Chapter 7: Enacting Speculation
The Paradoxical Epistemology of Performance as Research

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The generation of knowledge—i.e. predominantly propositional knowledge in Western traditions of science—depends on embodied and situated practices, as the sociology of knowledge and the feminist discussion of situated knowledges have made clear. But apart from this well-rehearsed argument that all knowledge is situated, what precisely constitutes embodied, performative dimensions of knowledge production, and how these relate to cognitive and propositional dimensions, has remained rather unclear. Are embodiment and performativity aspects that ought to be controlled or critically reflected upon, or are they generative resources to be affirmed? Are there any particular strategies for fostering or intensifying performative dimensions of knowledge generation? Which kinds of settings, formats and collaborations does this entail? And what are some of the concrete implications regarding the practice of teaching and research? This essay tackles these questions by relating the issue of speculation, which has received increasing interest across the humanities and social sciences, to discussions on performative research and "performance as research" (Kershaw 2008, 2009; Stutz 2008). As a way of thinking that goes beyond existent propositional knowledge, speculation enables the formation of new knowledge. But as an embodied activity, speculation also supports ways of knowing that exceed cognitive reasoning. In this essay, we examine some of the conditions of possibility of this double capacity of speculation, of generating knowledge and fostering embodied ways of knowing. We consider especially the role that performative enactments play in facilitating speculative moments as they unsettle entrenched hierarchies between cognitive and bodily, abstract and situated practices. More specifically, we highlight the productive role of paradoxical constellations of scientific inscription and practical performance.

Our discussion focuses on the 2016 interdisciplinary seminar "Mapping Bayreuth" that we conducted, in collaboration with Matt Adams from the arts collective Blast Theory, with our students at the University of Bayreuth. Practically speaking, the seminar offered a welcome context for experimentation and exemplification around issues of speculation and embodied knowledge. But we also

focus on teaching and collaborative learning/research here, as we see potential in using interdisciplinary seminars to foster the kinds of speculative practice on which learning as well as research depends. In fact, following Paulo Freire (1970), any real learning might be productively viewed as a form of research in the first place. In what follows, we will begin by situating our approach within the wider shift from critical rationalism to "abductive" and "affirmative" epistemologies. We then introduce our strategy of enacting speculation in order to unpack some concrete ways of, and challenges in, performing speculative research.

From Critical Rationalism to Affirmative Speculation

Every theory needs speculation. Even Karl Popper (1959), who sought to purge speculation from the realm of science, had to admit the relevance of something like Henri Bergson's ([1907] 1911) "creative intuition" in regard to the generation of new hypotheses. Yet, for Popper, epistemology proper had no business engaging with speculation. Rather than proceeding through speculative forms of induction or abduction, only the persistent elimination of unwarranted assumptions through the method of falsification could ultimately yield scientific results. In Popper's critical rationalism, which provided an epistemological foundation to the quantitative approaches developed since World War II, science was thus ultimately distinguished from other kinds of practice if it succeeded in operationalizing the rational capacity to negate.

In demonstrating the limits of abstraction, negation is credited here for purifying scientific knowledge from subjective beliefs, imaginations or speculations. At the methodological level of research practice, this focus on negation has also entailed eliminating any 'confounding factor' in the objects studied as related to context, situation or body. To do so, positivistic science has deployed technologies such as containment, reiteration and controlled observation to arrive at reliable and valid statements. In the terms of the uncertain commons collective (2013), such a research practice can also be viewed as a "firmative" mode of speculation in its orientation towards the unknown. Firmative speculation, in this sense, seeks to predict and control uncertainties, "turning uncertainty into (external, calculable, knowable) risk" (uncertain commons 2013: ch. 2). Following in the footsteps of Western enlightenment as imprinted from Descartes to Kant and Hegel, this negativist bias—along with its devaluation of the body—still reverberates through both mainstream and critical social research. It also chimes with an instrumental view on research as the gradual 'filling of gaps' and piling up of knowledge. Even in a work such as Bruno Latour's *Science in Action* (1987), which shifts the focus from rational reasoning to the powerful, embodied and messy social practices

that enable science in the first place, processes of knowledge production are still depicted as the result of rational-instrumental accumulation cycles.

By the time Latour's book was first published in the late 1980s, though, a more *affirmative* undercurrent had already appeared in philosophy and the social sciences—not to mention the humanities, which had never succumbed to the positivistic agenda in the same ways. For instance, the narrative turn in 1980s social and cultural anthropology cast the "poetic" dimensions of knowledge production into relief (cf. Clifford/Marcus 1986), and the growing interest in complexity theories drew attention to the spontaneous emergence of novelty (Thrift 1999). Along with the surge in feminist and participatory methodologies, the 'turn to affect' of the 1990s and 2000s, and the more recent 'speculative turn,' these engagements have helped reopening the epistemological door to those speculative dimensions of knowledge production that had accompanied pre-World War II epistemologies all along—from Romanticism and Dilthey to Freud, Whitehead or Bergson. A bridge between, say, the 1920s interest in desire and the post-war agenda of a positivist science was constructed in the 1950s and 1960s by Guy Debord and the Situationist International. Using what Debord called "dérive" (drift), by which he meant an 'aimless strolling' in urban space, the researchers-activists still sought to study "the precise laws and specific effects of the geographical environment, whether consciously organized or not, on the affective behavior of individuals" (Debord [1955] 2006; translation altered).

