary forces. To venture into such a highly sensitive field site without the correct authorisation in India would be unwise, as it could lead to charges of espionage and imprisonment.

Compared to Switzerland, the Indian part of the comparator had to become connected to a far more heterogeneous and ever-changing set of actors. Zuzana

had to be prepared for the terrain of potential comparison to constantly shift, or for a new actor to be integrated into the processes of calibration and stabilisation necessary for comparisons to occur. Of course, this experience may itself in due course be integrated into a comparative analysis of organisational differences between our respective cases; the question of how we gained access is itself part of an ethnography of how these organisations relate to particular parts of the public. What will likely be absent from such accounts (because of norms of academic self-presentation), however, are the asymmetries involved in preparing the ground for such comparative work.

There is a further effect which relates to the temporal and spatial *trajectory* of comparison. This concerns the variations in how access is achieved, and when and where it happens. Each can shape the overall comparative career of the project: access in one site may open up questions in another before any field research has even been possible. Or, a denial of access in another site may prompt a change of strategy in yet another, resulting in a move towards a different type of data which, in turn, may reflect back on the work planned (or being undertaken) in one or more of the other sites.

In the Swiss case, early field research showed, for instance, that there is a significant blur between state institutions and the population when it comes to civil protection. This is because of the sheer number of people that are enrolled into its dedicated, militia-based, state-led<sup>13</sup> civil protection force.<sup>14</sup> After an initial two-week training period, participation in this force can last years, even if it only involves attending a few days' worth of refresher courses every year. This opened up an opportunity for comparison and a shift in the research strategy in India: during the period in which access to state institutions was problematic, Zuzana shifted her attention to the localised training of the population, in work that is often effectively subcontracted by the state to NGOs. Here too, then, was an instance of the population being enrolled into civil protection procedures.

As access to the NGOs was far less challenging, Zuzana could learn about the disaster management arrangements within the local administrative structure and observe localised disaster preparedness training practices in several communities. The work being done in these communities exhibits numerous parallels with forms of training we have observed in Switzerland, and has generated a

range of comparative questions: What relations of similarity and/or difference might the comparator be able to establish between these two forms of disaster response training? What constitutes the population in these instances? What constitutes the organisation of disaster response? Despite the pre-definition of the comparison, the comparator's gaze had thus shifted to take in a more diverse range of entities. A process of calibration was exposing different forms of organisational delegation and negotiations at the interface between civil protection organisations and populations.

### *Only a Comparator Can Produce Absence*

In any research project, certain entities may emerge that come to possess a particular allure. These are the entities, for instance, that surprise, that are unusual, that 'force' our thought (see Stengers (2010)). In our project, one such entity, which also shifted the comparator's gaze, has been an object: the shelter – a category of building designed to protect its inhabitants from danger. This object produced a move that can only be achieved by a comparator, namely rendering visible an *absence*. Not only did shelters become objects to be researched, but also their prominence in one site prompted questions as to the reasons for their absence in other sites. It is only by moving through a comparator (either ours or someone else's) that presences in one site can trigger an attention to an object that does not exist in another. Absence became visible here as data; as something that can be positively discussed only because it is relevant somewhere else.

Our interest in shelters initially emerged during documentary research into the Swiss case. Switzerland is a country where now, following Cold War government policy, there are enough nuclear-proof bomb shelters to house almost 100% of the population.<sup>15</sup> This marks Switzerland out as a country whose response to the threat of the atomic bomb was, and is, unique in at least offering its population the possibility of survival after a nuclear attack (what Elaine Scarry (2011) calls the 'right of exit'). Despite the end of the Cold War, the Swiss shelter system is an ongoing project: shelters continue to be built and continue to be maintained (even if not to the same degree). As we have explored elsewhere, these shelters

continue to have a direct impact on the conduct of preparedness practice, in part because their sheer material awkwardness means that they will not fit cleanly into contemporary civil protection paradigms (Deville, Guggenheim, and Hrdličková 2014).