Epistemologically speaking, we might frame the broader move beyond critical rationalism since the 1970s and 1980s in terms of an "abductive turn" (cf. Reichertz 2010). Credited with the potential of generating new orders of knowledge and meaning, Charles Sanders Peirce's ideas around abductive inference (e.g. Peirce [1901] 1958)—in contradistinction to deductive and inductive interference—have struck a chord with researchers from a range of disciplines.[1] Following Peirce, abduction is generally understood here as a kind of careful guessing in search of plausible explanations for given observations, as opposed to rigid explanations derived from causal connections that have already been established in advance. While in Popper's critical rationalism it is irrelevant how the hypothesis to be tested came into being, abduction is all about speculative hypothesizing. This *affirmative* mode of speculating stays with these uncertainties and seeks new ways of relating to the future's inherent complexity—it "progresses and lives by attending to what it does not know" (uncertain commons 2013: ch. 2).

1 As Jo Reichertz summarizes: "educationists, linguists, psychologists, psychoanalysts, semioticians, theater-scientists, theologians, criminologists, researchers in artificial intelligence, and sociologists announce in their research reports that their new discoveries are due to abduction" (Reichertz 2010: 6).

Some of the most consequential elaborations of such an affirmatively speculative approach have emanated from Anglophone experimental, performative and live methodologies, which have also increasingly interconnected the humanities and the social sciences, as well as the practical fields of curating, arts, political activism or the use of social media.[2] Intersecting with the reinvigoration of dynamic, processual and interactive ontologies in discussions of affect or the so-called new materialism, some of these approaches can also be related to earlier generations of researchers proposing ecological approaches to thought and practice, including Gregory Bateson, Félix Guattari or eco-feminists. On a conceptual level, an affirmatively speculative project has moreover been formulated in engagements with Gilles Deleuze, and Deleuze's readings of Spinoza, Nietzsche and Bergson in particular (Deleuze [1969] 2004).

In our endeavor to explore the epistemological potentials of speculation in an embodied and affirmative register, we follow in the footsteps of some of these wider debates, from Situationism to engagements with Deleuze. However, whereas especially in Deleuze-inspired discussions, ideas of 'affirmation' and 'becoming'—along with the vitalist ontology that has often underpinned these terms—have tended to be embraced in celebratory and idealized ways, abstractly denying negativity (Harrison 2015), we would like to argue here that affirmative speculation does not need to ignore the firmative strategies of falsification and critique, nor scientific technologies such as containment and inscription. Instead, we suggest that a performative approach to speculation teases out, and thrives on, the paradoxes that arise as such firmative epistemological strategies and technologies are performatively enacted and combined with affirmatively speculative strategies. In other words, we suggest that new knowledge, as well as embodied ways of knowing, are prone to be generated as the firmative closures of containment, reiteration, observation and inscription are paradoxically constellated with the affirmative openings of embodied enactment. Paradoxicality is therefore our ally.

The Paradox of Scientific Inscription and Performative Enactment

A key strategy for moving from positivistic reasoning to the speculative generation of new ideas is the use of paradox. Deriving from Ancient Greek παράδοξος (parádoxos), meaning "unexpected, strange," the notion of paradox addresses apparently self-contradictory statements, such as, "this sentence is false," or counterintuitive conclusions, for instance, "drinking a lot of water can make you

2 Examples include Bay-Cheng (2010), Back/Puwar (2012a), and Thompson/Independent Curators International (2009); cf. Law (2004), and Wilkie/Savransky/Rosengarten (2017).

feel thirsty." Often, paradoxes also arise when contradictory ideas or elements simultaneously coexist, as in "not having a fashion is a fashion." Authors such as the logician Lewis Carroll have spotlighted a creative capacity in paradoxicality, showing that what at first sight seems to be absurd or self-contradictory might lead to realistic explanations when looking at complex problems. Among the most prominent discussions in this line is Denis Diderot's elaboration on the paradox of the actor's passion: Should an actor playing a murderer feel what a murderer feels? While intuitively one might agree, this soon leads into murky waters in ethical terms. Wouldn't then the best preparation for the actor be to commit murder? Contemplating this ethical intricacy, Diderot then goes on to claim the opposite: The more an actor identifies with a character's passion, the less they will be able to act. This is the formulation of a counterintuitive paradox that leads to the elaboration of how the best actor is the 'cool' actor who shows no personal affective disposition whatsoever; the one "too apt for too many things," then, is the best actor (Diderot [1835] 1957: 18).

The use of paradoxes and the effects of surprise or puzzlement they elicit can thus foster the generation of new insights and ways of reasoning. As a strategy for using paradox as an epistemological resource, we want to highlight in particular ways of dealing with the simultaneous presence of contradictory elements. Going beyond the formulation of paradoxical statements, we take paradoxicality to the level of research practice by exploring the generative potentials that arise from the combination of scientific inscription and performative enactment.

In *Science in Action*, Bruno Latour showed how the modern science system has tended to accumulate knowledge in central locations, whereby it supports and stabilizes hegemonic political and economic processes. This accumulation of knowledge necessitates a great variety of technologies that make the researched objects controllable and mutually combinable. Moreover, it uses what Latour calls "inscription devices," such as cartography, laboratory instruments, ethnography and so on, which transfer local knowledge into the abstract grids of scientific texts. In return, only knowledge that appears as part of these grids counts as scientifically sound (Latour 1987). While this conception of scientific knowledge production assists in illuminating some of the logics and power-effects of modern science, more recent ethnographies of science have directed attention at the specific "enactments" of scientific methods, which relationally shape both objects and actors (e.g. Mol 2002). Following this interest in the contingent ways in which subjects and objects of knowledge are relationally enacted in actual practice, we want to push the discussion a step further by asking what embodied ways of learning take place as scientific methods are enacted, not within their apparatuses of control and inscription, but in experimental and performative processes that also involve putting these very methods in new ways on display. The field "performance

as research" offers useful practical and discursive queues for pursuing this investigation.

Performance as Research

In collaboration with Matt Adams, cofounder of the artist collective Blast Theory, we offered a series of workshops in 2016 for graduate students from human geography (Hutta) and opera studies (Ernst), using the rather ambitious title "Embodying Speculation." Among other issues, the workshops addressed how digital media and the increasing digitalization of everyday life impact both research and the subjects conducting it. As a starting point, we combined teaching in a seminar room with performative experiments in the urban spaces of the midsize town of Bayreuth. Considering the distinctive kinds of activity and interaction taking place in urban space, it became clear that a text-based approach to the cultures of speculation can productively be enhanced by some kind of performance and embodied practice. A workshop was therefore scheduled to introduce all participants to basic principles of body work, including warm-up, movement and expression exercises as well as theatre games. Drawing on the work developed by performers, researchers and educators such as the Californian dancer Anna Halprin, these activities focused especially on sensual awareness and a very rough introduction into movement techniques.

On a conceptual level, we introduced the "live-methods" discussion in sociology, which advocates the use of embodied and creative research techniques (Back/Puwar 2012a, 2012b), as well as arts-based approaches in human geography and examples from performance art and theory. We then moved towards the following idea, generally shared by all participants: we can understand performative research as taking place when theories and methods are both a way of doing research and an object studied in the process of enactment. In this double gesture of applying and reflecting on theory and methods, performative research is particularly suited for engaging with digital interactive practices, such as gaming and mapping, as they share its volatility and anti-expert character. Yet, the practical consequences of opting for performative research were less than evident, to say the least. Admittedly, there are easier—and more predictable—course designs at hand than delivering such a theory-practice mashup. Would we gain any usable results by moving around Bayreuth, equipped with Open Street Map and interactive applications on our mobile devices? Or would that mean merely repeating some of the insights we could learn from books? What kind of site-specific learning environments and situated knowledges might we encounter and produce through conducting performance as research in and around Bayreuth?

Our experiment was influenced by extant reflections in the 'pedagogics' of performance as research. On the website of one of the leading research projects in this field, *Practice as Research in Performance*, led by Baz Kershaw at the University of Bristol from 2000–2006, we find a helpful explanation:

> Broadly speaking, practice as research is an attempt to see and understand performance media practices and processes as arenas in which knowledge might be opened. The institutional acceptance of practice as research in the higher education sector acknowledges fundamental epistemological issues that can only be addressed in and through theatre, dance, film, TV and video practices. (PARIP 2002)

So, practice as research generates or reveals enactive ways of knowing, which are stimulated by the materiality and mediality of its very production and distribution or circulation—for instance, among university students. Knowledge emerging through ways of speculating with what Kershaw and colleagues call "performance media practices and processes" can and should thus be studied through embodied methods. Practice as research makes use here of the paradoxes arising as different media and knowledge practices are engaged simultaneously: "One kind of knowledge—theory, books, libraries, archives—is challenged profoundly by another" (Kershaw 2008: 23). What is emphasized in particular is that speculative *ways* of knowing—'knowing *how*' instead of 'knowing *that*'—are best achieved when they are embodied.

We were therefore confronted with a series of paradoxical shifts, moving from text-based to embodied knowledge practices and back again. While in other frameworks, different speculative ways of generating knowledge might occur, our approach opened up in particular disciplinary boundaries inasmuch as it invited reflections on how knowledge is usually generated, accumulated and evaluated. These reflections started with the researcher's own position in space. Are the students sitting at a table with text in front of their eyes, which they decode using their silent inner voice? Or are they standing or moving around in the theatre lab or in urban space? As long as they are in the seminar room, they will most likely understand themselves as listening and arguing academics. Once they are undergoing their physical warm-up, they gradually enlarge their awareness and add to it layers of their casual, private and artistic habits and experiences.

For example, one of the workshop exercises asked participants to move around in space and think of another person present in the room. Upon a certain cue, they were asked to address that person with their index finger as quickly and accurately as possible, calling them loudly by their name. This exercise performatively transformed the bodily order of the class room with its triangulation of silent voice–text–teacher into a diffusely interactive situation, where silent and loud voice constantly alternated. This also entailed shifts in the very ways we addressed

each other. The formal "Mr./Mrs." or "Dr." with family name, or "*Sie*," commonly used in German seminar rooms, gave way to a non-hierarchical '*du*' and first name for the time of the exercise. This address turned out to be just more fitting to the kind of deliberate collaboration that emerged in the lab, not least fueled by "kinesthetic empathy" (Foster 2008). Such a collaborative atmosphere might as well emerge when students are confronted with new methods in the seminar room. In most cases, such new methods are considered as new tools for gaining knowledge, but would not necessarily change the way of knowledge production itself. Performance as research aims precisely at this.