We could have left the object in Switzerland. However, one of the features of being in a comparator is that entities in other settings tend to offer themselves up for comparison. This initially occurred in the UK. When we (the ‘we’ here being mostly Michael’s end of the comparator) looked for shelters in the UK, the entity we found was actually not a material presence, but a material absence. At a relatively early stage in the Cold War (partly for reasons of cost and partly because of their possession of a nuclear deterrent) the UK decided against any comprehensive nuclear shelter building programme. Instead, the British population were more or less left to their own devices, being only provided with instructions on how to improvise shelters in their own homes and gardens.<sup>16</sup> For us, this absence was particularly striking given that, in Switzerland, bomb shelters were (and continue to be) something of an overwhelming presence (Berger Ziauddin 2010; 2012). We also quickly found that this absence had played a role in the sometimes contested history of British civil protection. This was, in part, a historical issue – the very lack of shelters for the population having arisen as an issue in the anti-war protests of the early 1980s. But it also resonated in the present: we argue elsewhere that the very absence of Cold War material preparedness practice may have made it *easier* for the UK to adopt certain post-Cold War forms of expertise than was the case in Switzerland (Deville and Guggenheim, 2015).

A comparison had thus been established and, in the process, the comparator had shifted to incorporate the relationship between these organisations and their history of building preparedness – as well as what was absent. This points to a more general observation about absences: it is impossible to specify absence if one cannot use a comparator to specify the presence of what is absent somewhere else in the world (obviously, the ‘somewhere else’ is not necessarily spatial. It could also be temporal, whether historical or utopian, or social and cultural). Without a comparator, there are no absences, only presences. The comparator, through producing absence, can then also help to produce

new presences: what fills any absences (the answer can never be simply ‘nothing’)? This question, in turn, highlighted some of the more general moral and political questions that are tied up in all preparedness practice. How should a country protect its population? Who is to be included in protective measures, and who is excluded?

Our two-way comparator was therefore achieving a measure of stability. But again, a comparator can have something of a life of its own and can begin to demand questions of us. The existence of a seemingly neat two-way comparison begged the question: what about shelters in India? As we started thinking about this, our comparator also began to question both the level of comparison and the *tertium comparationis* (see also Sørensen (2008) on this point). What were we comparing when we were comparing shelters? Were we comparing material structures designed to defend civilians against disasters, or were we comparing the role and meaning of bunkers as a response to the threat of nuclear war? If it were the latter, then India shows similarities to the UK: nuclear bunkers are similarly absent, although some exist for key government officials.<sup>17</sup> What, however, if the comparison at stake is something else, namely the way ideas about protection against disasters are materialised?

In the course of looking for shelters in India, Zuzana came across the cyclone shelter. These shelters are the main purpose-built buildings designed to protect the population against cyclones, although people are also encouraged to move to other so called ‘life-line’ engineered buildings, seen as strong enough to withstand a cyclone, like schools. Fieldwork in Puducherry and Tamil Nadu showed that only people who normally live in thatched structures (i.e. they are poorer) use cyclone shelters, so hiding in specially designed shelters during a cyclone becomes a matter of socio-economic status. The Indian coast is also marked with some completely dilapidated shelters that have become the hub of what the Indian authorities conceive of as anti-social behaviour and are not used by the public in case of disaster. This failure to protect is ascribed in the general discourse of NGOs and the authorities to the lacking sense of community ownership. Therefore, the more recently built shelters are actually disaster-resistant buildings that have other primary functions – for example, serving as a local community hall or a school.

Thus, the comparator has shifted from the disaster to be protected from (in the case of Switzerland), to the relationship between shelters – as a category of purpose-built buildings – and the surrounding lives into which they become entwined. In the process, its focus intensified on questions such as what the politics of entry and exclusion sheltering implies, and the relationship between sheltering and the presence of a threat, including the other life of a shelter when it is not being used for protection. The comparator had become interested in the way the state administration conceives of its own role, how it understands disaster, and how it sees the population and its needs. Some of these interests pre-existed the Indian research as under-articulated ideas. However, by following the comparison of an entity that was present in two of the cases to the third, the comparator was provided with another powerful lens, both through which to consider the relationship between civil protection and the population, and to enrich our thinking. As we bounce around our cases, the comparator is being fed.

### *The Field Shifts the Comparator*

We – and our devices – are not the only comparator in the research project, however. Our comparative project has encountered a world populated by a myriad circulating comparators. And these comparators have shifted our own.

It is not a simple case – as has often been observed – that thinking is always comparative, and that this thus also includes ordinary members of society. When we refer to the circulation of comparators, we refer to the use, by others, of explicitly deployed forms of comparison. These are the kinds of comparisons undertaken by academics and a range of other interest groups, including part-activists/part-academics,<sup>18</sup> policymakers,<sup>19</sup> and our informants.

In India, for instance, Japan is frequently mentioned – an idolised ‘Other’, whose disaster preparedness (with its technology, discipline, and civilian awareness of appropriate behaviour in earthquakes) represents practices to aspire towards. In Switzerland, Japan is also brought into the comparative frame, however, for a precisely opposite set of reasons: the events surrounding the

Fukushima nuclear disaster following the earthquake and tsunami (including the placement of its reactors in risky locations and the subsequent response by disaster response professionals) become a lesson in what *not* to do. At the same time, some respondents have held up the presence of the shelters as a legitimisation of the Swiss approach to civil preparedness: even if there *were* a nuclear event (the argument goes), the Swiss population would still be able to retreat to their shelters.

We are drawn to such ‘field comparators’. They open up potential important questions about the people, organisations, and things we are studying. In the above examples, for instance, we are able to see how our respondents invoke very particular (and quite conflicting) versions of Japanese disaster management. Field comparators, then, very often have a transparent political agenda. Indian disaster managers would like the population to be as well prepared for earthquakes as the Japanese are. With such ambitions, their disaster management organisation can continue to grow to reach a wider public. On the other hand, by invoking Fukushima, the Swiss want to justify and prolong the existence of their bunkers. By pointing at Fukushima, they are suggesting that although the Cold War is over, the risk of a nuclear incident, however small, cannot be eliminated. Thus, people may well at some point need to use the nuclear shelter. So, the comparisons of others further fed our comparator by providing fundamentally important insights. Our comparator became, then, quite a greedy thing.

Our attraction to field comparators is also based on the very fact that these comparators are so different from our own. First, field comparators are fast because they operate with minimal justifications invoking norms of empirical proof and theoretical rigour. Ours is cumbersome, as it relies on all the various steps we have described in this article in order to make it work and for it to conform to ethnographic and academic standards. Field comparators do not rely (to anywhere near the same degree) on this sometimes troublesome infrastructure. Actors in the field can invoke any comparison they like, often without the need to justify it or to calibrate a comparator first. They are likely neither to have to read extensive amounts of background literature, nor to justify what their *tertium comparationis* is, nor to write a research proposal that justifies why a comparison makes sense.

Second, our comparator is mainly built as a tool to understand differences. As a social scientific comparator, it attempts a degree of symmetry by holding one example against another, and accounts for various absences and presences, varying value judgements and operations grounded in historical routines. It simultaneously adds analysis on either side of the entities being compared, and tries to keep each case similarly thick.

The field comparators that we have encountered tend to operate in a more asymmetrical way, and are chosen strategically to make a political point. The asymmetric comparator proceeds by taking its own case as fully known and understood, while the other provides a standard to enable the comparator to make a judgement against it – based on a simple set of assessments. Comparison here is an evaluation composed of binary values: there is a simple yes or no: Japan is good at preparedness; we must strive to become like them; and Japanese nuclear power plants break; ours can (or cannot).

One consequence of this is that when we integrate the field comparator into our own, it becomes ‘re-symmetrised’ and re-politicised in ways that may run counter to its use in the field. Without our own comparator, our field comparators’ interventions through comparison would be not much more than the invocation of the comparative facts of another situation to make a political point. With our comparator, this comparative fact looks rather different: it draws our collective attention to the political composition of the comparators it absorbs. And, in so doing, it highlights particular aspects of the political composition of preparedness: what function does the idolisation of another’s preparedness practice serve for the idolisers? Does the continued maintenance of Swiss shelters really have anything to do with the very particular kind of disaster that befell Japan in 2011?

## CONCLUSION

As we have seen, comparison is not simply a practice that is imposed onto the field. Comparison proceeds by fits and starts, and it is just as much moved by the field as it moves the field. Following our own comparator as it has grown,

changed, and shifted its focus, all the while absorbing other technologies of comparison and the comparisons of others, we have seen it traverse quite different analytical, political, spatial, and temporal domains.