It might therefore be one of the crucial characteristics of performance as research that it both confronts and paradoxically aggregates the firmative knowledge practices of standard learning environments together with affirmative ways of knowing that emerge through performative enactment. No doubt, following such an approach would lead us into uncharted waters, posing a series of thorny questions, some of which we will discuss in the following sections. In particular, there are three paradoxical problems ahead: 1) the paradox of facts becoming fictional; 2) the paradox of boundless specificity; and 3) the paradox of inscribing the ephemeral. All three paradoxes are part and parcel of the issue of whether and how we acknowledge a performance's effect as a way of knowing something. Does knowledge obtained in performance encounter its limits in the attempt to systematize and chart it? Or does it, by contrast, comment on or even change existing regimes of truth?

Paradox 1: Facts Becoming Fictional

The first paradox addressed in our workshop emerged from the performative enactment of scientific factuality. 'Facts' in a positivistic framework are sensory 'data' registered through controlled, reproducible and mutually combinable means and inscribed into abstract grids. Standard cartographic methods, for instance, deploy a clearly defined set of operations to transpose real-world spatial data onto a two-dimensional plane. This plane then contains an apparently stable yet portable set of spatial data that can be moved around, combined with other such planes and decoded by means of another set of procedures. It thereby also enables firmative processes of speculation, whereby new data are included into extant grids. But what happens when the map is manipulated in ways that exceed these well-defined encoding and decoding operations, when mapping and reading follow as yet undefined strategies? What kinds of cartographic practice does this inspire? What insights regarding maps and mapping are solicited by such kinds of performance? How do these insights reflect back on understandings of 'facts'?

Some may think that the kind of knowledge such performance-as-research activities generate was related to the arts and theatre in particular and thus neither real nor relevant to scientific exploration. This objection does not fully acknowledge, though, that 'performance' equally refers to artistic, scientific, *and* everyday practice.[3] Not least, in anthropology and sociology, as well as in gender studies—particularly fueled by Judith Butler's (1990) work on the social construction of both sex and gender—the concept has opened up a critical semantic spectrum for considering the efficacy of embodied acts inside and outside the performing arts.[4] We would therefore agree that not only actions on stage but literally any scripted behavior can be understood as performed by someone and for someone, including the scripted behavior of scientists. Hence, it should come as no surprise that the performance paradigm demands a broader understanding of what theatre is. Yet, to conversely also consider scientific facts and data as subject of a *mise-en-scène* is another challenge, as it undermines the status of the apparently neutral scientist. (It is precisely this insight into science's constructed nature that performance studies shares with science and technology studies and the history of science.) The method of performance as research is therefore critical as it forces the researcher to consider whether their data should be taken as self-evident or make-believe, and according to what standards this decision should be taken. Drawing on Donna Haraway, we might approach any knowledge production as a type of "sf worlding," where the signifier "sf" is extended beyond its common use as abbreviating "science fiction" to signal how "speculative fiction and speculative facts" are necessarily entangled (Haraway 2007: 93).

In the workshop sessions, this paradoxical simultaneity of facticity and fictionality was purposefully intensified and performed through a series of techniques. Matt Adams, for instance, introduced 'play' as a vital dimension of creative interaction (resonating with Haraway's discussion of the role of play in sf—science fiction, speculative fiction, speculative facts—as worlding). Encouraging playfulness, one of our workshops focused on speculative experimentations with mappings, following on from our theoretical engagement with Situationism, critical cartography and the uses of cartography in choreography and performance arts. Our focus was here on cartography's capacity to conjure inversions of the tradi-

3 Within the discipline of performance studies, one distinguishes performance art from cultural performance such as sport events, rituals, and festivities. In performance theory, the concept is further stratified into performance signifying any 'show' in the broadest sense, a 'cultural performance' manifesting a certain culture; and a 'radical act' able to unsettle given oppositions (cf. Ernst et al. 2014).

4 In philosophy, the concepts of performance and the performative have unfolded similar border crossings, starting with J. L. Austin's lectures on the speech-act to the debate between Jacques Derrida and John Searle about the citationality of performance. See the helpful introductions by Carlson (1996), Wirth (2001), Shepherd (2016), and Schechner (2002).

tional relationship between (firmative) inscription and (affirmative) performance: as the scientific inscription of world onto map tends to fix the world's inherent processuality, so the map's practical, performative use and modification are able to remobilize this processuality. Thus, students who embark on experiments in drawing alternative maps and walking rare itineraries—for example, by symbolically rearranging significant locations of Bayreuth on the theatre-lab floor—do so in real space and with regard to the way maps work as inscription devices. Yet, as they simulate and change what is given, the students also approach their learning task in a playful manner, and nothing can prevent them from switching into a theatrical as-if mode. The use of maps thus invites fictitious reinscriptions of the real. This way, inscription and performance are able to penetrate each other, initiating a process of factual-fictitious speculation.

How can we better understand the way firmative knowledge is opened up by affirmative speculation? Inspired by the Situationists' experiments around the manipulation and reinterpretion of already existing cartography, one of our exercises was to manipulate Bayreuth city maps that were available for free, in order to read them differently.