We have also highlighted some peculiar features of comparison: the comparator is highly contingent on its composition, but the very practice of assembling it – ranging from job interviews and applications, internal hierarchies, to the technologies that keep it stable – is the part of it which is reflected upon the least within conventional comparative practice and never appears in resulting research articles. These conclusions are brought into sharper focus by the very fact that our comparator is made up of a team of researchers. A single-person comparator has the luxury of being able to proceed into the field far less encumbered by processes of calibration, and they can come out of the field without needing to develop ways to collectively think, analyse, and write. Nevertheless, being part of a collective comparator vividly exposes the precise mechanisms of comparison.

In this chapter, we have described a comparator that occupies one point on the spectrum between highly formalised types of comparative work and non-comparative ethnographic case studies. Since ours is only an auto-ethnography, we cannot compare our social scientific comparator to those of others. But as a reader, perhaps you now can, as this chapter now takes its home in a collection richly populated with other comparators. We ourselves are left to wonder about the comparator we have created and become: has our comparator been assembled in the right way? How might a differently composed comparator have produced different comparisons? How might we have calibrated differently? What if the contingencies of access had pointed us in different directions? What can our comparator see that others cannot?

Asking these questions with the comparator as its focus also allows us to conclude by reframing ongoing concerns about the ethics and politics of comparison, some of which we drew attention to at the start of the chapter and which we explore at greater length in the book's introduction. Much of the criticism of the use of comparison in the social sciences has stemmed from the observation that by forcing social and cultural phenomena into relation with one another, their complexity and specificity ends up being lost.

The argument, in effect, is that practising comparison is to practise a form of ‘injustice’.

One way to respond to this challenge is to observe that the field never has comparison done ‘to it’ in any straightforward way. Comparison happens through what Isabelle Stengers calls the creation of ‘rapport’ between the entities being studied (2011: 49). This act of creation is neither a given, nor is this process ever disinterested. Our comparisons happen because of the way people, things, and organisations either smooth out or resist our progress and offer themselves up to the comparative work that we wish to do with them. This is, then, in part about the mundane features of much research practice – gaining access for instance – and in part about how entities push themselves into contention *for* comparison. For example, a shelter in one site pushes itself into our comparative reckoning, in part because of our desire to find a parallel, but also because it renders itself as relevant to be taken into account (through various formal similarities to other shelters, similarities of material, and so on). Enacting social scientific comparison is also not a matter of the unilateral and politically motivated imposition of comparison into the field (to which actors might object). Particularly in a field of research like ours, which is populated by experts and individuals in positions of considerable power (a typical case of ‘studying up’, in other words), many of the actors we study have more than enough authority and mechanisms at their disposal to establish their own, often highly authoritative, comparisons.

For this reason, another response, one echoed by other contributions to this volume (see in particular Gad and Jensen), is to pay more attention to comparison as it occurs in the field. However, we may wish to hesitate before delegating authority for comparison to these field comparators in its entirety. Many of the comparisons undertaken by actors in the field are unconcerned with the question of whether or not justice is done to comparative entities. That is to say, these are comparisons that are not constrained by the disciplinarily-specific demands of empirical rigour.

To understand the specificity of (social) scientific comparison as compared to the comparisons undertaken by many of the other actors in the world, we thus need to understand the differences in the modes through which the

comparator operates. Many field comparators are mobile, adaptable, and quick. Our comparator, however, is slow and cumbersome. For this reason, it needs to do much of its calibration work independently of the field. The problem of comparison cannot, therefore, be solved by asking actors (whether organisation, individual, or non-human) in the field to choose the comparative entities on our behalf: not only would this elide the work that would have gone into choosing that actor in the first place, it would simply replicate the problem of comparison a level further down the line. One of the benefits of allowing social scientific comparators the authority to set up the comparison is that at least this authority is clearly defined: there already exist a familiar set of conventions and techniques for rendering aspects of the contingencies of comparative practice transparent. In this chapter, we have pushed this process of rendering transparent far further than is usually the case. The comparisons of the field, however, do not often have such complex comparators.