Students were therefore invited to manipulate copies of the map. The maps could be folded, torn, crumpled, inscribed, or edited in another form (performance). The resulting map object should then be provided with a new legend (reinscription), from which paradoxical jumps and a-logic connections (speculation) arouse. For this exercise, no fictional framing was necessary. The assumption that one would rearrange the map as a fictional character in the context of a fictional action would have been far too complex. It was rather a 'task performance' that, abstaining from overt fiction, simply asked participants to alienate the existing map and add a new legend. And yet the task appealed more to associative thinking, imagination, and hands-on experimentation than to rational-cognitive abilities of scientific inscription alone. Additionally, the manipulation was performed while other participants could watch it. It thereby revealed its theatrical merits. Probably, the location of this experiment was also of some importance, as all participants seemed to consider the folding maps as props rather than navigation devices. In the center, therefore, was the experience of creating and perceiving practical-performative approaches to cartography and setting them in paradoxical relation to accustomed forms of inscription and analysis. In a certain way, this experience compares to the one you may have when you become a cartographer by using an open-source online mapping tool. However, in our experiment the changes included the map's destruction and other absurd acts, such as when the second was transferred to the third dimension through folding, or when gaps and fragments appeared in place of the overview.

This suggests that the participants took the experiment very far, namely, in the direction of an implicit idea of art as a possible space of performative rewriting.

The a-logical jumps articulated in the feedback discussions also indicated that new insights into the map's/city's reality were produced precisely by the 'alienation' of the real finding. Participants implicitly displayed an exact idea here of what a map performs and of what logical and functional use it might be. Staged knowledge, therefore, can be viewed as located right between fictional assertion and factual knowledge. Kershaw also speaks of a "dislocation of knowledge" here that is typical of performance as research:

> Such dislocation of knowledge by action is characteristic of performance practice as research, especially in its more radical forms. […] As a result, any facts, truths, ideas, principles attributable to the scene become as fleet and wayward as autumn breezes; like all performance, there but not there. (Kershaw 2009: 4)

What is at stake is therefore no different or radically new propositional knowledge, but a shift and dynamization of the solid ground, on which we tend to believe exact knowledge is based. With regard to the contemporary rhetoric of 'alternative facts,' one might be concerned about this loss of certainty. Yet, if we accept what Haraway (1988) calls "situated knowledges" or what Hans Blumenberg ([1971] 2001) describes as the rhetorical constitution of human existence, it is not a question of whether, but of how and with what interest knowledge is dislocated and subject to change. What we want to emphasize, though, is that in dislocating firmative knowledge, the paradox of facticity and fictionality—"there but not there"—also opens up a space of affirmative speculation, as it calls for a response. It "produce[s] undecidability and in Derrida's sense: implying a decision that makes us responsible for their meaning" (Kershaw 2009: 4). It is this space of affirmative speculation that we want to further explore through a second experiment.

Paradox 2: Unlimited Embodiment

One of the key ways in which performance as research solicits affirmative speculation has to do with its capacity to touch upon the somatic and subjective dimensions of knowledge production. For it is not concerned with filtering out influences that would blur our sensory perception—a problem for which different disciplines have developed sophisticated methods. Instead, performance as research attempts to make productive use of the somatic, subjective and situational dispositions as a source of knowledge. It thus engages the issue of embodiment also raised in ethnographic approaches as well as in the feminist discussion of situated knowledge. Where these approaches understand knowledge production as a necessarily embodied process, performance as research goes a step further. It seeks out and affirms the conditions of embodiment, amplifying them as much

as possible, so that we can obtain new findings precisely from what is seemingly not at hand or adequate. What Haraway (1988) has called "the privilege of partial perspective" is brought down here to the concrete enactments of all participants in a given research setting. In this regard, performance as research subscribes to a "boundless specificity" (Kershaw 2008: 26) as its constitutive paradox. The method oscillates between an unlimited expansion of its subject area, on the one hand,[5] and its condition to consider each performance as embodied and specifically localized, on the other. Every human behavior can be understood as a performance, in line with Goffman, and complementary to this observation, every performance is a highly subjective act. Paraphrasing John Cage, Schechner thus notes, "simply framing an activity 'as' a performance—viewing it as such—makes it into a performance" (Schechner 2003: 22).

The decision to conceive every possible situation as a performance and, at the same time, to jeopardize the distinction between observers and performers, can be illustrated by the following experiment. The workshop participants were asked to take their lunch break in the cafeteria as an exercise in collective disability—in the sense of the alienation of everyday activities mentioned above. For this purpose, the group assembled within a rubber-cord loop of approximately twenty feet. The task was to have lunch together, while ensuring that everyone remained in the loop without letting the rope touch the ground. It was agreed that any communication should be limited to the most necessary, as the exercise was primarily about bodily and interpersonal coordination. Metaphorically speaking, any tension within the group had to be controlled, as an individual, existential need was being satisfied. The ensuing complications were predictable and unfolded on three complementary levels, each expressing specific issues of embodied performative research.