Comparison is thus never in itself an unjust, colonial, reductive, or violent enterprise. It can be; however, in such cases, our energies should be placed into demonstrating how, and in what ways, the calibration of the comparator was inadequate. We also cannot simply replace inadequate comparators with those of the field: there may be occasions when we may want to compare in collaboration with actors in the field (as we in many instances have), but there may be other occasions when we do not, or when we judge the comparators of the field to be an equally inadequate starting point for comparison. Rather, we need both to understand our comparators in more depth, and to set them up in more productive ways.

In assessing the quality of a comparison, the focus should thus be on the operations of the comparator (potentially by comparing it to other comparators) and not on the reactions that the comparison produces. This is not a call for each and every ethnographic comparison to dissect its comparator as we have, or to see auto-ethnographic reflexivity as providing a ready-made solution for the problem of comparison. It is rather a call for attending far more to the contingencies of both comparison and the operations of the comparator. The question of the ethics and politics of comparison, then, cannot be answered by judging what is compared (or not), but rather how comparators operate. It

has to be answered by assessing – whether by selecting the particular cases, by assembling, calibrating, and feeding the comparator in the way that we have (i.e. with care, with integrity and with a sufficient degree of skill). When assessing comparison as a social scientific method, we are thus not assessing a unitary thing, but rather a diverse and situated set of calibratory steps.

## NOTES

<sup>1</sup> Phrase used in South Asia meaning ‘similar’.

<sup>2</sup> Research for this article has been generously funded by a European Research Council (ERC) starting grant (number 263731).

<sup>3</sup> The comparator chip performs two functions: 1) it measures currents coming into it from two different sources, and 2) on the basis of this comparison (and according to predefined thresholds) it switches either on or off. See: <<http://www.brighthubengineering.com/robotics/60941-the-lm3-voltage-comparator-chip/>> [accessed 21 January 2014]

<sup>4</sup> It goes without saying in social research that this input-output process should be seen as dynamic, and involving a plethora of feedback loops.

<sup>5</sup> Photo by Joe Deville. No rights reserved.

<sup>6</sup> Our three cases have been selected because of points of continuity and discontinuity in their preparedness practices. For example, both India and Switzerland are, to varying degrees, dependent on civil protection mechanisms that are organised from the ‘top down’ and are also homogenous, with both having professional civil protection forces on call. The UK, by contrast, has no centralised, professional disaster response organisation, but is instead dependent on the coordination of diverse actors, ranging from the police, to the army, and to the fire service, whose precise deployment depends on the particular disaster at hand. Further, in the original proposal, the three cases were tied together by a shared disaster object: floods. This was chosen in part because of the fact that this is a disaster event relatively common to all three countries.

<sup>7</sup> Luhman’s monumental filing cabinet is a more nuts and bolts example – he famously said that, with its help, books effectively ‘wrote themselves’ (Luhman 1981).

<sup>8</sup> We decided it was not necessary to insert the author of the excerpt.

<sup>9</sup> This is in part because of its connection to the nationwide proliferation of nuclear shelters – as explored in the next section. This was accompanied by a dedicated civil protection force [*Zivilschutz*] which was composed mainly of men who were unable to serve in the conscript militia army (this situation has now changed – see the following footnote). In the 1980s in particular, this project became the object of political protest: although ostensibly a ‘defensive’ measure, protesters argued that it was ultimately a militaristic project that lent unwarranted legitimacy to the Swiss army (see Albrecht et al. 1988). After the end of the Cold War, many saw the maintenance of the shelter system,

the Swiss military, and a dedicated civil protection force as expensive and unnecessary.

10 The exact proportion of personnel working within the country's civil protection system (this is an umbrella organisation that includes the army, emergency services, *Zivilschutz*, and other organisations) who either continue to be involved in the Swiss army, or who were formerly, is unknown. Experience from the field, however, indicates that the proportion is substantial: perhaps as much as 50%, perhaps higher (given compulsory military service is restricted to men, this also indicates how male-dominated the organisation is).

11 Specific administrative regimes apply to foreign researchers, including a lengthy process of research visa application and registration.

12 Even here, reciprocal relationships played their part. This new contact was following a PhD programme led by the academic who put Zuzana in touch with him.

13 This was state-led despite the fact that the responsibility of leading this work was largely delegated to the cantons. Because of Switzerland's federal structure, these are clearly appendages of the state.