First of all, we observed that most of us focused on the in-group, as our own bodies became the central points of performative action. We thereby continued the performative exploration processes that had been prepared and started in the previous workshop exercises. Concentration and attention to one's own body and the bodies of others was thus rather high compared to usual lunch breaks. Only a few participants showed signs of what we called "being private." On a second level, though, the workshop atmosphere, which was characterized by a certain intimacy, collided with the cafeteria setting and the specific habitus in which we usually take our meals. At times, students were approached by fellow students; at times, it became obvious how they routinely maneuvered around the canteen crowds, acting strategically in order to get the food they liked. In some cases, participants lost sight of the task, the rubber cord threatening to be stretched or relaxed. At

5 As Schechner notes, "there is no cultural or historical limit to what is or is not 'performance'" (2002: 2).

the same time, these were also the moments in which other participants decided to de-privilege their own needs and to step in for the others, which served the common goal. This in turn led other participants to organize a portion for others, and so on.

The intermingling of habitual action and exceptional, situational experiment required a constant reorientation of one's own actions. On a third level, this was further intensified by the performative character of the exercise and the boundless specificity of the performance, as we were noted by the involuntary spectators in the cafeteria. The way spectators and actors looked at each other suggested that everyone knew they were dealing with a non-everyday action—despite the ordinary nature of the activity of picking up a meal and taking it in. The experiment thus intentionally intersected the expansion of the concept of performance with a specificity here and now. It was clear to everyone that the actions could be carried out with little effort, as few special skills were required. Putting Cage's definition of performance to practice, you could even dispense with the rubber band and see the intake of the meal itself as a performance. For instance, our constriction within the rubber band was curiously mirrored by the balustrade surrounding the terrace on which some of the other eaters were sitting, enacting a kind of involuntary reverse performance. What is considered a performance cannot be limited, then—it is 'boundless'—and, metaphorically speaking, also not to be delimited by a rubber band. At the same time, this experiment took place with very specific participants and in a very specific place, namely, 'our' cafeteria, which is connected to the conditions of student and teacher life, to our biographies, as well as to our relationships to others.

These three aspects—group focus versus private action, habitus versus situational practice, everyday activity versus performance—are all generative of speculative processes, as they constantly evoke paradoxes that call for new responses. The rubber band, as constitutive element of the exercise, illustrates their mutual imbrication. On the one hand, the band functioned semiotically as a sign of an 'as-if' situation—especially for the unprepared spectators. The spectators reacted to it as in a 'hidden camera' trick—with joy and astonishment, but also relatively relaxed as soon as they understood what was going on. The participants, in turn, answered questions, said "hello" to friends, but mostly remained with their task. In addition to the semiotic function, the rubber cord also unmistakably had its material qualities, which allowed to provide immediate embodied feedback. It took on an extreme form when an uninvolved person, for example, pressed themselves into the group or wanted to cross their path and gradually became aware of the rope. Or, there was the moment when the group agreed on how to sit down at the tables. The most extreme situation, however, occurred when all of the participants were back in the theater and were reluctant to leave the rope.

From such extreme feedbacks, those feedbacks are to be distinguished which point to continuous bodily attention, the feeling that figures as somatic and subjective knowledge. However, this knowledge, in the sense of an abductive process, only arises in the interplay of the mentioned complications that are related to the paradoxicality of embodiment and boundlessness: the persistent intersecting of demarcation and expansion as concerns group and individual, habitus and situation, routine and performance, stipulates new practical responses and intellectual reflections. The bodily as well as intellectual knowledge thus generated is affirmatively speculative as it defies any clear definition of the research field—spatially and epistemologically. The open-ended setup of the experiment therefore does not lend itself to the firmative control of predictable repetition. Instead of lending itself to the deductive testing of pre-established hypotheses, each repetition will invariably incite slightly different knowledge. Despite its essential association with the local, this knowledge ironically cannot be controlled or restricted to the local circumstances. Haraway speaks of irony as an essential moment of such paradoxical knowledge production: "Irony is about contradictions that do not resolve into larger wholes, even dialectically, about the tension of holding incompatible things together because both or all are necessary and true. Irony is about humour and serious play" (Haraway [1985] 2001: 291). The paradoxical formulation "serious play" nicely captures the simultaneously consequential and circumstantial nature of the boundless specificity of performative research.

Paradox 3: Ephemerality and Inscription

The rubber-cord experiment has demonstrated how intensifying paradox through performance incites affirmative speculations that are enacted by embodied subjectivities, while persistently challenging the boundaries of situated embodiment. Returning to our overarching paradox, we now want to consider further the relation between knowledge derived from performance as research and the abstract knowledge generated through scientific inscription devices. The map experiment has already indicated how the performative enactment of scientific inscription enables new *ways* of knowing cartography. But if it is thus possible to performatively open up scientific inscription, does it conversely also make sense to inscribe performance? What kinds of inscription devices are useful here, and how can paradoxes of the firmative and the affirmative be productively mobilized in the process of inscription?

Kershaw points out two distinct problems, one relating to ephemerality, the other one to inscription:

> Firstly, how can the ephemeral be of lasting value; that is, how might valid knowledge claims emerge through the ephemerality of performance events? Secondly, how can the "live" of the past be revived through its remains; that is, how might knowledge created by the liveness of performance be transmitted in its documentary traces? (Kershaw 2008: 26)

While the first question contemplates possibilities of creating "lasting value" precisely in the absence of (traditional) inscription devices, the second question calls for new techniques of inscription. Such techniques should be capable, not only of fixing performance events for the sake of knowledge accumulation, but to *revive* the eventful past in the present. How, in other words, might the eventful, paradox-ridden past come to bear on the present? And to what extent does paradoxicality itself need to be conjured in the present if the past's liveness is not to be deadened by the inscription?

Let's take this text as an example. At one level, our essay has enacted an abductive process of speculation oriented towards abstractable knowledge regarding the paradoxical relations of performance and inscription. This abstractive abduction has entailed recursive forms of evoking the workshop's live events through description and distancing ourselves through analytic accounts. The more we have distanced ourselves from what happened in the 'live' of the workshop, the more we have been able to build up a new hypothesis from our initial assumptions around speculative knowledge. In order to do so, the performance's diverse traces needed to be read over and over again, which allowed us to reflect on how knowledge is both embodied and inscribed. Similar abductive abstractions already happened during the workshop itself where participants responded to given tasks with different commitments and based on different experiences, reflecting on these responses in discussions and writing.

Recursive evocation has thus been a key element in our affirmatively speculative inscription device. Performance studies provide us with helpful tools to record, remember and re-evoke the ephemeral event. In some respects, this tool-kit also corresponds to ethnographic methods in social research (e.g. Emerson/Fretz/Shaw 1995). However, whereas such techniques of documentation and analysis often serve to inscribe ephemeral events into grids of apparently neutral-objective knowledge, they might also be used to cast into relief the ways in which the concrete paradoxes that have animated research-performances of the past have been responded to. They might thus be deployed to retrace these events on a dynamically unfolding and situated—rather than fixed and neutral—level of analysis. Perhaps more than we have managed to do here, this therefore entails not only factually tracing the eventful past, but rather affectively evoking it, for instance, through narrative and poetic means (which also connects to the ethnographic discussion on "writing culture"). Feminist researchers, especially, have productively

connected scientific inscription to such "evocative" descriptions and fabulations (cf. Hutta 2015). Methodological attentiveness to the evocative potential of analysis moreover suggests nuanced engagement with visualization beyond mere representation and illustration. This signals the value of collaborative formats that connect text-based research with expertise in areas such as visual arts, as also proposed in the discussion around live methods and live sociology.[6]

As Back and Puwar (2012a) have noted, "live sociology"—or what we have termed performative research—is enhanced as researchers become increasingly "crafty" in making use of the evocative inscription devices developed in visual or performance arts or curation. This imbrication of research and arts concerns processes of empirical research as well as of analysis and presentation. Regarding the empirical process of engaging with real-world objects such as maps of Bayreuth, the students of our workshops 'artistically' manipulated these objects and combined them with other material and semiotic objects. They speculatively in-folded various elements—map, signs, gestures, and spatial arrangements in the theatre lab—into their performative activity, which went along with a process of fictionalizing empirical facts. As our discussion has suggested, such creative speculation can be instigated through the use of play, irony and the creation of 'as-if' situations, especially in contexts like theatre or urban spaces. At the level of analytically and curatively reengaging with the various traces thus performatively produced, on the other hand, what has been performatively 'in-folded' is evocatively *un*-folded.

This brings to mind the ethnographic understanding of "thick description" as a process of "explicating" (which literally means 'unfolding') social events and interactions (Geertz 1973). In performance as research, however, what is to be explicated are not merely cultural sets of meanings and practices, but rather the creative responses participants have formulated in relation to paradoxes of fact and fiction, embodiment and privacy, group and privacy, habitus and situation or everyday situation and staged performance. While analysis and presentation retrace some of the material and factual processes 'im-plicated' (infolded) in a fictionalized performance, they simultaneously need to re-evoke these fact-fictions in the here and now—thereby necessarily altering whatever components have entered into the performance as these are selectively related to a different context.

Regarding the mode of analysis, we see a shift in focus here from the firmative inscription of events to the affirmative re-evocation of their paradoxical intensities. In such an approach, conceptual abstractions—such as group focus versus private action, habitus versus situational practice, everyday activity versus performance—cease to function as the neutral grids of universal knowledge. Instead, they become vital means enabling thought to open itself up towards the eventful-

6 In their discussion of "curating sociology," Nirmal Puwar and Sanjay Sharma (2012) have insightfully demonstrated this value.

ness that unfolds through perceptual and affective registers (cf. Deleuze/Guattari [1991] 1994). If there is thus considerable potential for analysis to be enhanced through techniques of evocation, however, this does not stop the paradox of inscription and ephemerality from reappearing all along—persistently demanding our response. Paradoxicality thus re-emerges in the very process of eventful inscription.

A variant of this paradox has surfaced in our double role as observers and participants. While conducting the workshop, we were also part of the group—for instance, during the cafeteria experiment or the warm-up sessions—and thus shared to some extent the somatic and subjective dimensions of the project. At no point were we able to observe the group from a safe distance. In ethnographic research, the simultaneity of bodily participation and analytic observation is commonly discussed under the rubric of "participant observation"—an activity that, starting from the haphazard jottings of ephemeral situations and continuing with the descriptive re-creation of significant scenes, leads, step by step, to the formulation of analytic claims and insights (cf. Emerson/Fretz/Shaw 1995). This ethnographic activity, though, tends to posit the observant participant-researcher-author as the central subject of knowledge. Yet, the text you are reading is only one of many possible traces of the workshop. Other such traces exist, for example, as feedback discussions, notes, photographs, a weblog, various notes—and likely the embodied memories of mapping exercises and lunch breaks. This suggests that knowledge formation ought to be conceived as more dispersed.