14 This is because of the close relationship between civil protection and the Swiss military. This is an organisation with only a very small number of full-time professional personnel. The remaining manpower is provided by a militia force that (in the event of a conflict) would be called into service. This militia reserve is initially recruited through a process by which young men (usually at the age of 18) are given the option of either entering into military service, or undertaking a form of voluntary service, or – and this is what concerns us here – entering the dedicated civil protection force (*Zivilschutz*).

15 At the end of 2010, the Federal Office for Civil Protection put the figure at 95% (Bundesamt für Zivilschutz 2010).

16 Some nuclear shelters were built; however, they were only done so for key government and military officials. See Deville et al. (2014).

17 The Indian case is more extreme than the UK, for in India there is a lack of even the pretence of protection for its population, should it be subject to a nuclear attack. These cases can be used to make a combined argument: just because there is a nuclear threat, it does not follow that a country needs to protect its population. Or, seen from another angle, it highlights the paranoiac quality of some aspects of Swiss civil protection. On a more general level, it leads to an important theoretical insight: risks do not explain preparedness, but preparedness has a logic in its own right that uses risks to legitimate its actions.

18 In the case of civil defence research, this can be seen in comparative literature, such as Lawrence J. Vale's (1987) *The Limits of Civil Defence in the USA, Switzerland, Britain and the Soviet Union: The Evolution of Policies Since 1945*, which is both an object of research, and academic study for us. Vale – who also did a comparative study – is not simply a precursor of ours, but the book is an indicator that, within the field of civil defence, a comparative view was very much part of the practice of civil defence.

19 For example, a policy paper on civil defence in India compares civil defence structures in the UK, Singapore, and Australia (Singh 2006).

## BIBLIOGRAPHY

- Albrecht, P., et al., *Schutzraum Schweiz: Mit dem Zivilschutz zur Notstandsgesellschaft* (Gümligen, Bonn: Zytglogge, 1988)
- Battaglia, D., 'Of Archipelagos and Arrows', *Common Knowledge*, 17.1 (2011), 51–54
- Berger Ziauddin, S., 'Wahre Schweizer Architektur ist unterirdisch – oder wie die Schweiz im Kalten Krieg zum Schutzbaumusterland wurde', paper presented at *Kolloquium DIALOGO*, Historisches Institut, Universität Stuttgart, 2010
- 'Apocalypse Now? Swiss Bunkers as (In)effective Transition Spaces into the Postnuclear World', Paper presented at the *Organising Disaster Advisory Board Workshop*, Goldsmiths University, 2012
- Brown, S. D., 'Rats, Elephants, and Bees as Matters of Concern', *Common Knowledge*, 17.1 (2011), 71–76
- Bundesamt für Zivilschutz, 'Schutzbauten', <<http://www.bevoelkerungsschutz.admin.ch/internet/bs/de/home/themen/schutzbauten.html>> [accessed 23 December 2010]
- Candea, M., 'Endo/Exo', *Common Knowledge*, 17.1 (2011), 146–50
- Cook, I. R., and K. Ward, 'Relational Comparisons: The Assembling of Cleveland's Waterfront Plan', *Urban Geography*, 33.6 (2012), 774–95
- De Castro, E. V., 'Zenos Wake', *Common Knowledge*, 17.1 (2011), 163–65
- Deville, J., and M. Guggenheim, 'Vom nuklearen Krieg zu all hazards. Die Katastrophe versprachlichen, materialisieren und berechnen', in S. Marti, and D. Eugster, eds., *Das Imaginäre des Kalten Krieges. Beiträge zu einer Wissens- und Kulturgeschichte des Ost-West-Konfliktes in Europa* (Essen: Klartext, 2015), pp. 267–295
- Deville, J., M. Guggenheim, and Z. Hrdličková, 'Concrete Governmentality: Shelters and the Transformations of Preparedness', in M. Tironi, I. Rodriguez-Giralt, and M. Guggenheim, eds., *Disasters and Politics: Materials, Preparedness and Governance* (Sociological Review Monographs, London: Wiley, 2014), pp. 183–210
- Gingrich, A., and R. Gabriel Fox, eds., *Anthropology, by Comparison* (New York: Routledge, 2002)
- Gough, K. V., 'Reflections on Conducting Urban Comparison', *Urban Geography*, 33.6 (2012), 866–78
- Haraway, D., *Modest\_Witness@Second\_Millennium. FemaleMan©\_Meets\_OncoMouse: Feminism and Technoscience* (New York and London: Routledge, 1997)
- Holbraad, M., 'Raising the Anti-, or Relativism Squared', *Common Knowledge*, 17.1 (2011), 31–36
- Jacobs, J. M., 'Commentary – Comparing Comparative Urbanisms', *Urban Geography*, 33.6 (2012), 904–14
- Jensen, C. B., 'Comparative Relativism: Symposium on an Impossibility', *Common Knowledge*, 17.1 (2011), 1–12
- Krajewski, M., 'Paper as Passion. Niklas Luhmann and His Card Index', in L. Gitelman, ed., *Raw Data* (Massachusetts: MIT Press, 2012), pp. 103–120