What is more, the ethnographic approach commonly centers the generation of knowledge on the sphere of textual production and analysis, sidelining the bodily levels on which it simultaneously occurs. A more consequential interrogation of the paradox of inscription and ephemerality calls instead for considering the body itself as a possible device for what we have called the evocative inscription of knowledge. This brings us back to speculation's double capacity of generating knowledge and fostering embodied ways of knowing.

To Conclude: Researching Performance, Performing Research

What is the epistemic status of the knowledge generated by means of performance? To the extent that the speculative cartography of performance as research is concerned with the formulation of propositional statements relating to the concrete issues engaged with, there might appear to be few new or substantially different findings compared to what one can read in academic literatures on performance art or live sociology. There are two ways in which this affirmatively speculative knowledge production matters, though. On a formal level, this knowledge is radically different inasmuch as it is embodied. This suggests not

only a different pedagogical approach in academic teaching, but also a different approach to knowledge production. Performance as research relates to the everyday practice of orientation in space by means of maps, digital devices and so on, only to transfer it to the instable, or 'multi-stable,' space between the theatre lab and its others (including experience, city space, social research and so on). It has turned out to be much easier to open up and unsettle existing grids of knowledge in the theatre lab as well as in public space than in the seminar room, where this might be a bigger challenge. Performance as research, then, claims to unsettle that which, as an effect of its accumulation, is considered self-evident. It does so by means of embodiment and in reference to implicit knowledge, which has always already been transferred more via evocation and performance than by being stored in neutral grids of knowledge. Thus, after the experiment, we can claim that we 'know' the meaning of navigation through public space in close proximity to another. We 'know' how our awareness can shift from the usual perspective of a sitting or standing body to a bodily awareness of the space. We 'know' how to imagine a-logical itineraries and cartographies that juxtapose and challenge existing regimes of navigation.

Additionally, on the meta-level we have used to frame this essay, we can now more profoundly evaluate the strategies, potentials and limitations of experiments and research endeavors in the performance arts, the Situationists' movement or abductive approaches. For instance, in focusing on the dynamic conjunction of firmative and affirmative speculation, we have sought to rework a paradox that has implicitly accompanied approaches from Situationism to the turn to abduction. As Reichertz points out, abduction's "secret charm" resides in the fact that "it is a *logical* inference (and thereby reasonable and scientific), however it extends into the realm of profound insight (and therefore generates new knowledge)" (Reichertz 2010: 7). Similarly, the Situationists have affirmed the desiring fluxes of embodied subjects that speculatively drift through space, while at the same time seeking to articulate "precise laws," to use Debord's above-cited formulation. Various approaches that can be credited with promoting affirmatively speculative research designs are therefore founded on a paradoxical simultaneity of firmative and affirmative registers. Yet—not least in the German social sciences—the endeavor to generate 'scientific' knowledge has frequently gotten the upper hand, whereas affirmatively speculative moments have been relegated to the secondary status of generating hypotheses to be deductively tested—and potentially falsified.[7] Rather than making productive use of paradoxes of emic and etic, concrete and abstract, affirmative and firmative, these approaches have therefore ambiv-

7 Qualitative approaches seeking to embrace abduction have been especially haunted by the specter of 'neutral objectivity'—avowals of the emic, contextual and explicatory notwithstanding.

alently oscillated between different registers, often hierarchically subordinating the affirmative to the firmative.[8]

As we have argued, though, it is precisely the dynamic coexistence of heterogeneous elements in the paradox that has a potential for generating new practices and insights (cf. Hutta 2010). Instead of warding off paradoxicality by integrating the affirmative into the firmative, we have sought to discuss settings of learning and research that open up space for paradoxicality to be enacted. In a certain way, we have returned to some of Peirce's own elaborations on abduction.[9]

There is thus more at stake than a mere reproduction of artistic or theoretical ideas. In fact, rather weak criteria such as expectation, empathy and suspense need to be considered as equally important and productive aspects for conducting a performance analysis as the instruments that enable scientific inscription. This entails productively accepting the limitation of our interpreting efforts, as set by the mere fact of performance's ephemerality. It also asks us to develop forms of re-inscription that proffer affective evocation in place of neutralizing distance. Therefore, the fact that we might find ourselves distanced from positive knowledge as a modern certainty even in the act of remembering it should not leave us in despair, for it is more and more a lesson to learn in digital culture.

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8 In a similar vein, Antke Engel has argued that paradox has often been conceived merely as a problem to be warded off or to be transposed into binary oppositions. Axel Honneth and the Frankfurt Institute for Social Research, for instance, call for a transposition of paradoxes into a normative politics of oppositions and contradictions (cf. Engel 2009: 125).

9 For instance, discussing strategies that facilitate abduction, Peirce mentions bodily emergency situations, such as the self-induced pressure to act or fear of failure, as well as—diametrically opposed—the daydreaming, *dérive*-like activity he calls "musement" (cf. Davis 1972). Such a strategic re-embodiment of epistemology also indexes its paradoxical relation to scientifically inscribed knowledge.

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