- Lloyd, G. E. R., 'Multidimensional Reality', *Common Knowledge*, 17.1 (2011), 27–30
- Luhmann, N., 'Kommunikation mit Zettelkästen', in H. Baier, H. Mathias, and K. Reumann, eds., *Öffentliche Meinung und sozialer Wandel/Public Opinion and Social Change* (Opladen: Westdeutscher Verlag, 1981), pp. 222–28
- McFarlane, C., and J. Robinson, 'Introduction – Experiments in Comparative Urbanism', *Urban Geography*, 33.6 (2012), 765–73
- Mol, A., 'Cutting Surgeons, Walking Patients: Some Complexities Involved in Comparing', in J. Law, and A. Mol, eds., *Complexities: Social Studies of Knowledge Practices* (Durham, NC: Duke University Press, 2002), pp. 218–57
- Phillips, S., 'John Stezaker's Best Photograph', *The Guardian*, 8 August 2012 <<http://www.theguardian.com/artanddesign/2012/aug/08/john-stezaker-best-photograph>> [accessed 5 January 2015]
- Robinson, J., 'Cities in a World of Cities: The Comparative Gesture', *International Journal of Urban and Regional Research*, 35.1 (2011), 1–23
- Scarry, E., *Thinking in an Emergency* (New York: W. W. Norton and Co., 2011)
- Scheffer, T., and J. Niewöhner, *Thick Comparison. Reviving the Ethnographic Aspiration* (Leiden and Boston, MA: Brill, 2010)
- Singh, K. M., 'Revamping of Civil Defence in the Country: National Policy Approach Paper. High Power Committee Report', government report, National Disaster Management Authority, Government of India, 2006
- Smith, B. H., 'The Chimera of Relativism: A Tragicomedy', *Common Knowledge*, 17.1 (2011), 13–26
- Sørensen, E., 'Multi-Sited Comparison of "Doing Regulation"', *Comparative Sociology*, 7.3 (2008), 311–37
- Steinmetz, G., 'Odious Comparisons: Incommensurability, the Case Study, and "Small N's" in Sociology', *Sociological Theory*, 22.3 (2004), 371–400
- Stengers, I., 'Including Non-Humans in Political Theory: Opening Pandora's Box', in B. Braun and S. Whatmore, eds., *Political Matter Technoscience, Democracy, and Public Life* (Minneapolis: Minnesota University Press, 2010), pp. 3–34
- 'Comparison as a Matter of Concern', *Common Knowledge*, 17.1 (2011), 48–63
- Strathern, M., 'Binary License', *Common Knowledge*, 17.1 (2011a), 87–103
- 'What Politics?', *Common Knowledge*, 17.1 (2011b), 123–27
- Vale, L. J., *The Limits of Civil Defence in the USA, Switzerland, Britain and the Soviet Union: The Evolution of Policies Since 1945* (Basingstoke: Macmillan, 1987)
- Verran, H., 'Comparison as Participant', *Common Knowledge*, 17.1 (2011), 64–70
- Wagner, R., 'Vùjà De and the Quintessentialists' Guild', *Common Knowledge*, 17.1 (2011), 155–62
- Ward, K., 'Towards a Relational Comparative Approach to the Study of Cities', *Progress in Human Geography*, 34.4 (2010), 471–87